TABLE OF CONTENTS

CATALOG 2019-2020

Welcome to the Indian River State College Interactive Catalog.

Here you will find the information and resources you need to navigate your way through "The River" - from choosing an exciting major - to applying for scholarships and financial aid - to learning about IRSC student services and more.

Just click and explore today!

Indian River State College was designated as the 3rd Most Affordable College in the country by the U.S. Department of Education.

INDIAN RIVER STATE COLLEGE

Indian River State College is a public, comprehensive college with a statewide and national reputation for excellence. Dedicated to the success of each student, IRSC offers over 100 programs leading to Bachelor's degrees, Associate degrees, technical certificates and applied technology diplomas. Continuing a 59-year tradition of responsiveness to community needs, IRSC is committed to advancing the educational, cultural, career training, workforce, and economic development of its surrounding area. IRSC is recognized as the premier institution for higher education, emphasizing quality, affordability and convenience and is a key partner in the continuing development of the Treasure Coast region and as a national model for innovative use of technology in education.

IRSC is an equal access, equal opportunity educational institution welcoming students without regard to race, color, national origin, ethnicity, sex, pregnancy, religion, age, disability, sexual orientation, marital status, veteran status, genetic information or any other factor protected under applicable federal, state, or local civil rights laws, rules or regulations. Special adjustments within the College, such as architectural modifications for the disabled and classes in English as a Second Language, ensure that all students have equal opportunities for success at IRSC.

IRSC's open door policy guarantees that anyone who earns a high school or high school equivalency diploma will be admitted to the College. Close cooperation among the administration and faculty, a collegial atmosphere of open communication, and concern for the overall success of the student allow IRSC to give its students a high quality education at a reasonable cost. In addition, many financial aid and scholarship programs are readily available to eligible students, including more than $3 million annually provided to students by the IRSC Foundation, Inc.

IRSC's reach extends to audiences throughout the Treasure Coast. The College serves high school students who wish to get a head start on college through its Dual Enrollment and Early Admissions programs. Most area high school graduates take their first steps toward future plans at IRSC. In fact, over 70% of the region's college-bound high school seniors attend IRSC following graduation. Persons already established in careers attend IRSC to expand their skills and retrain for new positions. And hundreds of area residents age 50 and over pursue their interests through the Fielden Institute of Lifelong Learning, which offers programs and lectures throughout the year. Through its Virtual Campus, the College provides hundreds of online learning opportunities, including full degree programs, making higher education broadly accessible.

The region's comprehensive educational provider, state-designated career and technical center, and cultural hub, IRSC has a reputation for quality that inspires nearly 30,000 people to enroll in classes each year.

Accreditation

Indian River State College is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award Associate and Baccalaureate Degrees.

Contact the Southern Association of Colleges and Schools Commission on Colleges at
1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Indian River State College.

additional program accreditations include:
Commission on Dental Accreditation
Dental Assisting and Dental Hygiene
211 East Chicago Ave., Chicago, IL 60611-2678 • Phone 312-440-4653
http://www.ada.org/100.aspx

The Indian River State College EMS Program is accredited by the
Commission on Accreditation of Allied Health Education Programs (www.caahep.org)
upon the recommendation of the Committee on Accreditation of Educational Programs for
the Emergency Medical Services Professions (CoAEMSP).
Commission on Accreditation of Allied Health Education Programs
25400 U.S. Highway 19 North, Suite 158, Clearwater, FL 33763 • 727-210-2350 • www.caahep.org
To contact CoAEMSP:
8301 Lakeview Parkway Suite 111-312, Rowlett, TX 75088
214-703-8445 • FAX 214-703-8992 • (www.coaemsp.org)

Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM)
200 East Randolph St., Suite 5100, Chicago, IL 60601 • Phone 312-233-1100

Commission on Accreditation of Allied Health Education Programs (CAAHEP)
25400 U.S. Highway 19 North, Suite 158, Clearwater, FL 33763 • Phone 727-210-2350

The Medical Laboratory Technology program is accredited by the
National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)
5600 N. River Road, Suite 720, Rosemont, IL 60018-5119
To contact NAACLS by Phone: 773-714-8880 • Fax: 773-714-8886 • Email: info@naacls.org
Website: http://www.naacls.org.

The IRSC Medical Assisting program is accredited by the Committee on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Curriculum Review Board of the American Association of Medical Assistants Endowment (CRB-AAME).
CAAHEP, 25400 U.S. Highway 19 North, Suite 158, Clearwater, Florida 33763 • 727-210-2350

Accreditation Commission for Education in Nursing (ACEN)
3343 Peachtree Rd NE, Suite 850, Atlanta, GA 30326 • Phone 404-975-5000

The Pharmacy Technician Program is accredited by the American Society of Health System Pharmacists (ashp.org) upon the recommendations of the Pharmacy Technician Accreditation Commission (PTAC)
4500 East-West Highway, Suite 900, Bethesda, MD 20814 • Phone 1-866-279-0681

The Physical Therapist Assistant Program at Indian River State College is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE)
1111 North Fairfax Street, Alexandria, VA 22314 • Phone 703-684-2782 • email: accreditation@apta.org
website: http://www.capteonline.org.
If needing to contact the program/institution directly, please call 772-462-7771 or email bcuscuna@irsc.edu.

Joint Review Committee on Education in Radiologic Technology
20 N. Upper Wacker Drive, Suite 2850, Chicago, IL 60606-3182 • Phone 312-704-5300

Commission on Accreditation for Respiratory Care (CoArc)
Associate in Science in Respiratory Care
P.O. Box 54876, Hurst, TX 76054-4876 • 817-283-2835
http://www.coarc.com • Program #200380

The Surgical Technology Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting ARC/STSA (arcstsa.org)
6 West Dry Creek, Littleton, CO 80120-8031 • Phone 303-694-9262

Commission on Accreditation of Allied Health Education Programs (CAAHEP)
25400 U.S. Highway 19 North, Suite 158, Clearwater, FL 33763 • Phone 727-210-2350

And approved by:
The Florida State Board of Nursing
The Florida Department of Health - Division of Emergency Preparedness and Community Support - Bureau of Emergency Medical Oversight - EMS Program

Contacts

Indian River State College

3209 Virginia Avenue • Fort Pierce, FL 34981-5596
Toll-free 1-866-792-4772 • (772) 462-4772 • Fax (772) 462-4796

Chastain Campus • 2400 S.E. Salerno Road • Stuart, FL 34997
(772) 419-5600 • Fax (772) 419-5630

Dixon Hendry Campus • 2229 N.W. 9th Avenue • Okeechobee, FL 34972
(863) 824-6000 • Fax (863) 824-6019

Mueller Campus • 6155 College Lane • Vero Beach, FL 32966
(772) 226-2500 • Fax (772) 226-2520

Pruitt Campus • 500 N.W. California Blvd. • Port St. Lucie, FL 34986
(772) 879-4199 • (772) 336-6235

Historic Sebastian School Site • 1235 Main Street • Sebastian, FL 32958
(772) 226-2525

Indiantown Education Center • 15655 S.W. Osceola Street • Indiantown, FL 34956
(772) 597-5130

IRSC Blackburn Educational Building • 3002 Avenue D • Fort Pierce, FL 34947
(772) 462-7100

Prima Vista Adult Education Center • 419 Irving Street • Port St. Lucie, FL 34983
(772) 343-9553

Stuart Square Site • 1994 S.E. Federal Hwy. • Stuart, FL 34994
(772) 283-6550

Treasure Coast Public Safety Training Complex • 4600 Kirby Loop Road • Fort Pierce, FL 34981
(772) 462-7150

In Dedication To Our Students…

In Dedication To Our Students . . .

- *You are a student preparing for life…*

  IRSC is a resource in your learning for life…as we have been for over a million students before you.

- *We are people providing a learning environment, and an unparalleled spirit to support you in reaching your fullest potential.*

  Thoughtful people… giving of themselves the best they know how.

  State-of-the-art equipment and facilities… enabling you to learn faster, better and with enduring value.

  An "up with student" spirit… so great and contagious it will move you and always be with you.

- *What you will find is… learning in an environment where you are encouraged, challenged, and championed…*

  Encouraged to explore and grow… discovering who you are and building the foundation for your life.

  Challenged to stretch… to never, never, never give up in becoming the very best you can be.

  Championed to reach...performance and goals you might not have thought possible before joining our family.

We Commit To . . .

- *Sustain our leading edge…*

  we choose to continually assess our institutional relevance by sensing and responding to both the present and the future.

- *Perpetually determine student skill and knowledge requirements in a fast-changing world...*

  and as a result optimize education within a superior learning environment.

- *Create an all-encompassing environment where learning complements rather than complicates our lives . . .*

  strengthening IRSC's entrepreneurial and innovative posture in the communities we serve.

- *Assure a culture throughout the College…*

  where the dignity of every individual is honored and respected by deeds and subject-focused communication.

- *A Strong and Viable College…*

  through disciplined processes that provide for a consistent endeavor for excellence through intellectual investigation, interpersonal communication and pride in a set of shared values.

. . . Student Success is the Most Important Thing at Indian River State College . . .

District Board of Trustees

The District Board of Trustees of Indian River State College
is appointed by the Governor of the State of Florida and represents Indian River, Martin, Okeechobee, and St. Lucie counties.

José L. Conrado, Chair, Indian River County	Sandra J. Krischke, Vice Chair, St. Lucie County
Susan R. Caron, St. Lucie County	Vicki H. Davis, Martin County
Mark A. Feurer, Indian River County	Anthony D. George Jr., Martin County
Christa Luna, Okeechobee County	Phoebe H. Raulerson, Okeechobee County
J. Brantley Schirard Jr., St. Lucie County	Edwin R. Massey, Ph.D., Secretary to the Board of Trustees

Quick Facts

Indian River State College serves Florida's St. Lucie, Martin, Indian River and Okeechobee counties as the premier institution for higher education, emphasizing quality, affordability and convenience.

Serving nearly 30,000 students annually, IRSC offers Bachelor's degrees, Associate in Arts degree programs for university transfer, Associate in Science/Associate in Applied Science degrees for career education, Quick Job Training/Technical Certificates, Adult Education and programs for professional development, personal and cultural enrichment.

- IRSC is the 2019 winner of the prestigious Aspen Prize for Community College Excellence, an honor that recognizes outstanding quality in the areas of completion and transfer, labor market outcomes, learning, equity and more.

- Over 70,000 students have graduated from IRSC throughout the College's 59-year history.
- Bachelor's Degree graduates are the most rapidly growing group. Since the College began offering Bachelor's Degrees in 2008, over 5,600 students have earned a four-year degree from IRSC.
- IRSC has been ranked as the 3rd most affordable college in the country by the U.S. Department of Education.
- Through the IRSC Foundation, over $3 million in scholarships are awarded annually.
- Students benefit with IRSC's One-Stop Student Services Centers, personalized Guided Pathways, free tutoring and career planning, internships and applied learning.
- IRSC students can choose from over 70+ student clubs which combine fun, community outreach and service learning.
- Each year, Study Abroad trips open the world to IRSC students including countries such as Italy, China, Prague, Ireland, England, Costa Rica, Cuba and Jamaica!
- The Brown Center for Innovation and Entrepreneurship combines education in energy, nanotechnology, photonics, sustainable building design and other emerging fields.
- The College's Public Safety Training complex is a 50-acre learning laboratory where future firefighters, law enforcement, human services and corrections officers train for jobs locally, nationally and internationally.
- The Thomas STEM Center provides students with new opportunities for paid internships and employment in biotechnology.
- The IRSC Virtual Campus provides online learning opportunities, including degree programs, hundreds of classes each semester and student services.

History

Indian River State College was authorized by the Florida Legislature in 1959 and has grown from a one-building structure to the dominant educational and cultural center in the community. The College moved to its present campus on Virginia Avenue in 1963 after the City of Fort Pierce donated 87 acres of land to IRSC.

In 1965, with the advent of integration, Indian River Junior College and Lincoln Junior College merged, creating one college to serve students in Indian River, Martin, Okeechobee and St. Lucie counties. As the College continued to grow in scope and role, the Board of Trustees felt a name representative of the College's comprehensive service was appropriate and, in 1970, changed its name to Indian River Community College.

In 2007, IRSC was accredited by the Southern Association of Colleges and Schools to offer Bachelor's Degree programs in areas of regional need. In July 2008, Governor Crist signed into law a legislative bill that included Indian River in the State College Pilot Project, providing the newly named Indian River State College the opportunity to expand its Baccalaureate programs to meet both regional and statewide employment needs.

In 2013, IRSC created the Virtual Campus to provide students with affordable, flexible and quality online learning opportunities that would fit into their lives. Since its inception, the Virtual Campus has grown to include 15 web-based degrees and hundreds of individual web-based courses.

The past decades have been ones of notable growth at IRSC. IRSC has a reputation for quality that inspires nearly 30,000 students to enroll in classes each year. IRSC stands out as an institution of higher learning dedicated to serving the educational, career training and cultural needs of its surrounding area. Although students from nearly every state and many foreign countries attend the College, it maintains its primary commitment to providing academic, occupational, technical, cultural and service programs that meet the needs of its four-county community. At IRSC, our priority is educational excellence.

In April 2019, the Aspen Institute, an educational and policy studies organization based in Washington, D.C., awarded its highest honor, the Aspen Prize for Community College Excellence, to Indian River State College. The award is the nation's signature recognition of high achievement and performance among America's community colleges. IRSC was selected from more than 1,000 state and community colleges following a rigorous review of data, strategies, and outcomes related to student learning, degree and certificate completion, high rates of graduate employment, earnings for graduates, and exceptional access and success for minority and low-income students.

Governed by a District Board of Trustees representative of the four-county area, IRSC maintains an open, innovative administration; a dedicated staff; and concerned, well-qualified faculty. College faculty and staff members contribute to their community through involvement in many local organizations.

Alma Mater Pioneers

Along the Indian River's shores
Our College walls will stand.
While scholarship and fellowship
Go forward hand in hand.

The friendships made and knowledge earned
Will guide us through the years.
And so with hearts and voices raised,
We hail the Pioneers.

In troubled times our college days
Will keep our spirits high.
With memories of student years
And hopes that cannot die.
Devotion to a way of life
With purpose strong and bold,
Will fill us as our voices join
To praise the blue and gold.

Original words and music by
L.H. Whipple
September 24, 1961

President's Letter

Welcome to Indian River State College, winner of the 2019 Aspen Prize for Community College Excellence!

As the 'Top College in the Nation' and the Okeechobee and Treasure Coast region's comprehensive higher education provider, state-designated career and technical center, and nexus of cultural and community activity, Indian River State College is pleased to welcome nearly 30,000 students to our institution annually. We take great pride in working to "positively impact lives by making possibilities a reality" for every single student we serve.Commitment to student success is a main reason IRSC earned the distinguished Aspen Prize, and I assure you, over the course of the 2019-2020 academic year, that commitment to students will be more evident than ever before.

We want to do everything within our ability to help you succeed and achieve the goals you've set forth as an IRSC student. Whether it's individualized advising or personalized guided pathways, mentorship and tutoring in our ASC labs, or applied learning, capstones, and internships in the real world, we strive to provide the experience you're seeking both in and out of the classroom. Opportunities for our students are everywhere, and I'm confident you will have the guidance and resources to make the most of them.

As one of Florida's state colleges, IRSC offers Bachelor's Degree programs, enabling you to earn a four-year degree close to where you live and work. Maintaining our open-door policy, IRSC continues to offer the Associate in Arts Degree to prepare students for university transfer and the Associate in Science Degree, Associate in Applied Science Degree and certification programs for careers in the nation's fastest growing professions. You can also get started by working toward your GED®. Whatever program you choose, our faculty and staff stand ready to make your educational dreams come true.

Through a supportive learning environment where students are encouraged to explore and grow, you will reach goals you might not otherwise thought possible. And, with more than 100 programs to choose from, you will find the education and career path that is right for you. In addition, the College's emphasis on innovation and technology enables us to bring learning experiences to you in the time and manner most convenient to your needs.

The programs and policies described in this catalog have been carefully developed with one purpose in mind: to enable you to achieve your greatest potential and to establish a firm foundation for your academic and career pursuits. Please don't hesitate to explore and utilize the many student services available to you in our Enrollment & Student Services Division. These devoted professionals are here for you, eager to answer any questions you might have and assist you in any way possible.

We encourage you to visit with us in person and learn more about how IRSC can provide you an enriched environment where learning complements rather than complicates your life.

Sincerely,
Edwin R. Massey, Ph.D.
President

3209 Virginia Avenue • Fort Pierce, Florida 34981-5596
Fort Pierce • Okeechobee • Port St. Lucie • Stuart • Vero Beach
1-866-792-4772 • www.irsc.edu

CAMPUS LOCATIONS AND MAPS

Located in an area of unsurpassed natural beauty, tropical weather, and proximity to the ocean, IRSC is oriented toward outdoor life. Open areas and courtyards on campus give students places to gather or study. With Lake Okeechobee to the west, the Indian River to the east, and the white sandy beaches of the Atlantic Ocean only minutes away from campus, activities such as swimming, surfing, fishing, scuba, and snorkeling are always within easy access. The cities of Fort Pierce, Vero Beach, Stuart, Okeechobee, and Port St. Lucie offer an array of recreational and cultural events, and leisure time activities such as museums, theaters, rodeos, fishing, professional and minor league baseball, shopping and dining.

Within an hour's drive on the Florida Turnpike or I-95 are the city of West Palm Beach, many natural attractions, Kennedy Space Center, and a multitude of job opportunities. Only a short distance farther are the Florida Keys, Sea World, Disney World, and by air or boat, the Bahamas.

On campus, a diverse group of organizations, formal and informal gatherings, and stimulating special events ensure that IRSC students have the opportunity to explore their interests, discover new ones, and make friends to share them with. Students find that challenges, work, research, study, service, discovery, and fun all have a place at IRSC.

Other locations, not noted on the above map, where coursework toward a degree, diploma, or certificate can be obtained primarily through traditional classroom instruction are:

Historic Sebastian School
1235 Main Street
Sebastian, Florida 32958

Gifford Youth Achievement Center
4875 43rd Avenue
Vero Beach, Florida 32967

Harbor Branch Oceanographic Institute
5600 U.S. 1 North
Fort Pierce, Florida 34946

Main Campus Fort Pierce

Fifty-four buildings on 362 beautifully landscaped acres compose IRSC's Main Campus in the coastal city of Fort Pierce. Reflecting the diversity of IRSC students and their interests, the Main Campus encompasses such specialized facilities as the Brown Center for Innovation and Entrepreneurship, the Kight Center for Emerging Technologies, Treasure Coast Public Safety Training Complex, Mary L. Fields Health Science Center, Florida State University College of Medicine Regional Campus, Brinkley Science Center and Hallstrom Planetarium, a world class aquatic complex, a modern child development center, a physical fitness lab, a physical therapy assistant training center, and a large, comfortable student center.

The 65,000 square-foot Brown Center for Innovation and Entrepreneurship is constructed to "silver LEED" standards for green construction, using recycled materials. The multi-purpose Center prepares students for cutting-edge careers in emerging technologies, particularly in energy-related fields, and provides programs and services to entrepreneurs and business start-ups gearing up to create new types of jobs.

The College's Kight Center is one of the nation's most technologically sophisticated educational facilities. With an advanced manufacturing suite, photonics laboratory, engineering and digital media laboratory, and editing suite/virtual studio, it provides highly innovative instruction in evolving technologies and serves as an unprecedented resource for economic development.

The 50-acre Treasure Coast Public Safety Training Complex is the nation's most comprehensive center for education and professional development in criminal justice, emergency management, homeland security and fire science. The state-of-the-art complex attracts professionals in these fields from around the nation and world for seminars and conferences.

In conjunction with Florida State University, a regional campus of the FSU College of Medicine was established on the IRSC Main Campus. This community-based medical school directs clinical rotations for third and fourth year medical students and supports regional development of a strong knowledge-based economy linked to science and medicine.

The Brinkley Science Center provides a technologically advanced setting for the study of math and science complemented by a unique astronomy classroom - the Hallstrom Planetarium. The Mary L. Fields Health Science Center houses 14 laboratory suites and classrooms which simulate "real world" health care environments, including a hospital emergency room, nursing ward, dental clinic, and medical laboratory.

The Tomeu Center for Career and Academic Advancement is specifically designed to serve students preparing for a GED®, developing English language skills, preparing for American citizenship or transitioning into career training and upper-division studies at IRSC.

The IRSC Fine Arts Complex which includes the McAlpin Fine Arts Center, Wynne Black Box Theatre, Fee Dance Studio, Art Gallery and music and drama rehearsal rooms

emphasizes IRSC's commitment to the development of well-rounded students and inspires participation in the arts and cultural activities.

Complementing the Main Campus are branch campuses in Stuart, Vero Beach, Okeechobee, and Port St. Lucie. Facilities in the surrounding communities include the Blackburn Educational Building in Northwest Fort Pierce, Prima Vista Adult Education Center in Port St. Lucie, and the Indiantown Education Center in Indiantown.

GED® is a registered trademark of the American Council on Education (ACE) and administered exclusively by GED Testing Service LLC under license. This material is not endorsed or approved by ACE or GED Testing Service.

Main Campus Maps

Indian River State College is conveniently located just east of I-95 (exit 129) and just west of U.S. Hwy 1 on 3209 Virginia Avenue in Fort Pierce, Florida.

The Main Campus encompasses 54 buildings on 362 acres. Visitor parking is available all around the campus and buildings are within walking distance from the parking lots.

LEGEND

A Ben L. Bryan, Sr. Administration Building
B Business Development Center
C Tomeu Center for Career & Academic Advancement
E PNC Careers Building
F Administration Annex
FSU Smith Center for Medical Education
G Gymnasium
H Mary L. Fields Health Science Center
I Medical Examiner's Office
J Classroom Building
KSU Koblegard Student Union (Bookstore, Cafeteria, Mailroom, Student Affairs/Activities)
L Miley Library & Academic Support Center
M Employee Print Shop
N Brinkley Science Center/Hallstrom Planetarium
O Occupational Building
P Anne Wilder Aquatic Complex
PT Physical Therapy
P1 Men's Locker Rooms
P2 Women's Locker Rooms
P5 Tennis Courts
Q Radio Station - WQCS
R Classroom Building/Wynne Black Box Theatre
S Leroy C. Floyd Administrative Services Building
T McAlpin Fine Arts Center
U Health & Wellness Center
V Kight Center for Emerging Technologies
W Crews Hall (Enrollment & Student Services, Registration, Financial Aid, Cashier, Security)
Y Brown Center for Innovation & Entrepreneurship
Z Racquetball Courts
EN Institute of Cosmetology & Barbering
ES Child Development Center

Corporate and Community Training Institute

The Corporate & Community Training Institute (CCTI) is located in the Brown Center for Entrepreneurship and Innovation on the IRSC Main Campus in Fort Pierce. It provides customized training and educational services and seminars covering an array of topics from basic computer classes to courses in communication, customer service, finance and accounting, human resource management, personal development and interpersonal communication skills, sales and marketing and legal issues in the work place.

The CCTI is committed to providing "Business Solutions" – high quality training and employee enhancement programs to individuals, corporations, small businesses and governmental agencies in a professional and timely manner. Under the CCTI umbrella you'll find the Florida SBDC, a resource for start-up and established businesses, the Pioneer Incubator, the Public Works Institute and much more! Check all the services and training available through CCTI at www.irscbiz.com.

Small Business Development Center at IRSC

To expand support of entrepreneurship and small business, Indian River State College operates the Florida Small Business Development Center (SBDC) serving St. Lucie, Indian River, Martin and Okeechobee counties.

The Florida SBDC at IRSC offers:

- free management counseling
- low-cost seminars and training sessions

Its mission is to provide the expertise and resources small businesses need to succeed so **S**takeholders reap return and value for their investment, **B**usiness needs are addressed and solutions are provided, **D**evelopment and economic growth is realized, all supported by a strong culture **C**ommitted to excellence.

Chastain Campus Stuart

Located in Martin County, the Chastain Campus provides a wide range of academic and career training programs during both day and evening hours. Students may complete the entire A.A. Degree and many A.S. Degree programs at this location, and begin coursework in several Baccalaureate programs.

The Robert Morgade Administration & Student Services Center provides an array of student services, including individualized academic advising, career services, financial aid assistance, an Enrollment Center, bookstore, assessment center, and café.

The Clare & Gladys Wolf High-Technology Center serves as a hub for technical career preparation and business training, including state-of-the-art equipment and software programs to prepare students for high-skill jobs. Customized programs for businesses, an Academic Support Center (ASC) and GED® classes are also available.

In addition, located on this campus is the multi-purpose 15,000 square foot Robert Morgade Library operated in conjunction with the Martin County Library System, as well as the Clark Advanced Learning Center, a national model charter high school, which offers high school sophomores, juniors and seniors the ability to earn both high school and college credits at no cost.

GED® is a registered trademark of the American Council on Education (ACE) and administered exclusively by GED Testing Service LLC under license. This material is not endorsed or approved by ACE or GED Testing Service.

Chastain Campus Maps

The Chastain Campus is located east of I-95 (exit 101) by following Kanner Highway north to Salerno Road. Head east (take a right off Kanner Hwy) on Salerno Road and the Chastain Campus will be on your right.

The Chastain Campus is comprised of three main college buildings with the joint-use Martin County Library within walking distance. Also located on the campus is the Clark Advanced Learning Center - an "A"-rated national model high school.

Indiantown Education Center

Supporting the economic development of the area, the Indiantown Education Center greatly expands opportunities for Indiantown residents to gain a top-quality education. Local businesses and organizations benefit from customized business training programs, while Associate Degree and Technical Certificate programs provide area residents with skills for career advancement.

Stuart Square Site

The IRSC Institute of Cosmetology and Barbering and the Career Training Center are located at Stuart Square, just a few miles north of the Chastain Campus. The Institute provides practical education and career training in the cosmetology field, designed to lead to licensure or certification. Upon completion of a required number of hours in a combination of classroom and lab instruction, a student is well-prepared to enter the career field.

The Career Training Center is home to Indian River State College vocational and career programs in Martin County, focusing on short-term programs that lead to employment. Students seeking information about specific training programs can call (772) 283-6550.

Dixon Hendry Campus Okeechobee

Located in Okeechobee, the Dixon Hendry Campus offers a creative and flexible schedule for daytime, evening, and weekend courses for Associate in Arts, Associate in Science/Applied Science Degree programs.

The campus offers up-to-date technology with a high-tech computer lab, electronic access to research materials, an Academic Support Center (ASC), GED® preparation, and Health Science testing preparation. Career programs directly address the needs of the surrounding community, including customized training for businesses and expanded technical programs in nursing, automotive technology and HVAC.

The Williamson Conference and Education Center provides students and Okeechobee residents with a technologically sophisticated facility for conferences, courses, seminars, strategic planning sessions, and community activities.

GED® is a registered trademark of the American Council on Education (ACE) and administered exclusively by GED Testing Service LLC under license. This material is not endorsed or approved by ACE or GED Testing Service.

Dixon Hendry Campus Maps

The Dixon Hendry Campus is located just north of State Road 70 and west of Highway 441/98 at 2229 NW 9th Avenue in Okeechobee.

The Dixon Hendry Campus is comprised of three main building including the Williamson Conference & Education Center.

Mueller Campus Vero Beach

Located in Indian River County, the Mueller Campus offers daytime, evening, and weekend classes leading toward Associate and Bachelor's degrees. Customized industry training, workforce development, computer technology, and professional certification programs are also available.

At the Schumann Center, students can obtain educational/career counseling, apply for financial aid, register/pay for classes and purchase textbooks all in one place. In addition, the Schumann Center features biology laboratories, a high-speed computer lab for graphic design and a teacher training center.

The most recent addition at the Mueller Campus is the Brackett Library, a joint-use facility with Indian River County, which serves both IRSC students and the local community and houses the Marion C. Link Electronic Resource Center.

The Richardson Center, home of the Culinary Institute at Indian River State College, is an educational, entrepreneurial and conference facility providing a unique high-tech environment for community and economic development activities, business conferences, and a multitude of classes, workshops and seminars.

In addition, the Mueller Campus offers a full array of courses at:

- Historic Sebastian School
  1235 Main Street - Sebastian, Florida 32958
- Fellsmere City Hall
  22 South Orange Street - Fellsmere, Florida 32948

Mueller Campus Maps

The Mueller Campus is located east of I-95. Take exit 147/State Road 60 east to 58th Avenue. At 58th Avenue head south (right turn) and make a right onto College Lane.

The Mueller Campus boasts four college buildings plus the Brackett Library, a joint-use facility with Indian River County.

Pruitt Campus St. Lucie West

Located in rapidly growing south St. Lucie County, the IRSC Pruitt Campus offers daytime, evening, and Friday-only college credit classes for the Associate Degree including a two-year R.N. program. One-year professional certifications are available in Landscape & Horticulture Technology and Agricultural Production Technology augmented with a horticulture lab. English as a Second Language (ESL) and the General Equivalency Diploma (GED®) are offered through the Adult Education Department.

The William and Helen Thomas STEM (Science, Technology, Engineering, Mathematics) Center is home to the Bachelor's Degree in Biology and is supported by sophisticated laboratories in genetics, ecology, anatomy and physiology, chemistry, molecular biology, botany and microbiology. The programs offered in this cutting-edge teaching facility prepare students for employment opportunities on the Research Coast in the STEM disciplines.

Located on the first floor of the newly renovated F-building is IRSC's Enterprise Hub, with representatives from CCTI, SBDC, SCORE, Career Source and the Economic Development Council of St. Lucie County who promote entrepreneurship, stimulating job creation and furthering the economic development of the area.

A state-of-the-art academic and public library, the Academic Support Center (ASC), which offers free individualized tutoring, and an assessment center are available to help ensure student success. Advisors and counselors in Student Services provide academic advising, registration and financial aid assistance, and career counseling.

The Schreiber Conference Center offers customized business training through IRSC's Corporate & Community Training Institute as well as providing a professional venue for local business, government, and community conferences, seminars, and meetings.

GED® is a registered trademark of the American Council on Education (ACE) and administered exclusively by GED Testing Service LLC under license. This material is not endorsed or approved by ACE or GED Testing Service.

Pruitt Campus Maps

The IRSC Pruitt Campus is located just east of I-95 at exit 121. Turn left (heading east) on St. Lucie West Blvd. and then turn left (heading north) on California Blvd. Proceed past the roundabout, continue on California Blvd. and the Pruitt Campus will be on the left.

The Schreiber Conference Center offers a professional venue for local businesses, government and community organizations to host seminars and meetings. Rental venues include the CORE Auditorium, Strategic Planning Room and conference rooms. These facilities are equipped with state-of-the-art technologies and supporting amenities. For additional information, or to make a reservation, call 772-336-6370.

Treasure Coast Public Safety Training Complex

An outstanding national model for public safety and disaster relief training, the eight-building, 101,000 square foot Treasure Coast Public Safety Training Complex provides a world-class environment for professional development in coordinated emergency response.

Facilities include a Tactical Village enabling students to work as a team to make on-the-spot decisions to defuse simulated crimes and emergencies, and gain skills through virtual reality practice and mock disasters. There is also an Incident Command Center for training in field command, a Crime Lab observation area for viewing of DNA testing, ballistics and advanced forensics, a Fire Station Training Center, Live Burn Simulator and Mock Court Room.

Treasure Coast Public Safety Training Complex Maps

The Treasure Coast Public Safety Training Complex at Indian River State College is located on the south west corner of the Main Campus. It can be reached by heading south on 35th Avenue to Kirby Loop Road.

The 50-acre TCPSTC is comprised of eight buildings plus a dive/rescue training site, observation tower and driving range.

VIRTUAL CAMPUS-IRSC

E-Learning services extend opportunities to students beyond the traditional classroom. These services are provided by the Instructional Departments in cooperation with the offices of Enrollment and Student Services, Instructional Technology, and Academic Affairs.

Hundreds of courses are now available online. Through the IRSC Virtual Campus students can complete select degree programs entirely online. These include:

- Associate in Arts Degree
- Associate in Science Degree in Business Administration
- Associate in Science Degree in Computer Information Technology
- Associate in Science Degree in Criminal Justice Technology
- Associate in Science Degree in Health Information Technology
- Bachelor's Degrees in:
    - Business Administration
    - Criminal Justice
    - Education/ESE with ESOL Endorsement
    - Elementary Education with Reading & ESOL Endorsements
    - Information Technology Management & Cyber Security
    - Middle Grades Mathematics
    - Nursing (Coursework is online, but clinical component is required for two courses.)
    - Organizational Management
    - Public Administration

Students complete assignments and communicate with instructors via the Blackboard Learning Management System.

At the beginning of each semester, special Virtual Campus Online Student Information Sessions are held for new E-Learning/Online students.

Please note: At least one proctored assessment will be required. Assessments can be proctored free of charge at any IRSC Assessment Center, or at another college/university at your own expense. Refer to the Assessment Center's Testing Procedures with additional questions.

ACADEMIC CALENDAR

Fall 2019

July 1, Monday	First day to register: Fall 2019 Schedule.
July 3, Wednesday	Priority deadline-Fall 2019 Baccalaureate applications: submit official transcripts, and complete New Student Orientation.
July 22, Monday	Priority deadline - Fall 2019 Associate applications: submit official transcripts, and complete New Student Orientation.
August 5, Monday	Fall Registration and Payment Deadline extended through Sunday, August 11.
August 6, Tuesday	Fall Registration and Payment Deadline extended through Sunday, August 11.
August 11, Sunday	Registration Deadline. Last Day to pay before late registration.++
August 12, Monday	Late Registration begins. Payment due upon registration.
August 13, Tuesday	New Faculty report.
August 14, Wednesday	Returning Faculty report.
August 16, Friday	Late Registration Deadline. Last day to pay all fees. ++
August 19, Monday	**Classes Begin: Full Term Schedule.**
August 25, Sunday	Last day to drop classes - Full Term Schedule. NO REFUNDS after this date.
September 2, Monday	HOLIDAY - Labor Day. *
September 3, Tuesday	Registration Deadline - Express Schedule. ++
September 4, Wednesday	**Classes Begin: Express Schedule.**
September 10, Tuesday	Last day to drop classes - Express Schedule. NO REFUNDS after this date.
September 11, Wednesday	Due to Hurricane Dorian, Express Payment Deadline Extended. Students who have not paid tuition and fees or received payment coverage from other sources by September 11 will be dropped from these classes.
October, 13, Sunday	Deadline to register for 8-week October Express classes that begin week of 10/14/19. Payment is due at the time of registration.
October 14, Monday	8-week October Express classes begin.
October 22, Tuesday	Early Spring Registration for eligible students.
October 28, Monday	Last day to withdraw from Full Term Schedule classes with a "W".
October 29, Tuesday	First day to register: Spring 2020 Schedule.
November 4, Monday	Last day to withdraw from Express Schedule classes with a "W".
November 8, Friday	Priority deadline for Spring 2020 Baccalaureate and Associate applications: submit official transcripts, complete New Student Orientation & Initial Advising Session.
November 11, Monday	HOLIDAY - Veteran's Day. *
November 12, Tuesday	Deadline to apply/pay for Fall 2019 Commencement Ceremony participation.
November 27, 28, 29 Wednesday, Thursday, Friday	HOLIDAY - Thanksgiving observed. *
December 4, Wednesday	Last day for Total Withdrawal from all classes.
December 10, Tuesday	**Last day of Full Term AND Express Schedule classes and final exams.**
December 11, Wednesday	Grades due/entered by 8:00 p.m.
December 12, Thursday	Grades available online.
December 13, Friday	Faculty Service Day.
December 16, Monday	Faculty Service Day.

December 17, Tuesday	Faculty Service Day - Instructional Review & Realignment Day.
December 18, Wednesday	Fall Commencement. Deadline Extended to January 4, 2020, 9 p.m. -Registration Deadline - Full Term Schedule and Spring A. Students who have not paid their tuition and fees or received coverage from other sources will be dropped from their Full Term and Spring A classes. ++
December 20-31, Friday - Tuesday	HOLIDAY - Winter Break. *

** Official Holiday — All offices closed. No classes.*
++ Students who have not paid their tuition and fees or received payment coverage from other sources will be dropped from their classes.

Spring 2020-Dates Subject to Change

October 22, Tuesday	Early Spring Registration for eligible students.
October 29, Tuesday	First day to register: Spring 2020 schedule.
November 8, Friday	Priority Deadline - Spring 2020 Baccalaureate and Associate applications: submit official transcripts and complete New Student Orientation.
December 18, Wednesday	Deadline Extended to January 4, 2020, 9 p.m. - Registration Deadline: Full Term Schedule and Spring A. Students who have not paid their tuition and fees or received coverage from other sources will be dropped from their Full Term and Spring A classes.
January 1, 2, & 3 Wednesday, Thursday, Friday	HOLIDAY - New Year's Day. *
January 4, Saturday	Registration Deadline 9 p.m. - Full Term and Spring A Schedule. Students who have not paid their tuition and fees or received coverage from other sources will be dropped from Full Term and Spring A classes.
January 5, Sunday	Workday will be temporarily unavailable until the drop for non-payment process is completed.
January 6, Monday	Late Registration begins - No Late Fees - Spring Full Term and Spring A Schedule. Payment due upon registration. All Faculty Report.
January 7, Tuesday	Last day to pay all fees: Full Term Schedule and Spring A.
January 8, Wednesday	**Classes begin: Full Term Schedule and Spring A.**
January 14, Tuesday	Last day to drop classes - Full Term and Spring A Schedule. NO REFUNDS after this date. Students who have not paid their tuition and fees or received coverage from other sources will be dropped from their Full Term and Spring A classes.
January 20, Monday	HOLIDAY - Martin Luther King, Jr. Day. *
January 21, Tuesday	Registration Deadline - Express Schedule. Last day to pay. ++
January 22, Wednesday	**Classes begin: Express Schedule.**
January 28, Tuesday	Last day to drop classes - Express Schedule. NO REFUNDS after this date.
February 28, Friday	Professional Enhancement Day (No classes, day or night).
March 1, Sunday	Deadline to register for 8-week Spring B classes that begin week of 3/2/20. Payment is due at the time of registration.
March 2, Monday	**Start of 8-week Spring B classes.**
March 16-20 Monday - Friday	HOLIDAY - Spring Break. *
March 23-28, Monday-Saturday	No face to face or hybrid classes will meet.
April 1, Wednesday	Priority Deadline - Summer 2020 Associate applications: submit official transcripts and complete New Student Orientation and Initial Advising Session.
April 6, Monday	First day to register - Summer 2020 Schedule.
April 10, Friday	Last day to withdraw with a "W" - Full Term AND Express Schedule classes.
April 17,	Last day for Total Withdrawal from All

Friday	Classes.
April 23, Thursday	**Last day of Full Term AND Express Schedule classes and final exams.**
April 24, Friday	Faculty Service Day.
April 27, Monday	Faculty Service Day.
April 28, Tuesday	
April 29, Wednesday	
April 30, Thursday	Spring Commencement: Associate in Arts Degree graduates. **POSTPONED TBA.** Faculty Service Day.
May 1, Friday	Spring Commencement: Associate in Science/Applied Science & Bachelor's Degree graduates. **POSTPONED TBA.** Faculty Service Day.

**Official Holiday — All offices closed. No classes.*

++Students who have not paid their tuition and fees or received payment coverage from other sources will be dropped from their classes.

MISSION STATEMENT & COLLEGE GOALS

As a leader in education and innovation, Indian River State College transforms lives by offering high-quality, affordable and accessible education to the residents of Indian River, Martin, Okeechobee, and St. Lucie counties through traditional and online delivery. IRSC is a comprehensive college accredited to award Baccalaureate Degrees, Associate Degrees, and Career and Technical Certificates.

We commit to

- Sustain a learning environment that stimulates the intellect and inspires the imagination
- Provide a comprehensive support system for academic and career success
- Advance cultural awareness and appreciation of diversity
- Stimulate economic growth
- Develop a highly skilled workforce
- Create partnerships to foster economic development and expand opportunities
- Provide cultural enrichment and lifelong learning
- Promote civic responsibility and community engagement
- Treat all students, employees, and community members fairly and with respect

Our Mission is fulfilled through the accomplishments of the following goals:

- **Educational Access:**
  Provide open access to educational opportunities for members of our service region.
- **Student Success:**
  Provide services and resources that promote student growth and achievement.
- **Student Development and Satisfaction:**
  Enhance and enrich the student learning experience through comprehensive and accessible support services and co-curricular activities.
- **Educational Programs:**
  Develop and deliver educational programs that lead to attainment of students' educational and career goals and provide the knowledge and skills needed in the workforce.
- **Cultural Enrichment:**
  Improve the quality of life and promote social interaction in our community by serving as a resource for cultural enrichment.
- **Equity and Diversity:**
  Demonstrate our commitment to the diversity and equity by ensuring that each individual receives the specific resources and services needed to achieve their educational and professional goals.
- **Technology:**
  Maximize educational quality, student learning, efficiency of operations, and service to the community through the appropriate integration and utilization of technology resources and infrastructure.
- **Fiscal Resources:**
  Ensure that all funding secured, received, and utilized by the College is effectively managed in alignment with the mission, goals, and priorities of the institution, as well as the educational needs of the community.
- **Physical Resources:**
  Provide and maintain the necessary land, facilities, and physical resources to create an environment conducive to effective teaching and learning.
- **Workforce Development:**
  Train and prepare a skilled, competent workforce aligned with current and future employment needs and opportunities in our community.
- **Economic Development:**
  Collaborate with economic development stakeholders and leaders to implement bold initiatives and entrepreneurial opportunities for our service region.
- **Employee Development:**
  Enrich the organizational culture and enhance employee performance through educational and professional growth opportunities.
- **Service**:
  Provide informed, responsive, and respectful service to our students, employees, and community.
- **Institutional Effectiveness**:
  Collect, analyze, and share performance and outcome data to support evidence-based decision-making.

EQUITY POLICY AND STATEMENT

Non-Discrimination/Non-Harassment Policy Statement

It is the policy of Indian River State College that each employee, visitor and student be allowed to participate in college programs, activities and employment in a discrimination and harassment free environment. Discrimination and harassment of any nature based on one's race, color, national origin, ethnicity, sex, pregnancy, religion, age, disability, sexual orientation, marital status, veteran status, genetic information and any other factor protected under applicable federal, state, and local civil rights laws, rules and regulations is strictly prohibited.

Title IX of the Educational Amendments of 1972 is a Federal Law prohibiting discrimination on the basis of sex in higher education. Sex discrimination includes sexual harassment and sexual violence.

Indian River State College prohibits the commission of any act of sexual assault, sexual misconduct, sexual battery, and other crimes of violence upon employees, students and prospective students, visitors, and other affiliates of the College conducting College business, events or activities on IRSC property or IRSC sponsored events.

Questions or concerns regarding IRSC's Non-Discrimination and Non-Harassment Policy may be directed to:

Adriene B. Jefferson
Equity Officer/Title IX Coordinator
Indian River State College
3209 Virginia Avenue
Fort Pierce, FL 34981-5596
ajeffers@irsc.edu
(772) 462-7156

The College Non-Discrimination and Non-Harassment Policy and related Reporting Procedures for both employees and students may be downloaded from the IRSC website at www.irsc.edu. Copies of the procedures are also available from the Equity Officer/Title IX Coordinator and the Office of Human Resources, both located at 3209 Virginia Avenue, Fort Pierce, Florida.

Official Notice of Policy and Practices

In compliance with various state and federal regulations, the District Board of Trustees of Indian River State College has approved non-discriminatory practices and policies concerning enrollment, admissions, and equal opportunity employment. This includes an Affirmative Action Program (See Administrative Procedures, AP 3.13 and AP 3.131) for reporting complaints.

The following laws collectively prohibit decisions that adversely affect an individual:

TITLE VII - CIVIL RIGHTS ACT OF 1964 AS AMENDED: No persons shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving federal financial assistance from the Department of Health, Education, and Welfare.

TITLE IX - EDUCATIONAL AMENDMENTS OF 1972: Prohibits Sex Discrimination in Education on the basis of sex in its employment practices for both academic and non-academic personnel, or in its admission of students, or in its educational programs or activities. Any inquiries concerning the applications of Title IX should be made to the Associate Dean of Human Resources or to the Equity Officers.

SECTION 504 - REHABILITATION ACT OF 1973: Prohibits discrimination against handicapped persons on the basis of handicap. The provisions of this law are equally applicable to employees, employment applicants, students, and student admissions.

THE AMERICANS WITH DISABILITIES ACT (ADA) OF 1990: Protects persons with disabling conditions from discriminatory practices in public accommodations, employment, transportation, and telecommunications. The ADA extends the coverage of Section 504 of the Rehabilitation Act of 1973, beyond just those programs receiving federal funding.

THE FLORIDA EDUCATIONAL EQUITY ACT, Section 1000.05, F.S.: Prohibits discrimination against students and employees in the state system of public education, on the basis of race, sex, national origin, marital status, and handicap.

Other laws and regulations with which we are in compliance are The Equal Pay Act of 1963; Executive Order No. 1246: Title VIII, Public Health Service Act; Age Discrimination in Employment Act of 1967; the Florida Human Rights Act.

Purpose

The purpose of Administrative Procedure (AP-3.13) is to support the IRSC District Board of Trustees Policy number 6Hx11-3.13 by rendering a process through which a complaint may be filed toward resolution of issues, and

may be pursued in a fashion devoid of coercion, interference, restraint, discrimination or reprisal.

This procedure shall apply only to discrimination or harassment complaints based on race, color, national origin, ethnicity, sex, pregnancy, religion, age, disability, sexual orientation, marital status, veteran status, or genetic information.

Definitions

1. **Complainant/s**: An individual, or group of individuals expressing a complaint, or charging another with a violation.
2. **Complaint**: A dissatisfaction wherein a person feels he/she has been adversely affected by discriminatory actions and/or harassment at the College.
3. **Complaint Intake Persons**: These are the individuals to whom an initial complaint/concern is to be reported as the first step in pursuing resolution. The proper individuals for this purpose are either the Health and Wellness Coordinator, who is located in the Health & Wellness Center or Equity Officer/Title IX Coordinator, who is located in W-building, Room 207.
4. **Discriminate**: To act with partiality or prejudice either for or against a person or group, based upon race, color, national origin, ethnicity, sex, pregnancy, religion, age, disability, sexual orientation, marital status, veteran status or genetic information.
5. **Evidence**: As applied in this procedure, any information, including documents and testimony, which relate to the alleged circumstances that gave rise to the complaint.
6. **Harassment**: There are a variety of types of harassment that can occur in the workplace. Workplace harassment, whether it be verbal or physical badgering based on sex, religion or race, is unlawful and also a form of discrimination. Unwelcome and discriminatory conduct is legally considered harassment when it is bothersome enough to negatively impact the work environment. Also, if a supervisor's harassment results in an obvious change in the employee's salary or status, this conduct would be considered unlawful workplace harassment.
7. **Respondent/s**: The individual, or group of individuals, against whom the complaint is filed.

Filing a Harassment and/or Discrimination Complaint

Indian River State College and its District Board of Trustees strongly encourage any student who believes that he or she has been subjected to discrimination and/or harassment at the College to immediately bring it forward to one of the Complaint Intake Persons designated in this Procedure (see Definitions). Such discussion should include as much information as possible, including names and positions of persons involved; identification of witnesses if any; the time, place and details of the incident leading to the allegations; etc. In no case will a Complainant be required to report such behavior to the alleged Harassing Party (the Respondent).

In the event that a faculty member, adjunct faculty member, or any other college employee may receive a complaint concerning harassment directly from a student, he/she must immediately inform an appropriate Intake Person.

Should an employee be involved in such a situation, reference is to be made to the Employee Reporting Procedure outlined in AP-3.131 for designated Complaint Intake Persons, their locations on campus, and the “Responsible Authorities.”

Failure of a student to immediately notify an appropriate individual of suspected or actually disclosed allegations of discrimination and/or harassment constitutes a violation of their individual accountability to support the Non-Discrimination and Non-Harassment Policy and Procedures of the College. Such violations may be subject to disciplinary actions.

http://www.irsc.edu/uploadedFiles/AboutIRSC/Harassment-Discrimination-Complaint-Form.pdf

Complaint Investigation

The issues generating the complaint are first discussed with an Intake Person in order to determine that the situation properly fits into the purview of these specific Policy and Procedural provisions. The Intake Person will explain the formal investigative process about to be entered into, should the complaint be eligible and desired by the Complainant to move forward to the Vice President of Student Affairs. The Vice President of Student Affairs serves as the Responsible Authority vested with investigative duties.

In order to move the complaint forward into investigation, the Complainant must complete and sign a "Harassment Report Form". This form must include details of the conduct and circumstances of the complaint. The Complainant must file a complaint within 60 days of the incident.

The Vice President of Student Affairs will then conduct an actual investigation of the charges being made.

In the event that an employee is involved in the complaint along with a student, the Vice President of Student Affairs will partner with the Assistant Dean of Human Resources in a joint investigation process.

The Respondent will be provided with a copy of the Complainant's written complaint as stated in the "Harassment Report Form".

Any persons thought to have information or evidence relevant to the complaint shall be interviewed and such interviews shall be appropriately documented. Students and involved employees are expected to cooperate in providing requested information. Other acceptable methods for gathering information include, but are not limited to, visual inspection of offensive materials and follow-up interviews as necessary.

In determining whether the alleged conduct constitutes sexual harassment, the totality of the circumstances, the nature of the conduct, frequencies, and the context in which the alleged conduct occurred will be investigated.

The investigation of the complaint must be concluded within a reasonable period of time. The institution will make every effort to complete a thorough investigation as expeditiously as possible. The timeline should not exceed twenty (20) working days after the receipt of the written "Harassment Report Form," unless otherwise agreed upon by the Complainant and the Responsible Authority or Authorities, due to extenuating circumstances.

Within five (5) days of the completion of the investigation, the Vice President of Student Affairs will prepare a written Complaint Resolution Report. The Complaint Resolution Report shall include the: basis of the complaint; issues and facts surrounding the dispute; summary of investigative findings, including interviews; recommendations/dispositions of inquiry; proposed disciplinary penalty (if any); basis for recommended action.

The Complaint Resolution Report will be presented and explained to both the Complainant and the Respondent in separate debriefing meetings. Findings and the resulting official actions to be taken, if any, will be discussed. Should disciplinary actions be determined to be in order, the appropriate supervisors must be made aware at this time in order to carry out the recommended action(s) and/or disciplinary procedure(s) that may be applicable.

The College President will be fully advised from the outset of the complaint being lodged, and will also be given a copy of the final Complaint Resolution Report.

Confidentiality: Confidentiality shall be maintained to the greatest extent possible while still meeting the requirements of conducting an appropriate investigation. Witnesses interviewed will be advised and requested to honor confidentiality as well.

Retaliation: Retaliation against an individual or individuals who have filed a charge, participated in an investigation, or openly opposed any unlawful practice, is prohibited and will subject the person who retaliates to disciplinary action.

Disciplinary Actions: Any employee or student found to have harassed another employee or student within the definitions of the Non-Discrimination and Non-Harassment Policy and Procedures will be subject to disciplinary actions up to and including possible separation of service, probation, suspension, or expulsion.

False or Malicious Complaints: Any employee or student found to have acted dishonestly or maliciously in making complaint allegations, or in their actions or witness statements during an official investigation, shall also become subject to possible disciplinary action.

Prevention: Indian River State College and the District Board of Trustees recognize that preventive measures are the best tool for the mitigation of discriminatory actions and sexual harassment issues emerging. Therefore, the College and the Board of Trustees will take necessary steps toward prevention, including, but not necessarily limited to the following:

- Establishing and publishing the Indian River State College Non-Discrimination and Non-Harassment Board Policy, along with the companion Administrative Procedures with regard to reporting violations.
- Inclusion of the policy and procedure information in student and employee handbooks with availability electronically maintained through the College website.
- Distribution of the Policy and Procedures during student and new employee orientations.
- Including discrimination/sexual harassment awareness and prevention training during student and employee orientations.
- Fostering Cultural Intelligence through college events and educational materials that address appreciation of diversity and cultural differences.
- Refreshing the ongoing awareness and training toward prevention of discrimination and harassment among both students and employees.

All students are encouraged to work through the internal complaint and appeal process provided by Indian River State College. However, if the student feels further investigation is warranted they can contact The Florida College System (FCS) at http://www.fldoe.org/policy/cie/file-a-complaint.stml .

SERVICES TO STUDENTS

The Catalog

The Indian River State College Catalog is designed to guide students from admission to graduation. It is the primary source of College information to ensure student success. Students are responsible for meeting in full the requirements for admission and graduation as set forth in the College catalog.

Upon being fully admitted, the Enrollment and Student Services Division assists in the planning of a program of study for each student with the final responsibility for meeting the requirements for graduation resting with the student. The catalog considered "in force" and binding on the student is (on the student's option):

1. The one under which he/she originally enrolled provided the student has maintained continuous enrollment (and allowing for institutional curriculum updates).
2. The current online/interactive College catalog.

The provisions of this online/interactive catalog are not to be construed as a contract between the student and Indian River State College. The College reserves the right to update any provision or requirement when such action will serve the interests of the College or its students. The College further reserves the right to ask a student to withdraw when it considers such action to be in the best interest of the College.

The success of each student is the top priority at Indian River State College. Student Services at IRSC help students benefit from their college experiences from the first campus visit to graduation. Services are provided by the following departments: Student Records, Academic Advising, Financial Aid, Veteran Affairs, Curriculum Support, Career and Transfer Services, Student Accessibility Services, Assessment Services, and International Student Advising. These services ensure that each student receives the individual support and guidance necessary for success.

Printed, archived copies of IRSC College Catalogs are available in the Main Campus library. Other requests for archived information should be sent to the Curriculum Support Office on the Main Campus or requests may be made to bsampson@irsc.edu.

Apply for Admissions

Complete an Application for Admissions at www.irsc.edu

Admissions - Associate, Certificate, Vocational Programs

Anyone planning to enroll in Indian River State College Associate Degree, Certificate and/or Vocational programs needs to complete an IRSC Application for Admission and Residency Declaration which can be found at www.irsc.edu. Students new to IRSC must also complete New Student Orientation (p. 33).

Admission to the Associate Degree and Certificate programs is open to all who apply with one of the following educational credentials:

- a standard high school diploma which meets the validation standards identified in Administrative Procedure-7.11
- a high school equivalency diploma (GED®) as prescribed in Section 1003.435, Florida Statute
- previously demonstrated competency in college credit post-secondary coursework with at least 30 semester hours of college credit with a minimum 2.0 cumulative GPA, as prescribed 1007.263, Florida Statute
- Home-School Affidavit signed by the student’s parent or legal guardian attesting that the student has completed a home education program pursuant to the requirements of Section 1002.41, Florida Statute.

New Associate in Arts degree-seeking students are required to complete SLS 1101 (p. 286). Student Success during their first semester of attendance. Please see your advisor for details.

Effective Fall 2017, Associate in Arts degree-seeking students must enroll in the first required math course appropriate for their degree by the time they have earned fifteen college credits or reached the 25% benchmark toward degree. These students must enroll in a math course each subsequent semester until the math general education requirement has been met.

Certain specialized programs, such as Health Sciences and Cosmetology, have additional requirements for admission and may have specific application deadlines. If you are interested in a Selective Admission program, please contact an advisor, the department, or check the appropriate webpage at www.irsc.edu.

Once an application has been processed, a series of notification emails will be sent to the student's personal email account indicating any missing requirements needed to complete the admissions process. Once admissions has been completed, students will be assigned an advisor, who will assist them in establishing and completing a Guided Pathway.

Students whose continued attendance is interrupted by two or more major terms (one calendar years) must submit an updated Application for Admission and Residency Declaration and are subject to the Admission Guidelines in effect at the time of re-entry. Returning students may complete their re-admission application at www.irsc.edu.

GED® is a registered trademark of the American Council on Education (ACE) and administered exclusively by GED Testing Service LLC under license. This material is not endorsed or approved by ACE or GED Testing Service.

Admissions - Dual Enrollment

Dual Enrollment is defined as a student simultaneously earning high school credit toward a high school diploma along with college credit toward an Associate Degree or occupational credit toward a technical certificate.

New Dual Enrollment Associate in Arts degree-seeking students are required to complete SLS 1101 (p. 286) Student Success during their first semester of attendance. Please see your advisor for details.

For information on additional requirements and opportunities, go to www.irsc.edu and click on "Choose a Program or Career" then click "Dual Enrollment." Types of Dual Enrollment include:

1. Academic - Students may simultaneously earn high school credit toward a high school diploma and college credit toward an Associate or Baccalaureate Degree. Students may be part time or full time. To enroll in academic coursework, students must successfully complete an entry level examination as required by Section 1008.30, Florida Statutes. For the purpose of this agreement, ACT, SAT, and/or P.E.R.T. scores are acceptable.
2. Career/Technical - Students may simultaneously earn elective high school credit toward a high school diploma and career/technical credit toward an Associate Degree or Technical Certificate. Students may be part time or full time in Career/Technical Dual Enrollment.
3. Early Admission - Highly qualified high school students may enroll full time in college, and simultaneously earn high school credits toward a high school diploma and college credit toward an Associate or Baccalaureate Degree. Students must have completed, prior to Early Admission, a minimum of six semesters of full time secondary enrollment (grades 9-11). Eligibility criteria, as stated in paragraphs #1 and #2 above, also apply to Early Admission.

The following are ineligible to be counted as Dual Enrollment.

1. Vocational preparatory instruction
2. College preparatory instruction
3. Other forms of pre-college instruction
4. Physical education and recreational studies that focus on physical execution of skills rather than the intellectual attributes of an activity
5. Private music lessons

Admissions - Associate Level Non-Degree Seeking Students

Anyone planning to enroll in Indian River State College as an Associate level, non-degree seeking student must complete an IRSC Application for Admission and Residency Declaration. Applicants may apply at www.irsc.edu.

Non-degree seeking students must also meet applicable placement testing requirements and satisfy course prerequisites. Upon completing 15 college credits at IRSC, the student's status will be reviewed, and appropriate advisement will be provided to support achievement of the student's goals.

Admissions – Baccalaureate Programs

Anyone planning to enroll in Indian River State College Baccalaureate programs must complete the Application for Admission and Residency Declaration and pay the one-time $30 non-refundable application fee. Applicants may complete this form online at www.irsc.edu. Admission is open to all who meet the admission requirements. Applicants must provide official transcripts for all prior college coursework and students who are new to IRSC must complete the New Student Orientation. Students must demonstrate successful completion of developmental course requirements in English, reading and math prior to admission into a Baccalaureate program.

Applications for IRSC's *Bachelor of Applied Science Degree in Organizational Management* (p. 74)program

are accepted year-round, and students may start during any semester of the academic year. Requirements for admission to the B.A.S. program in Organizational Management are:

1. An Associate in Science (A.S.) or an Associate in Arts (A.A.) Degree (or equivalent) from a regionally accredited postsecondary institution. Those with an A.A. degree who have completed all core General Education requirements will be required to complete a total of eighteen (18) credits in a technical area (e.g., accounting technology, computer science, business, etc.) in lieu of the additional core General Education required of the A.S. graduate.
2. A cumulative Grade Point Average (GPA) of 2.0 in Associate level coursework.

Applications for IRSC's *Bachelor of Applied Science Degree in Digital Media* (p. 65)program are accepted year-round, and students may start during any semester of the academic year. Requirements for admission to the B.A.S. program in Digital Media are:

1. An Associate in Science (A.S.) or Associate in Arts (A.A.) Degree (or equivalent) from a regionally accredited postsecondary institution. An A.S. Degree in Graphic Design or Digital Media is preferred.
2. A cumulative Grade Point Average (GPA) of 2.0 in Associate level coursework.

Applications for IRSC's *Bachelor of Science Degree in Education* (p. 66)programs are accepted year-round, and students may start during any semester of the academic year. Requirements for admission to the B.S. programs in Education programs are:

1. An Associate in Arts Degree (or equivalent) from a regionally accredited postsecondary institution.
2. Completion of lower-division state-mandated common prerequisite: EDF 2005 (p. 207).
3. A cumulative Grade Point Average (GPA) of 2.5 in Associate level coursework.
4. Demonstrate mastery of general knowledge by presenting passing scores on all portions of the General Knowledge (GK) test of the Florida Teacher Certification Exam.

Equivalent Prerequisites may be accepted (see the Common Prerequisite Manual at www.flvc.org or contact an IRSC Advisor for details).

Note: All students accepted into an Education Baccalaureate Degree program must pass a Level II background check by the Florida Department of Law Enforcement (FDLE) and the Federal Bureau of Investigation (FBI) prior to beginning any course with a field experience component. Background checks will be administered by the school district(s) where field experiences are to be conducted. Students who cannot obtain a satisfactory background check will be prohibited from registering for courses with a field experience component and may be dismissed from the Education program.

Applications for IRSC's *Bachelor of Science in Nursing* (p. 74)*(B.S.N.)* program are accepted year-round, and students may start during any semester of the academic year. Requirements for admission to the B.S.N. are:

1. Active, unrestricted home state of Florida Registered Nursing License.
2. Completed an Associate in Science Degree in Nursing (ADN) from a regionally accredited postsecondary institution.
3. At least a 2.5 cumulative Grade Point Average (GPA) on a 4.0 scale.
4. Florida residency declaration for tuition purposes.

Effective Spring 2020 the requirement for admission to the B.S.N. program are:

1. Active, unencumbered valid home state of Florida Registered Nursing License.
2. Completed an Associate in Science Degree in Nursing (ADN) from a regionally accredited postsecondary institution.
3. At least a 2.5 cumulative Grade Point Average (GPA) on a 4.0 scale.
4. Florida residency declaration for tuition purposes.
5. Completed BSC 2093, BSC 2093L, BSC 2094, BSC 2094L, or equivalent, all with a grade of "C" or higher.
6. Completed MGF 2106, MGF 2107, or MAC 1105 or higher, with a grade of "C" or higher.
7. Completed the Nursing Advising meeting.

Applications for IRSC's *Bachelor of Science Degree in Biology* (p. 63)program are accepted year-round, and students may start during any semester of the academic year. Requirements for admission to the B.S. program in Biology are:

1. An Associate in Arts Degree (or equivalent) from a regionally accredited postsecondary institution.
2. A cumulative Grade Point Average (GPA) of 2.0 in Associate level coursework.
3. Completion of all required common prerequisite courses (listed below) with a grade of "C" or higher

BSC 2010 (p. 179)- General Biology, BSC 2010L (p. 179)- General Biology Lab, BSC 2011 (p. 179)- General Biology II, BSC 2011L (p. 179)- General Biology II Lab, CHM 1045 (p. 184)- General Chemistry I, CHM 1045L (p. 184)- General Chemistry I Lab, CHM 1046 (p. 184)- General Chemistry II, CHM 1046L (p. 184)- General

Chemistry II Lab, CHM 2210 (p. 185)- Organic Chemistry I, CHM 2210L (p. 185)- Organic Chemistry I Lab, CHM 2211 (p. 185)- Organic Chemistry II, CHM 2211L (p. 185)- Organic Chemistry II Lab, MAC 2311 (p. 248) - Calculus I or MAC 2233 (p. 248) - Business Calculus I, STA 2023 (p. 289)- Statistics. Equivalent Prerequisites may be accepted (see the Common Prerequisite Manual at www.flvc.org or contact an IRSC Advisor for details).

Applications for IRSC's *Bachelor of Science Degree in Human Services* (p. 71)program are accepted year-round, and students may start during any semester of the academic year. Requirements for admission to the B.S. program in Human Services are:

1. An Associate in Science (A.S.) or Associate in Arts (A.A.) Degree (or equivalent) from a regionally accredited postsecondary institution. An A.S. Degree in Social & Human Services is preferred.
2. A cumulative Grade Point Average (GPA) of 2.0 in Associate level coursework.

Applications for IRSC's *Bachelor of Science Degree in Business Administration* (p. 64)program are accepted year-round, and students may start during any semester of the academic year. Requirements for admission to the B.S. program in Business Administration are:

1. An Associate in Arts (A.A.) or Associate in Science (A.S.) Degree (or equivalent) from a regionally accredited postsecondary institution.
2. A cumulative Grade Point Average (GPA) of 2.0 in Associate level coursework.
3. Completion of all required common prerequisite courses (listed below) with a grade of "C" or higher.

CGS 1060 (p. 183) - College Computing, or CGS 1100 (p. 183)- Introduction to Computer Applications for Business; ECO 2013 (p. 206) - Principles of Economics Macro; ECO-2023 (p. 206)- Principles of Economics Micro; STA-2023 (p. 289)- Elementary Statistics I; MAC-2233 (p. 248)- Business Calculus I; ACG-2001 (p. 164)- Financial Accounting I; ACG-2011 (p. 164)- Financial Accounting II; ACG-2071 (p. 164)- Managerial Accounting. Equivalent Prerequisites may be accepted (see the Common Prerequisite Manual at www.flvc.org or contact an IRSC advisor for details).

Applications for IRSC's *Bachelor of Science Degree in Public Administration* (p. 75)program are accepted year-round, and students may start during any semester of the academic year. Requirements for admission to the B.S. program in Public Administration are:

1. An Associate in Science (A.S.) or Associate in Arts (A.A.) Degree (or equivalent) from a regionally accredited postsecondary institution.
2. A cumulative Grade Point Average (GPA) of 2.0 in Associate level coursework.
3. Completion of all required common prerequisite courses (listed below) with a grade of C or higher.

CGS 1060 (p. 183) - College Computing, or CGS 1100 (p. 183)- Introduction to Computer Applications for Business; ECO 2013 (p. 206) - Principles of Economics Macro, or ECO 2023 (p. 206)- Principles of Economics Micro; POS 1041 (p. 277)- American Government. Equivalent Prerequisites may be accepted (see the Common Prerequisite Manual at www.flvc.org or contact an IRSC Advisor for details).

Applications for IRSC's *Bachelor of Science Degree in Criminal Justice* (p. 64)program are accepted year-round, and students may start during any semester of the academic year. Requirements for admission to the B.S. program in Criminal Justice are:

1. An Associate in Science (A.S.) or Associate in Arts (A.A.) Degree (or equivalent) from a regionally accredited postsecondary institution. An A.S. Degree in Criminal Justice is preferred.
2. A cumulative Grade Point Average (GPA) of 2.0 in Associate level coursework.

Applications for IRSC's *Bachelor of Science Degree in Information Technology Management/Cyber Security* (p. 73) program are accepted year-round, and students may start during any semester of the academic year. Requirements for admission to the B.S. program in Information Technology Management/Cyber Security are:

1. An Associate in Science (A.S.) or Associate in Arts (A.A.) Degree (or equivalent) from a regionally accredited postsecondary institution. An A.S. Degree in Computer Information Technology is preferred.
2. A cumulative Grade Point Average (GPA) of 2.0 in Associate level coursework.

Applications for IRSC's *Bachelor of Science Degree in Healthcare Management* (p. 71)program are accepted year-round, and students may start during any semester of the academic year. Requirements for admission to the B.S. program in Healthcare Management are:

1. An Associate in Science (A.S.) or Associate in Arts (A.A.) Degree (or equivalent) from a regionally accredited postsecondary institution. An A.A. degree or an A.S. Degree in Health Services Management is preferred.
2. A cumulative Grade Point Average (GPA) of 2.5 in Associate level coursework.
3. Completion of all required common prerequisite courses (listed below) with a grade of "C" or higher

ACG 2001 (p. 164) - Financial Accounting I; ACG 2011 (p. 164)- Financial Accounting II; ACG 2071 (p. 164)- Managerial Accounting; ECO 2023 (p. 206)- Principles of Economics Micro; STA 2023 (p. 289)- Elementary

Statistics I; CGS 1100 (p. 183) - Introduction to Computer Applications for Business, or CGS 1060 (p. 183)- College Computing. Equivalent Prerequisites may be accepted (see the Common Prerequisite Manual at www.flvc.org or contact an IRSC Advisor for details).

Applications for IRSC's *Bachelor of Science Degree in Accounting* (p. 62)program are accepted year-round, and students may start during any semester of the academic year. Requirements for admission to the B.S. program in Accounting are:

1. An Associate in Science (A.S.) or Associate in Arts (A.A.) Degree (or equivalent) from a regionally accredited postsecondary institution. An A.A. degree or an A.S. Degree in Accounting Technology is preferred.
2. A cumulative Grade Point Average (GPA) of 2.0 in Associate level coursework.
3. Completion of all required common prerequisite courses (listed below) with a grade of "C" or higher.

ACG 2001 (p. 164) - Financial Accounting I; ACG 2011 (p. 164)- Financial Accounting II; ACG 2071 (p. 164)- Managerial Accounting; ECO 2013 (p. 206) - Principles of Economics Macro; ECO 2023 (p. 206)- Principles of Economics Micro; MAC 2233 (p. 248) - Business Calculus I, or MAC 2311 (p. 248)- Calculus I with Analytic Geometry; STA 2023 (p. 289)- Elementary Statistics I; CGS 1100 (p. 183)- Introduction to Computer Applications for Business, or CGS 1060 (p. 183)- College Computing. Equivalent Prerequisites may be accepted (see the Common Prerequisite Manual at www.flvc.org or contact an IRSC Advisor for details).

Admissions - Baccalaureate Level Non-Degree Seeking Students

Non-degree seeking students may register for certain upper-division courses for the purpose of personal or professional development without being admitted to a Baccalaureate Degree program.

Non-degree seeking students must complete an IRSC Application for Admission and Residency Declaration, pay the $30 non-refundable Baccalaureate application fee, submit transcripts documenting completion of an Associate Degree or higher, and demonstrate successful completion of developmental course requirements in English, reading and math prior to admission. Enrollment will be on a space-available basis only.

Upper-division credits earned as a non-degree seeking student may be applied toward a Baccalaureate Degree upon admission to a Baccalaureate Degree program. Additional academic program requirements or restrictions may apply. Consult with an IRSC advisor for additional information.

Admissions - Health Science Programs

Applicants to the Health Science programs at IRSC are subject to special admission requirements and dates. Program application deadlines may be found at www.irsc.edu/programs/healthscience/healthscience.aspx?id=1816.

In addition to admission requirements for most of the programs at IRSC, the Health Sciences Division requires applicants to meet additional "Selective Admission" conditions. These include:

- submission of a Health Science program application
- payment of a $30 non-refundable/non-transferable application fee for each program
- appropriate academic preparation
- acceptable scores on various aptitude tests

Students who need remediation before being accepted into the Health Science programs are referred to the Academic Support Center (ASC), where individualized instruction is available.

Program information outlining the "Selective Admission" criteria is available at http://www.irsc.edu/programs/healthscience/healthscience.aspx?id=1816.

Admissions - International Students F1 Student Visa

International students wanting to attend IRSC need to request the International Student Admissions packet. The student must then submit:

1. Completed IRSC Application for Admission along with the $30 non-refundable application fee.
2. Official transcripts of completed high school and postsecondary work, including the dates of attendance, courses taken, and grades received. A certified English translation and a course-by-course evaluation completed by a transcript evaluation service (for all postsecondary work) must accompany the transcript.
3. Official copy of scores attained on the Test of English as a Foreign Language (TOEFL). A minimum total score: internet based 61, paper-based of 500, or a computer-based of 173 is required of international students whose native language is not English.
4. Documentation of medical insurance covering the periods of enrollment.
5. The applicant must complete the Affidavit of Financial Support forms and submit valid supporting financial documents certifying sufficient funds are available to cover expenses for the first year at Indian River State College.

The affidavit forms must be signed by the applicant and sponsor.

Documents must be original, dated less than six months from the date of intended enrollment and issued by a financial institution verifying the minimum amount of - $17,000 for Associate Degree programs or $20,000 for Bachelor Degree programs. ALL FUNDS MUST BE IN U.S. Dollars.

International students will then receive Form I20 (Certificate of Eligibility) upon approval of the application.

Refer to International Transfer Coursework (p. 30)for more information.

Admissions - Transient Students

Students currently attending another college or university who want to take one or more courses at Indian River State College and transfer their credit back to their home institution may be admitted as a transient student. Transient students should be advised by their home institution regarding which courses to take at Indian River State College and determine if the student has satisfied the necessary course prerequisites.

Transient Students who do not attend a Florida public institution must:

1. Submit a Transient Student form from their home institution. The form must indicate that the student is in good academic standing and specify the course(s) in which the student is eligible to enroll at Indian River State College.
2. Complete an IRSC Application for Admission at www.irsc.edu.

IRSC students who want to take classes at private or out-of-state institutions must see an IRSC advisor to complete the Transient Student request form.

Residency for Tuition Purposes

Students shall be classified as residents or non-residents for the purpose of assessing tuition at Indian River State College based on the provisions of Florida Statute 1009.21 and State Board of Education Rule 6A-10.044.

Initial classification as a Florida resident for tuition purposes applies to students who are enrolling for the first time, or those enrolling after a period of twelve (12) months of non-enrollment. After 12 months of non-enrollment, students will be required to apply for re-admission to the college and resubmit documentation for classification as a resident for tuition purposes.

To qualify as a resident for tuition purposes, the student as an independent claimant, or the student's parent or guardian as claimant if the student is dependent, must have established and maintained legal residence in this state for at least 12 consecutive months immediately prior to the student's enrollment at the College. As stipulated in Florida Statute 1009.21, living or attending school in Florida is not equivalent to establishing a legal residence for tuition purposes.

To be eligible for Florida residency for tuition purposes for initial classification, a student must satisfy all of the following criteria:

1. Be a U.S. Citizen or legal alien granted indefinite stay and eligible for study in the United States per State Board of Education Rule 6A-10.044 and *Guidelines on Florida Residency for Tuition Purposes*.
2. Demonstrate independent/dependent status as defined by the student's birth date in accordance with the Federal Income Tax code.
3. Submit Form FRD-1 Florida Residency Declaration and provide two documents evidencing legal residence in Florida for at least 12 consecutive months immediately prior to the first day of classes for the term for which Florida residency is sought. If the student is a dependent under the federal income tax code, then the parent or guardian must submit the Florida Residency Declaration documenting 12 months of continuous residency and primary domicile prior to the classification term.

All U.S. citizen dependent students who meet the statutory requirements for Florida residency, regardless of parental immigration status in the United States, will be classified as residents for tuition purposes.

All other dependent students whose birth country is not the United States, along with their parent as claimant, must provide proof of an eligible immigration status in the United States to be considered for residency for tuition purposes.

A student who meets any of the following criteria may file as an independent claimant:

- The student is 24 years of age or older by the classification term of enrollment;
- The student is married;
- The student has a child or other dependents for whom the student provides more than half of their support;
- The student is a Veteran or currently serving on active duty in the United States Armed Services;
- The student's parents are deceased or the student is or was a ward of the court;
- The student earns more than 50% of the cost of attendance. Contact the Student Records Office for the current income amount required to demonstrate financial independence.

Valid documentation evidencing independence must be submitted by all students under the age of 24. Students who do not meet the above criteria for independence are subject to filing residency as a dependent; their parent or guardian is the claimant who must provide the documentation.

A student under the age of 24 living with an adult relative other than the student's parent or guardian may request classification as a resident for tuition purposes if the adult relative claimant is a legal resident who has maintained legal residence in this state and the student has resided continuously with such relative for the three years immediately prior to the student's initial enrollment during which time the adult relative claimant has exercised day-to-day care, supervision, and control of the student. Submission of a tax return evidencing the dependency or other valid proof of the parental relationship is required.

The student as an independent claimant, or the student's parent or guardian as claimant, must submit an FRD-1 Florida Residency Declaration. The claimant must indicate his or her length of residence in Florida and establish that his or her presence during the 12-month qualifying period is and was for the purpose of maintaining a primary domicile, rather than for the purpose of maintaining a temporary residence related to enrollment at Indian River State College.

The claimant is required to submit two (2) documents evidencing Florida as their primary domicile as part of their FRD-1 Florida Residency Declaration. The documents must be dated or issued at least 12 months prior to the first day of classes for the term for which residency is requested.

Per Florida Statute 1009.21(3)(c)1, the documents must include at least one of the following:

1. A Florida voter registration card.
2. A Florida driver license or State of Florida identification card.
3. A Florida vehicle registration.
4. Proof of ownership of a permanent home in Florida as primary residence or proof of homestead exemption.
5. Proof of permanent full-time employment in Florida for at least 30 hours per week for the 12-month period.
6. For dependent students only: A Florida high school transcript showing multiple years' enrollment and a graduation date within the previous 12 months in conjunction with another Tier 1 or Tier 2 document from the parent guardian.

Per Florida Statute 1009.21(3)(c)2, the documents may include one of the following:

1. A declaration of domicile in Florida.
2. A Florida professional or occupational license.
3. A Florida incorporation.
4. Proof of membership in a 401C Florida-based charity or professional organization registered with the State of Florida.
5. Any other documentation that supports the request for resident status, including a lease, notarized letter of housing, or an official state, federal, or court ordered transfer of legal ties to Florida.

Residency documentation is subject to validation through State of Florida databases.

Florida Statute 1009.21 also provides for the following persons to be classified as a Florida resident for tuition purposes.

- Students who were enrolled in a Florida public postsecondary institution and classified as a resident for tuition purposes within the last 12 months as evidenced and noted on their official transcript.
- Active duty members of the Armed Services of the United States residing or stationed in this state, and their spouses and dependent children; active drilling members of the Florida National Guard.
- Full-time instructional and administrative personnel employed by Florida public schools and institutions of higher education and their spouses and dependent children.
- Qualified beneficiaries of the Florida Pre-Paid College Program as defined in F.S. 1009.98(2), unless otherwise eligible by the guidelines set herein.
- Full-time employees of state agencies/political subdivisions of the state when the student fees are paid by the state agency or political subdivision for the purpose of job-related law enforcement or corrections training.

In addition to the Florida Statute exceptions, Florida Administrative Code Rule 6A-10.044(1)(a) provides classification as a Florida resident for tuition purposes for a dependent student who attended a Florida high school for a minimum of two (2) academic years immediately preceding his or her initial enrollment at IRSC and who graduated from a Florida high school or earned a State of Florida High School Diploma within the last twelve (12) months. For this exception, the student's high school transcript or their State of Florida High School Diploma transcript is one evidence of Florida residency, and at least

one (1) additional document identified in F.S. Sect.1009.21(3)(c)1. or 1009.21(3)(c)2., F.S., must be presented evidencing parental legal residence.

Per Florida Administrative Code Rule 6A-10.044(2), a student who is classified as a nonresident for tuition purposes may become eligible for reclassification as a resident for tuition purposes by presenting a minimum of three (3) documents identified in Section 1009.21(3)(c)1. or 1009.21(3)(c)2., F.S., that convincingly demonstrate the establishment of permanent legal residence in Florida other than for the sole purpose of pursuing a postsecondary education. Documentation must demonstrate that the claimant has maintained legal residence in Florida for a least twelve (12) consecutive months prior to the request for reclassification. The documentation must include at least one document from F.S. Sect.1009.21(3)(c)1., plus two additional documents from either F.S. Sect.1009.21(3)(c)1. or 1009.21(3)(c)2.

A person who is classified as a non-resident for tuition purposes and who marries a legal resident of the state or marries a person who becomes a legal resident of the state may, upon becoming a legal resident of the state, become eligible for reclassification as a resident for tuition purposes upon submitting evidence of his or her own legal residency in the state, evidence of his or her marriage to a person who is a legal resident of the state, and evidence of the spouse's legal residence in the state for at least 12 consecutive months immediately preceding the application for reclassification.

A student who requests resident status but provides information or documentation that is inconsistent with other areas of his or her application may not meet the eligibility requirements for Florida residency for tuition purposes. In evaluating documentary evidence, there must be an absence of information that contradicts the student's claim of resident status. Possession of legal tie to any other state (i.e., driver license, vehicle registration) may preclude the student from being classified as a Florida resident for tuition purposes.

A student who is otherwise unable to qualify as a Florida resident for tuition purposes by the guidelines set herein, may submit a Residency Petition for In-state Tuition to the Residency Appeals Committee in the Student Records Department. The student must include documentation evidencing the grounds on which the appeal for residency for tuition purposes is based. Petition forms are available at any campus. The Residency Appeals Committee will render a final residency determination in writing that includes the reason for the determination.

An applicant should be aware that a false statement regarding residency status is punishable as a misdemeanor under Section 837.06, Florida Statutes.

ADDITIONAL RESOURCES

Florida Statute 1009.21 is located at http://www.flsenate.gov/Laws/Statutes/2013/1009.21.

Florida Administrative Code Rule is located at http://www.flrules.org/gateway/ruleNo.asp?id=6A-10.044

Florida State Residency Guidelines are located at www.flvc.org under the "apply" link.

For additional questions about residency, please contact Student Records at (772) 462-7460.

Submit Your Documents

High School or GED® transcript, transcripts from all colleges attended previously, and college placement test scores (ACT, SAT or P.E.R.T.)

Degree-seeking students must submit official transcripts from high school and all post-secondary educational institutions attended to Student Records.

All students entering Selective Admissions programs and/or students receiving financial aid must have their transcripts on file and evaluated prior to their first term of enrollment.

All other degree-seeking applicants must complete their admissions and submit all transcripts prior to registering for their second term.

The student is responsible for requesting official transcripts and paying related fees from prior institutions attended.

Students who have graduated from a foreign high school must have their foreign credentials evaluated by:

- International Education Evaluations, Inc., 7900 Matthews-Mint Hill Rd., Suite 300, Charlotte, NC 28227, or
- World Education Services, Inc., P.O. Box 745, Old Chelsea Station, New York, NY 10011, or
- Josef Silney & Associates, Inc., 7101 S.W. 102 Avenue, Miami, FL 33173, or
- any current NACES member (www.naces.org/members.htm)
  The evaluation must state that the student has completed a secondary education that is the equivalent of a standard US High School Diploma.

Refer to International Transfer Coursework (p. 30) for information about the evaluation of foreign post-secondary credentials.

GED® is a registered trademark of the American Council on Education (ACE) and administered exclusively by GED Testing Service LLC under license. This material is not endorsed or approved by ACE or GED Testing Service.

High School Transcripts

The College accepts high school credentials in accordance with Florida Statutes (1003.428), State Board of Education Rules, and IRSC Administrative Procedure 7.11. An official transcript must be submitted from a regionally accredited or IRSC approved secondary school or the equivalent (GED®, etc.).

GED® is a registered trademark of the American Council on Education (ACE) and administered exclusively by GED Testing Service LLC under license. This material is not endorsed or approved by ACE or GED Testing Service.

Evaluation of Post Secondary Transfer Credits

Once all transcripts have arrived, a formal evaluation of transfer credit will take place as follows:

- All credits awarded from regionally accredited schools will be evaluated for transfer.
- Credits from non-regionally accredited institutions may be evaluated provided the student submits documentation of instructor credentials and a syllabus for each course.
- All military training, experience, or coursework that is recognized by the American Council on Education (ACE) will be evaluated if the student provides IRSC with a transcript of that training or coursework. (6A-14.0302).
- All evaluated courses will be added to the student's IRSC academic record.
- Courses in which the student made an insufficient grade to earn transfer credit will be calculated in the cumulative grade point average.
- Transfer courses that are not equivalent to IRSC courses will also be calculated in the cumulative grade point average though the courses do not count toward a degree or certificate.
- Courses from any Health Science program will not automatically transfer even if a comparable course exists, however these will be calculated in the cumulative grade point average.
- All credits attempted at IRSC, along with transfer credits from all other institutions attended, will be used to compute the student's cumulative grade point average.
- All evaluated courses count toward a student's attempted hours for financial aid Satisfactory Academic Progress (SAP). (p. 31)
- Transfer Students with a last term below a 1.5 GPA will be admitted on an academic warning status. Students in this category should refer to the Academic Warning/Deficiency/Suspension (p. 40) section of this catalog.

Upon evaluation, a degree audit will be mailed to the student reflecting courses accepted toward an IRSC degree. IRSC accepts eligible credits of a grade of D or higher in all undergraduate courses. However, a grade of C is required for certain General Education courses and as a prerequisite for other courses. Please consult an IRSC Advisor for further clarification.

Residency for Program Completion at IRSC (Minimum Hours Required)

Students must complete at least twenty-five percent (25%) of the requirements for their certificate or degree at IRSC. For example, a student completing a 60 credit hour program must take a minimum of 15 credits required for that program at IRSC. Only courses with grades of A, B, C, D and S that are part of the degree or certificate program will satisfy the residency requirement.

Developmental level courses may not be used to fulfill the residency requirement.

Courses that can be taken multiple times for credit can be used multiple times toward the residency requirement up to the number of times that they can be taken for credit.

CLEP, AP, IB, PEP, and competency-validated credit will not be counted toward the residency requirement. Students should consult with their assigned advisor if they have any questions regarding transfer.

International Transfer Coursework

Submission of foreign post-secondary transcripts is optional.

Students who have attended a post-secondary educational institution outside the United States and wish to transfer their coursework must have their foreign academic credentials evaluated by any of the following:

- International Education Evaluations, Inc., 7900 Matthews-Mint Hill Rd., Suite 300, Charlotte, NC 28227, or
- World Education Services, Inc., P.O. Box 745, Old Chelsea Station, New York, NY 10011, or
- Josef Silney & Associates, Inc., 7101 S.W. 102 Avenue, Miami, FL 33173, or
- any current NACES member (www.naces.org/members.htm)

and provide the IRSC Student Records Office with a course-by-course evaluation of the official translated transcripts from each institution attended.

The student is responsible for evaluation fees, and there is no guarantee that any coursework will transfer to Indian River State College.

Refer to Submit Your Documents (p. 29) for information about the evaluation of foreign secondary (high school) transcripts.

Placement Testing

IRSC strongly encourages all students to take advantage of placement testing to ensure appropriate placement into developmental or college-level courses in English, reading, and math. The P.E.R.T. is administered by IRSC for this purpose.

Students with ACT scores of Reading 19, English 17, Math 19 or SAT scores taken before March 1, 2016, of Verbal 440, Math 440 or higher, or SAT scores taken between March 1, 2016, and January 24, 2017, of Critical Reading 24 or higher, Math 24 or higher, or SAT scores taken after January 24, 2017, of Critical Reading 24 or higher, SAT Writing & Language 25, Math 24 or higher, may be exempt from taking the P.E.R.T.

Students who graduated from a Florida public high school since 2007 and students who are serving as an active duty member of any branch of the United States armed services are exempt from mandatory placement testing.

The P.E.R.T. is offered daily at each campus. Photo identification is required. Testing schedules are available at www.irsc.edu and at all IRSC campuses.

For specific details about Assessment Services and testing click www.irsc.edu/admissions/assessmentservices/assessmentservices.aspx?id=388.

Apply for Financial Aid

Indian River State College believes that no person should be denied a college education due to a lack of funds.

The College and the IRSC Foundation make available to eligible students a variety of scholarships, grants, work opportunities, and loans. Applying for these opportunities is strongly encouraged as many students do qualify for some type of scholarship or financial aid.

Apply at www.irsc.edu, and click on the Financial Aid link.

Federal and State Financial Aid programs are offered to eligible students at IRSC. These include:

- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant (FSEOG)
- Florida Student Assistance Grant (FSAG)
- Florida Bright Futures Scholarship Program
- Federal TEACH Grant
- Federal Work Study Program (FWSP)
- Federal Direct Student Loans

Applications and information on these programs are available to students through their high school guidance counselor or at www.irsc.edu. Since financial aid applications may take 6 weeks to process, students are encouraged to apply early.

- Federal Aid recipients must meet Satisfactory Academic Progress (SAP) guidelines (See Satisfactory Academic Progress for Financial Aid (p. 31)).
- Federal Financial Aid eligibility requirements will only allow payments for classes that are a part of the student's program of study. Up to 30 credits of developmental education coursework will count for financial aid purposes.

Satisfactory Academic Progress for Financial Aid

There are three components to IRSC's Satisfactory Academic Progress Standards (SAP) for Financial Aid Recipients:

1. Financial Aid recipients are expected to maintain a minimum cumulative 2.0 GPA for all classes attempted, including transfer credits. First year students may be eligible for the sliding scale GPA indicated below:

Minimum Hours Attempted	Maximum Hours Attempted	Minimum GPA
0	**15**	**1.50**
16	**30**	**1.70**
31	**999**	**2.00**

2. Financial Aid recipients must successfully complete 67% of all credits attempted effective with the Spring 2016 term, including transfer credits.
3. Financial Aid recipients must complete their degree or certificate within a specified time-frame, based on enrollment status.

Note: If you are put on financial aid warning, you must check with the financial aid office to see what you must do to remain eligible after the warning term.

In general, students who have attempted more than 150% of credits in their program of study will not be eligible to

continue to receive financial aid at IRSC, even if some of these credits were attempted at another institution.

Certain Financial Aid programs may have more restrictive guidelines. More specific SAP guidelines may be obtained from the Financial Aid Office. It is the student's responsibility to be aware of, and to adhere to, all Satisfactory Academic Progress requirements.

Financial Aid and Attendance

Students at IRSC who receive any Federal Financial Aid, including Veterans Benefits, are expected to attend all classes. Unavoidable absences should be discussed with instructors. Financial Aid and Veteran students should refer to IRSC's Standards of Satisfactory Academic Progress, available at: http://www.irsc.edu/uploadedFiles/Admissions/Financial_Aid/Financial-Aid-Handbook.pdf.

Financial Aid recipients who stop attending classes or receive a grade of I, F, U, or W, will be considered withdrawn as of their last date of attendance. Financial Aid may be adjusted accordingly (See Withdrawals - Return to Title IV Funds (p. 32)).

Students who do not attend the first week of their classes will be withdrawn, receive a grade of W, and their Financial Aid award will be adjusted as appropriate. Attendance in online classes is verified by completing online assignments during the first week. See class syllabus for specific attendance requirements.

Full-time for Financial Aid eligibility is defined as at least 12 credit hours during each semester, Fall, Spring, and Summer. If fewer credit hours are attempted, awards are adjusted proportionately.

Withdrawals - Return to Title IV Funds

Title IV Aid includes all Federal Financial Aid programs authorized under the Higher Education Act of 1965 (as amended). The following IRSC Financial Aid sources are a part of the Title IV programs:

- Direct Student Loan
- Federal PLUS Loan
- Federal Work-Study
- Federal Supplemental Educational Opportunity Grant (FSEOG)
- Federal Pell Grant
- Federal TEACH Grant

Any student who withdraws and/or stops attending all of his/her classes prior to the 60% point of any term and has received any Federal funds will owe a repayment to the Financial Aid program. Federal regulations prohibit a student from receiving any additional Title IV Aid until this obligation has been paid.

Veterans/Eligible Dependents

Indian River State College is approved by the State Approving Agency for Veterans Training to provide training under the various education laws administered by the Department of Veterans Affairs. The new Post-911 G.I. Bill provides expanded education benefits for qualified veterans who have served in the military after September, 11, 2001. It is important that veterans and eligible dependents who plan to attend IRSC apply early through the Veterans Affairs Office on the IRSC Main Campus so that certification of eligibility may be obtained from the VA Regional Office. It is the individual's responsibility to make sure that he/she meets all of the eligibility requirements and understands the regulations and policies that govern the VA Education Benefits program.

In order to receive full-time education benefits, veterans/eligible dependents must enroll full-time in each term. Full-time is defined as at least 12 semester hours during the Fall and Spring semesters, and for at least 6 semester hours during each of the Summer sessions. If fewer credit hours are attempted, benefits are generally reduced proportionately.

Students receiving VA Education Benefits must maintain a cumulative grade point average (CGPA) of 2.0 to continue their eligibility. If a student's CGPA falls below 2.0, the student will be given two consecutive probationary periods to re-establish a 2.0 CGPA. A student's VA Education Benefits will be terminated if the CGPA remains less than 2.0 at the end of the second probationary period. Students may be recertified for VA Education Benefits when their CGPA again reaches 2.0.

Non-degree students who fail to maintain Satisfactory Academic Progress are not permitted to continue enrollment in the program and would not, therefore, be certified as eligible to receive VA Education Benefits.

A veteran/eligible dependent's enrollment status must be certified to the VA for each enrollment period. It is the individual's responsibility to report to the IRSC Veteran's Office all changes in the number of credit hours he/she is enrolled in or any other change in status. Students should allow at least 45-60 days for paperwork to be processed prior to receiving the first benefit payment.

Students in vocational clock-hour programs are expected to attend all class sessions. Students receiving VA Education Benefits should note that excessive absences will result in termination of benefits. Absences totaling more than 10% of the total hours for the enrollment period will result in the student's termination from receipt of VA Education Benefits.

Scholarships

The Indian River State College Foundation enhances access and quality of education for students by attracting and managing private contributions from individuals, corporations, and private foundations.

During the 2018-2019 academic year, the IRSC Foundation awarded more than $3.0 million in scholarships to assist students in gaining a college education. Various academic, cultural and discipline area scholarships are available on a competitive basis, and many organizations throughout the community offer scholarships to students who plan to attend IRSC.

Applications and information concerning scholarships can be obtained at www.irscfoundation.org, or any of the four-county area high school guidance offices.

Sign Up for New Student Orientation

New Student Orientation is an exciting, interactive introduction to student life at IRSC and an admission requirement for all degree-seeking first time in college, technical certificate seeking students, and transfer students.

During New Student Orientation you can:

- Tour the campus
- Meet fellow students
- Learn about resources to help you succeed
- Meet IRSC representatives ready to assist you
- Learn about - financial aid, campus security, communications tools and more! *Special session for parents are also presented, specifically designed to familiarize them with IRSC and the tools available to support students.*

There are both in-person and online options for New Student Orientation (ORI 0003) at www.irsc.edu. Click on MyIRSC - Register & Pay under Quick Links.

Activate RiverMail

All students need to activate their free RiverMail (email) account at www.irsc.edu/RiverMail.

RiverMail is the **official** means of electronic communication for student information and important IRSC announcements. Check your mailbox daily for critical updates on Registration, Financial Aid, and other alerts.

Sync your RiverMail address to your Android or iPhone. Email RiverMailHelp@irsc.edu to find out how.

Students emailing college personnel must send all correspondence from their RiverMail account and not another personal email address.

Contact Your Advisor

The heart of advising at Indian River State College is "student success." From application to enrollment, then enrollment to completion of a certificate or degree program, all students at IRSC receive comprehensive advising from staff who study each student's specific set of circumstances to provide each of them with a Guided Pathway to success.

All new degree-seeking students and all new Dual Enrollment students at Indian River State College are assigned and meet with an advisor upon completion of New Student Orientation to discuss academic and career goals and developmental education options. Each advisor works with their students to develop a Guided Pathway which provides them with a plan to complete a degree or certificate. A Guided Pathway must be developed within the student's first term of enrollment. Students may use their completed Guided Pathway to select classes and register for subsequent terms at www.irsc.edu.

Students who are undecided about academic or career choices will be advised of meta-majors related to a general area of interest. A meta-major is a collection of academic programs that have common or related content. The following meta-major academic pathways are established for the purposes of advising Florida College System Associate degree-seeking students of the gateway courses that are aligned with their intended academic and career goals.

- Arts, Humanities, Communication, and Design
- Business
- Education
- Health Sciences
- Industry/Manufacturing and Construction
- Public Safety
- Science, Technology, Engineering, Mathematics (STEM)
- Social and Behavioral Sciences and Human Services

All students will be advised of developmental education options available at IRSC, including accelerated, compressed, modularized, and contextualized English, math, and reading courses. Students may use the free tutoring services provided by IRSC's Academic Support Centers, located at each campus, to aid them with their developmental or gateway courses. IRSC also provides free online tutoring through "Smarthinking."

Students who graduated from a Florida public high school since 2007 and students who are serving as an active duty member of any branch of the United States armed services are exempt from mandatory placement testing and developmental course requirements. Students will be advised of the gateway courses tied to their major and/or meta-major and the developmental education options available to them.

Once advised of their options, exempt students will have the opportunity to either opt-in or opt-out from developmental education. Students will not be able to register for classes until developmental advising options are discussed.

Non-exempt students will be advised of the developmental education requirements they must meet prior to entering the gateway courses associated with their major and/or meta-major.

Select Classes and Register

Registration

Register for classes at www.irsc.edu. Click on the link entitled **MyIRSC** or **Register & Pay** and log in. Please note that instructor listed in the schedule are subject to change.

To register, students must have a current Application for Admission on file (including Residency documents), a valid major code, and no outstanding holds.

Students may also use online or phone registration to drop and add classes. Contact the IRSC Call Center at 772-462-4772 or 1-866-792-4772.

Classes may be scheduled in advance however, registration is not complete and the schedule is not final until all fees are paid. All registrations must be completed prior to the start of the class.

Registration deadlines are noted in the Academic Calendar (p. 15)section of this catalog.

Audit

Indian River State College does not offer the audit of courses.

Changing Your Class Schedule

Registration periods are noted in the Academic Calendar (p. 15)section of this catalog. **Registration is not permitted after the class begins**.

Students who need to change their class schedule during the registration period can do so at www.irsc.edu or via the Call Center (1-866-792-4772) or by contacting an advisor at any IRSC campus.

Students who have not paid their tuition and fees or received payment coverage from other sources by the established deadline will be dropped from their classes.

Failure to officially drop a class will result in fees being charged and either a withdrawal or a failing grade being issued, regardless of Financial Aid status. Students should refer to their schedule for the deadline to drop a class.

Withdrawal Procedures

Withdrawal from courses will negatively impact students both academically and financially. Students who accrue excess hours in earning a degree may be subject to paying additional fees at any Florida public university.

Bright Futures Scholarship students are required to repay the tuition for any course withdrawal.

Students are required to discuss any intent to withdraw from a course with their instructor in order to avoid negative repercussions and to explore how the course might be completed through various possible options.

Students may withdraw from any class and have a "W" recorded provided certain conditions are met:

1. Student has completed the online survey requesting to withdraw from a course and discussed their desire to withdraw with their faculty member through a live meeting, online, or by phone.
2. For Full Term and Express schedule classes, individual class withdrawals must occur before the deadline noted in the Academic Calendar (p. 15).
3. Withdrawals from Special Registration classes must be completed prior to the final class meeting. A Special Registration class has beginning and ending dates that do not coincide with the beginning and ending dates of Full Term classes.
4. A total withdrawal from all classes must occur before the deadline date noted in the Academic Calendar (p. 15) in this catalog. Official withdrawal forms are available at any IRSC campus.
5. Withdrawals are not permitted for a student's third attempt in any college credit course. See the Withdrawal and Grade Forgiveness Policy (p. 35).
6. Individual class withdrawals may be completed at www.irsc.edu or in person at any IRSC campus. The official withdrawal date is the date the withdrawal form or web entry is submitted.
7. Students who do not attend class and who do not officially withdraw may receive a failing or unsatisfactory grade.
8. Financial Aid and Veteran students should refer to IRSC's Satisfactory Academic Progress for Financial

Aid (p. 31) and Withdrawals - Return to Title IV (p. 32).

Withdrawal and Forgiveness Policy

A student may repeat a college credit course in which a grade of "D, F, I, U, or W" was earned for a total of three attempts.

Grade forgiveness means that the student's grade point average (GPA) will be calculated based upon the grade of the final attempt earned in the course, provided it is not a "W." If a student repeats a course resulting in a "W", then the grade earned in the previous attempt will be used in the GPA calculation.

Federal Financial Aid rules do not use grade forgiveness in calculating Satisfactory Academic Progress (p. 31).

Withdrawals of any kind, including Instructor Withdrawals, are not permitted for the student's third attempt in a course.

Courses taken at institutions other than Indian River State College will not be counted as attempts.

Students who take a college credit course for the third time will be assessed full instructional costs. If a student has extenuating circumstances, the student may appeal for reduced charges by supplying documentation to their assigned advisor.

Pay for Classes (Fees)

Every effort is made at IRSC to provide a high quality education at a reasonable cost. Many financial aid and scholarship programs are available to eligible students to assist with the financing of their college education at IRSC.

The fee schedule in effect at IRSC as of August 2017, is listed below. These fees should be considered approximate cost estimates. All fees listed are subject to change at any point during the Catalog year.

Program	Florida Resident	Non-Florida Resident Tuition
Advanced and Professional Baccalaureate-level	$117.10/cr. hr.	$536.04/cr. hr.
Advanced and Professional Lower-level	$103.83/cr. hr.	$390.49/cr. hr.
Postsecondary Vocational	$103.83/cr. hr.	$390.49/cr. hr.
Educator Preparation Institutes	$103.83/cr. hr.	$390.49/cr. hr.
Developmental Education	$103.83/cr. hr.	$390.49/cr. hr.
Postsecondary Adult Vocational	$2.56/contact hr.	$10.21/contact hr.
Continuing Workforce Education	$8.00/contact hr.	$8.00/contact hr.
Vocational Preparatory	$30.00/term	$30.00/term
Adult General Education	$30.00/term	$30.00/term
Recreational and Leisure Time	$1.00/contact hr.	$1.00/contact hr.
Lifelong Learning Institute	$7.50/contact hr.	$7.50/contact hr.

Special fees (non-refundable), in addition to matriculation, tuition, and registration:

Late Registration	$30.00
Commencement (includes regalia)	$50.00
Cosmetology and Barbering Graduation	$20.00

Adult High School Graduation	$20.00
Practical Nursing Graduation	$20.00
Baccalaureate Application	$30.00
Culinary Institute Application	$30.00
Health Science Application	$30.00
International Student Application	$30.00
Internet Course	$5.00/cr. or /30 clock hour
Performing & Visual Arts Scholarship Drug Test	$35.00
Health Science Fee for Criminal Background Check/Drug Screening	$100.00
Health Science Reasoning Test (HSRT)	$10.00
Postsecondary Education Readiness Test (P.E.R.T.)	$10.00
One Subtest	$10.00
National League of Nursing Exam	$75.00
Competency Validated Credit - Service Fee	$5.00/cr. or /30 clock hour
College Level Examination Program (CLEP)	$15.00 *Additional test fee will be charged by CLEP*
Interlibrary Loan Fees - Photocopied	$ .10/pg.
Parking Fines	$10.00
Replacement Student I.D. Card	$5.00
Replacement Radiation Monitor Badge	$4.00
Replacement Radiation Monitor Ring	$3.00
Basic Ability Test (Law Enforcement or Corrections)	$40.00
Physical Ability Test (Criminal Justice)	$20.00
Region XI Selection Center Phase 1	$345.00
Region XI Selection Center Phase 2	$105.00
Region XI Equivalency of Training – Non-resident	$200.00
Region XI Equivalency of Training – Resident	$100.00
Entry Level Firefighter Test	$40.00
Fingerprinting – Fire Academy and Equivalency of Training	$53.25
Dental Hygiene Instrument Kit and supplies	$1,400.00
Distance Learning Testing Fee for non-IRSC Students	$40.00/exam
Early Childhood Education Laboratory School	
Registration Fee (per student) *Summer Rates may vary	$75.00
Before School Care 7:30 - 8:30 a.m. (per student, per week)	$10.00
School Day 8:30 a.m. - 3:30 p.m. (per student, per week)	
Infants & Toddlers class	$150.00
1 year old class	$150.00
2 year old class	$130.00
3 year old class	$120.00
4 year old class	$70.00
After School Care 3:30 - 5:30 p.m. (per student, per week)	$20.00

Additional fees may be charged for instruction incurring unusual costs and for special services to individuals or community or governmental agencies.

In accordance with state law, students who register for a developmental class or for a college credit class for the third time may be assessed the full instructional cost. The full cost of instruction shall be based on the system wide average of the prior year's cost of undergraduate programs for the Florida College System institutions and the state universities. Students with documented extenuating circumstances may file an appeal of the full instructional cost with the Associate Dean of Enrollment and Student Services or any Campus Provost.

Refer to the Course Description (p. 164)section of this catalog for lab fees, test fees, insurance fees, and special fees assessed for individual courses.

Tuition Waiver Notification

Out of State Tuition Waivers

As of July, 2014, the Florida legislature approved two new out-of-state tuition waiver programs that dramatically reduces the costs for veterans and eligible Florida high school graduates.

Veteran Tuition Waivers

The C. W. Bill 1365 Young Veteran Tuition Waiver Program grants an out-of-state tuition waiver to honorably discharged veterans who served in the U.S. Armed Forces, U.S. Reserve Forces, or National Guard, and who physically reside in this state while enrolled at IRSC. The student veteran must provide their DD-214 and one legal tie to the state of Florida from the Florida Statute 1009.21(3)(c)1 list. The waiver applies to 110% of the number of required credit hours of the degree, certificate or PSAV program.

Florida HS Enrollment and Completion Waivers

Florida Statute 1009.26(12)(a) grants an out-of-state fee waiver for students, including, but not limited to, students who are undocumented for federal immigration purposes, who meet the following conditions:

1. Attended a Florida secondary school for three (3) consecutive years immediately before graduating from high school;
2. Applied for enrollment within 24 months after Florida high school graduation; and
3. Submits an official Florida high school transcript as evidence of attendance and graduation.

The waiver applies to 110% of the number of required credit hours of the degree, certificate or PSAV program. Students receiving an out-of-state tuition waiver are not eligible for any state financial aid.

For more information on these waivers, please visit any campus or contact the Office of Admissions and Records at 772-462-7460.

Military Tuition Assistance Program

(for active duty service members)

Active Duty Tuition Assistance (TA) is one of the many great benefits available to service members, and it is one big reason many incoming recruits opt to join the Armed Forces. The rules and requirements are different depending on your specific service branch, but wherever you are TA will support you and the goals you've set for your education.

Your **Education Service Officer (ESO)** is your best resource for assistance in choosing a military-friendly school that meets your educational needs. He or she can provide you with information, advice and support in navigating the often complicated maze of the college-search process.

When you meet with your ESO to discuss your college options, you can use the following questions as a guide (with other questions you may have):

1. Is there anyone else on the military installation that attends this school?

Knowing someone else who attends the same school is helpful for several obvious reasons. It's nice to have a "familiar face" on campus that can answer your questions about the college, and you may gain a study partner if you are in the same program.

2. Does this school currently or historically have any relationships with the military?

If the answer is yes, you'll know you've found a reliable college that is familiar with and supports service members' needs and customs.

3. Do this school's programs fit my goals?

- Find out about regional and national accreditation for the transferability of any credits.
- Does the school offer credit for military service? (Some schools that grant credit for service may also have higher required credit hours for graduation.)
- What are the attendance policies for this program, and will they fit into my schedule? It's worth finding out what options there are for service members, especially what the distance learning and online possibilities are.
- Will the program lead me in the direction I want to go either during my service or after I separate from the service?

Tuition Assistance is handled in the Accounts Receivable department at Indian River State College. You can contact them at 772-462-7184 for information on payment of your tuition.

Veterans Deferment

Veterans Benefits and Transition Act of 2018

Pursuant to the Veterans Benefits and Transition Act of 2018, section 3679 of title 38, United States Code, effective August 1, 2019 Indian River State College will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other institutional facilities, or the requirement that a covered individual borrow additional funds, on any covered individual because of the individual's inability to meet his or her financial obligations to the institution, when the delay is due to the delayed disbursement funding from VA under Chapter 31 or 33.

IRSC will permit any covered individual to attend or participate in their course of education during the period beginning on the date on which the individual provides to the educational institution a Certificate of Eligibility for entitlement to educational assistance under Chapter 31 or 33 (a "certificate of eligibility" can also include a "Statement of Benefits" obtained from the Department of Veterans Affairs' (VA) website – eBenefits, or a VAF 28-

1905 form for Chapter 31 authorization purposes) and ending on the earlier of the following dates:

1. The date on which payment from VA is made to the institution.
2. 90 days after the date IRSC certifies tuition and fees following the receipt of the Certificate of Eligibility.

IRSC requires covered individuals to take the following additional actions:

1. Submit a certificate of eligibility for entitlement to educational assistance no later than the first day of class.
2. Submit an Application for Veteran's Deferment of Tuition and Fees.
3. Provide additional information necessary to the proper certification of enrollment by the educational institution.

Students are responsible for additional payment(s) or the payment of fees for the difference between the amount of the financial obligation and the amount of the VA education benefit disbursement in the following cases:

1. The covered individual will receive less than 100% tuition reimbursement based on the Certificate of Eligibility or Statement of Benefits provided by the covered individual.
2. Other fees or charges that are not eligible for payment by the Veterans Administration such as late registration and third attempt fees.

Refunds

A full (100%) refund of matriculation, tuition and other fees will be granted to a student only under the following circumstances:

1. A student officially drops a class prior to the published Drop Deadline for the Full Term and Express Schedule.
2. A student officially drops a Special Registration class prior to the published Drop Deadline. A Special Registration class is defined as a class with beginning and ending dates that do not coincide with the beginning and ending dates published for the Full Term Schedule.
3. A student is registered for a class that is cancelled by the College.
4. A student is called to active military duty and officially withdraws from classes. The student must present his or her formal "Orders to Report for Duty".

A student receiving Financial Aid may receive refunds based on the Federal Refund regulations.

Other than the four conditions stipulated above, the only other refund requests considered by the College will be those in which there are extraordinary circumstances absolutely beyond the student's control that are supported by third party documentation.

Students who believe their situation qualifies for consideration and review have one year from the date of withdrawal to submit a Refund Request and any pertinent documentation to the relevant Provost or Dean. The Provost or Dean will then make their recommendation to their respective Vice President. Students will be informed of the decision.

The process of refunding fees for classes begins as soon as possible following the published Drop Deadline for that semester and continues on a periodic basis for the remainder of that semester. Any monies owed to the College by a student will be deducted before a refund is issued.

Refunds will be mailed 2 - 4 weeks after the Drop Period ends.

Individuals can refer to the District Board of Trustees policy Manual, 6Hx11-7.14, for detailed information regarding student refunds.

Collection Policy

A student with an outstanding financial obligation will have his/her grades, transcripts, and registration withheld until the outstanding balance is paid in full. Examples of an outstanding financial obligation are a returned check, deferment, fee deficiency, Financial Aid over-award, fine, or other financial obligation.

The College will make every effort to notify the student of the obligation. Notifications will be sent to the mailing address on file at the College as well as the student's RiverMail account. If no response is received, the College reserves the right to send all accounts deemed delinquent to an external collection service. Once an account is submitted to collections, all collection costs will be added to the outstanding balance of the delinquent account. The student will be responsible for all collection costs incurred.

Get Your Student I.D.

To get a free IRSC Student I.D., students should bring a current class schedule and receipt showing payment of tuition, along with a valid photo I.D., to the Student Affairs Office at the Main Campus (KSU-112). Student I.D.'s are also available, once per semester, at the branch campuses during Welcome Week.

A current, valid IRSC Student I.D. is required to check out materials from the IRSC libraries, gain entry to athletic and other College events, receive various student services and to utilize campus recreation facilities.

A student should always carry his/her IRSC Student I.D. as it serves to identify Indian River State College students for departments or College officials needing verification.

There is no charge for the initial card; however, there is a $5 fee for a replacement card. It is a violation of student regulations to have two current I.D. cards in your possession at any time.

Buy Your Books

The well-stocked River Shop bookstores, located on the Main Campus (KSU-The River Commons) and branch campuses, sell new and used textbooks, classroom supplies, gifts, IRSC apparel and merchandise. Check out "Back-to-School" promotions like "Midnight Madness" and other events by clicking on the link below.

As part of a continuing effort to keep the cost of education at Indian River State College to a minimum, "Book BuyBacks" are offered at all campuses each Spring and Fall. Books accepted for resale must be in good condition and they must be designated for use in upcoming classes at IRSC.

For more information about The River Shop bookstores http://www.bookstore.irsc.edu/

ACADEMIC STATUS

Academic Notice/Deficiency/Suspension

A student shall be placed on Academic Notice at the end of the first term in which they have earned less than a 1.5 cumulative Grade Point Average (GPA). Students shall be placed on Academic Deficiency at the end of the second consecutive term in which they have earned less than a 1.5 cumulative GPA. Student shall be placed on Academic Suspension at the end of the third consecutive term in which they have earned less than a 1.5 cumulative GPA. Only grades of A, B, C, D, and F will be included in these GPA calculations.

Students who are on Academic Suspension will not be permitted to enroll for one term (Fall, Spring, Summer - Session A or Session B) following the term in which they were suspended. Students on Academic Suspension already registered for the upcoming term will be informed that their courses have been dropped due to their academic status.

At the end of the suspension term, the student may request readmission by completing a Request for Readmission form. Approval requires an advisor's signature and the signature of the Associate Dean of Enrollment and Student Services, Director of Advising Services, or a Campus Provost.

Students shall be placed on Academic Reinstatement if their request for readmission is approved and will have a Reinstatement Hold placed on their record to prevent online registration. They will be required to see an advisor in order to register and will also be required to maintain a term GPA of 1.5 or higher for each subsequent semester of enrollment. If the GPA for any term of enrollment is below a 1.5 they will return to Academic Suspension status and will not be permitted to enroll for one term.

Students who are approved for academic reinstatement are limited to taking six credit hours per term.

Articulation Agreement

Articulation Agreements have been developed between Indian River State College, public school districts, other state/community colleges, and universities to ensure equitable and efficient admission and transfer of students (Florida Statute #240.107 and State Board Rule 6A-10.024). Specialized articulated agreements in program major have been established with selected universities.

Associate in Arts graduates are guaranteed the following rights under the Florida Statewide Articulation Agreement (State Board of Education Rule 6A-10.024):

1. Admission to one of the twelve (12) state (public) universities, except to limited access programs which have additional admission requirements.
2. Acceptance of at least 60 credit hours by the state (public) universities toward the Baccalaureate Degree.
3. Adherence to state (public) university requirements and policies based on the catalog in effect at the time the student first entered a community/state college, provided the student maintains continuous enrollment.
4. Transfer of equivalent courses under the Statewide Course Numbering System.
5. Acceptance by the state (public) universities of credits earned in accelerated programs (e.g., CLEP®, AP, PEP, Dual Enrollment, Early Admission, and International Baccalaureate).
6. No additional General Education Core requirements.
7. Advance knowledge of selection criteria for limited access programs.
8. Equal opportunity with native state (public) university students to enter limited access programs.

Should any guarantee be denied, students have the right of appeal. Each state (public) university and community/state college shall make available established appeal procedures through the respective articulation officers. The Vice President of Enrollment & Student Services is the articulation officer at Indian River State College.

Attendance

Regular class attendance is required at Indian River State College. Students are expected to adhere to the policies set by each instructor. Those policies are printed in the course syllabus.

Students who do not attend the first week of the class will be withdrawn for non-attendance and will receive a grade of W. For online classes, refer to the course syllabus in Blackboard regarding what constitutes attendance. Students who are taking a class for the third time are not eligible to receive a W, so failure to attend will result in an F.

Students who receive Financial Aid or Veterans benefits should refer to the Financial Aid (p. 32)section of this catalog for further information on attendance and how attendance impacts financial aid.

Change of Address

Students may change their address at www.irsc.edu by logging into MyIRSC. To ensure receipt of College correspondence, information distributions, and emergency notifications, it is important to keep contact information updated.

Students must activate their FREE student email account (RiverMail) at www.irsc.edu/RiverMail. The RiverMail system is the official means of electronic communication for student information.

Classification of Students

Students may enroll at Indian River State College on a full-time or part-time basis. Students who enroll for 12 or more credit hours in the Fall and Spring semesters are classified as full-time, while those who enroll for fewer than 12 hours are part-time students. During Summer - Session A or Session B, students must be enrolled in 6 or more credit hours to be classified as a full-time student.

Full time for Financial Aid eligibility is defined as at least 12 credit hours during each semester, Fall, Spring, and Summer. If fewer credit hours are attempted, awards are adjusted proportionately.

The number of credit hours earned determines a student's classification. Freshmen have earned fewer than 30 credit hours; sophomores have earned at least 30 credit hours; juniors have earned at least 60 credit hours; seniors have earned at least 90 credit hours.

The word "credit" as used in this catalog refers to semester hours. Generally, one class hour per week throughout the semester is equal to one semester hour. A two or three-hour laboratory period is equivalent to one semester hour.

In the interest of student success, all individuals taking classes at Indian River State College are expected to dedicate a minimum of two (2) hours of out-of-class time for every one (1) hour of direct instruction.

Students who spend time outside of class studying, engaging in research, completing assignments, improving skills, etc., typically realize a higher success rate than students who do not practice the same level of dedication.

Directed Independent Study

Students may, in limited circumstances, register for courses on a directed independent study basis. Approval for such course work rests with the instructor, the Instructional Dean, and the appropriate Vice President, and is limited to those situations in which no other alternative to course scheduling is available. This exceptional instructional approach is not suitable for courses in which student interaction and sharing of experiences are major components of the course. A Directed Independent Study (DIS) form must be completed for each DIS course. The regular grading system applies to all DIS courses. Grades earned by DIS have the same status as those acquired through regular class attendance.

The following steps are required to complete the Directed Independent Study form

1. The student makes a request of the instructor to offer a Directed Independent Study (DIS).
2. If the instructor agrees to administer the DIS, the student and the instructor must fill out the DIS form completely.
3. The completed DIS form is then forwarded to the Instructional Dean for approval. The Dean will determine the student's eligibility to complete the course on an Independent Study basis. A minimum 2.0 cumulative grade point average is required for DIS study.
4. The student will be notified via RiverMail by the Dean's office of the status of the class, copying the instructor. If approved, the class will be entered by the Dean's office and the reference number sent via RiverMail to the student for self-registration and payment of fees.
5. Student must pay for the class within five days upon notification of an approved DIS.

Educational Records and Privacy

Access to Educational Records

Every student has certain rights regarding access to his/her own educational records and the disclosure of information from those records to others. The rights of IRSC students are clearly specified and protected by law as stated in two District Board of Trustees Rules: 6Hx117.31 *Student Records* and 6Hx117.32 *Student Directory Information*.

> Board Rule 6Hx117.31, *Student Records*, states:
> The College maintains student records in accordance with Federal and State law, Florida Statutes, and State Board of Education Rules. Such records are confidential and exempt from F.S. 119.07(1) and are open to inspection only as provided in F.S. 1002.22 and AP-7.31, Procedure for Accessing Student Records.

In compliance with Federal law and Florida Statute, directory information may be released under the conditions set forth in Board Policy, 6Hx11-7.32.

> Board Rule 6Hx11-7.32, *Student Directory Information*, states:
> Pursuant to Florida Statute, 1002.22 and the

Family Educational Rights and Privacy Act (FERPA), the College may publish and release general public directory information relating to students.

Student directory information includes a student's name, address, telephone number if it is a listed number, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of College attendance, degrees, awards received, and the most recent previous educational agency or institution attended by the student.

Directory information will be subject to release in accordance with F.S. 1002.22, F.S. 1006.32 and Federal Regulation 34CFR Part 99.

Students who wish to prevent the disclosure of their Directory Information must submit a written notice to that effect to the Records Center. Such written notice shall be maintained in each respective student's file.

All other student record information shall be considered limited access information in accordance with the statute.

The Family Educational Rights and Privacy Act further states that when a student reaches the age of 18 or begins attending a postsecondary institution, regardless of age, FERPA rights transfer from the parent to the student.

Therefore, all students who enroll in IRSC are protected by FERPA and shall have the following rights:

1. The right to inspect and review their education records maintained by IRSC. Copies of records are not provided unless, for reasons such as great distance, it is impossible for students to review their records.
2. The right to request correction to their records which they believe to be inaccurate or misleading. If IRSC makes a determination not to amend the record, students then have the right to a formal hearing. After the hearing, if IRSC still decides not to amend the record, students have the right to place a statement with the record setting forth his or her view about the contested information.
3. The right to limit disclosure of personally identifiable information. Written permission is required to release personally identifiable information from their education records. Written permission shall include the student's signature, written or electronic, where authentication of the electronic signature is validated by use of the student's personal PIN. However, FERPA allows disclosure of those records, without consent, to the following parties or under the following conditions (34 CFR § 99.31):
   - School officials defined as instructional, support, or administrative within an educational agency or institution who have a legitimate educational interest;
   - Information designated as directory information;
   - Other schools to which a student seeks or intends to enroll;
   - Appropriate parties in connection with enrollment and degree verifications;
   - Authorized representatives of Federal, State or local educational authorities;
   - Appropriate parties in connection with Financial Aid records;
   - Organizations conducting certain studies for or on behalf of the school;
   - Accrediting organizations;
   - To comply with a judicial order or lawfully issued subpoena;
   - Appropriate parties, including parents, where a significant threat to the health or safety of a student, or other individual exists; and
   - Disclosure to a parent of a student under the age of 21 concerning violation of laws or policies regarding the use or possession of alcohol or a controlled substance.
4. The right to file a complaint with the Department of Education concerning an alleged failure by IRSC to comply with FERPA regulations.

In addition to the exceptions noted herein for release of personally identifiable information, parents may obtain non-directory information in compliance with a subpoena or at the discretion of the institution if one of the following conditions has been met:

1. Student completion of an Authorization for Release of Educational Records form available at any IRSC campus.
2. Student submission of an IRSC Application for Admission for Dual Enrollment.
3. Student submission of a written authorization designating access to their parent.
4. Submission of evidence that the parent declares the student as a dependent on his or her most recent Federal Income Tax form.

Student information may only be released to the authorized individual in person with valid photo ID, or to the authorized fax or email account.

Questions regarding this annual notification of student FERPA rights may be directed to the Student Records at 772-462-7460.

Excess Hours Notification

Section 1009.286, Florida Statutes, establishes an "excess hour" surcharge for students seeking baccalaureate degrees at state universities. It is critical that students, including those entering Florida College System institutions, are aware of the potential for additional course fees.

For the 2019-2020 academic year and thereafter, "excess hours" are defined as hours that go beyond 120% of the hours required for a baccalaureate degree program. For example, if the length of the program is 120 credit hours, the student may be subject to an excess hour surcharge for any credits attempted beyond 144 credit hours (120% x 120).

All students whose educational plan may include earning a baccalaureate degree should make every effort to enroll in and successfully complete those courses that are required for their intended major on their first attempt. Florida college students intending to transfer to state universities should identify a major or "transfer program" early and be advised of admission requirements for that program, including the approved common prerequisites. Course withdrawals and/or repeats, as well as enrollment in courses nonessential to the intended major, may contribute to a potential excess hours surcharge.

Students should schedule an appointment with their advisor to create a Guided Pathway that ensures they enroll only in courses needed for their program so they can avoid extra costs when transferring to Florida public universities.

Extended Course Load

Students may take up to 19 credit hours during the Fall or Spring semesters (12 credit hours during Summer - Session A or Session B). Academically superior students with a 3.0 or higher cumulative grade point average and an academic record that reflects successful full-time enrollment may file an appeal to take additional credits.

Grading System

At the end of each semester, students view their grades through their MyIRSC account at www.irsc.edu. In addition, students may evaluate their academic progress and status each semester by obtaining a Degree Audit via www.irsc.edu.

The following grading system is used:

A	Excellent (4 grade points per semester hour)
B	Good (3 grade points per semester hour)
C	Average (2 grade points per semester hour)
D	Poor (1 grade point per semester hour)
F	Failure (no grade points)
I*	Incomplete (no grade points)
S	Satisfactory (no grade points)
U	Unsatisfactory (no grade points)
W	Withdrawn (no grade points)
NR	Not Reported (no grade points)

Some courses require a grade of C or better for graduation. To verify which courses require a C, students can review their Degree Audit or contact an advisor.

> *An incomplete grade (I), for which coursework is not completed by the end of the following semester will be converted to an F or a U, depending upon the grading method of the class.

Given appropriate advisement, a student may take a course for S (Satisfactory) or U (Unsatisfactory) graded credit and count it towards their program. Courses taken for S or U graded credit will not convert to any other type of grade.

The student’s grade point average is computed by dividing the total number of quality points earned by the total number of hours attempted.

Grade Appeals

Criteria for final grade determination and assignments are the prerogative of the instructor of record for all College courses. Therefore, only the primary instructor can change the final grade assigned to the student.

If a student does not accept the instructor’s explanation of the final grade determination, or contacting the instructor is no longer possible, the student should contact the Instructional Dean for the academic area for additional review.

If adequate resolution is not reached, the student is entitled to appeal a final grade to the Academic Review Committee. Students must submit their request in writing to the Vice President of Academic Affairs. A formal meeting will then be scheduled to review the student’s case, review any pertinent documentation, and make an objective determination regarding the student’s final grade. After the review is completed, the Academic Review Committee will make a recommendation to the College President who will notify the student in writing of the College’s final decision.

Social Security Number Collection and Usage-Notification

In compliance with Florida Statute 119.071(5), this document serves to notify you of the purpose for the collection and usage of your Social Security number by Indian River State College. IRSC collects and uses your Social Security number only if specifically authorized by law to do so or it is imperative for the performance of its duties and responsibilities as prescribed by law.

Specifically, IRSC collects your Social Security number for the following purposes:

Student Records Department

Federal legislation relating to the Hope Tax Credit makes it mandatory that all postsecondary institutions report student Social Security numbers to the Internal Revenue Service (IRS). This IRS requirement makes it mandatory for colleges to collect the Social Security number of every student. A student may refuse to disclose his or her Social Security number to IRSC, but the IRS is then authorized to fine the student in the amount of $50.

In addition to the federal reporting requirements, the public school system in Florida uses Social Security numbers as a student identifier (Florida Statutes 1008.386). In a seamless K-20 system it is non-mandatory; however, it is beneficial for postsecondary institutions to have access to the same information for purposes of tracking and assisting students in the smooth transition from one education level to the next. All Social Security numbers are protected by Federal regulations Family Educational Rights and Privacy (FERPA).

Financial Aid Department

It is mandatory that the Office of Financial Aid at IRSC requires students to submit their Social Security numbers on various forms in order to correctly identify applicants, match each applicant's Financial Aid record with the student record, and to help coordinate state aid programs with institutional and Federal Aid programs as authorized by Sections 483 and 484 of the Higher Education Act of 1965, as amended.

Outreach Programs

Programs such as the Educational Opportunity Program and College Reach-Out Program are youth outreach projects funded by discretionary grants from the United States or Florida Departments of Education. As such, each project is required to exclusively serve eligible participants that are citizens or nationals of the United States; or are permanent residents of the United States. In order to verify a participant's project eligibility, it is mandatory that Social Security numbers are collected and also later used when submitting information for the Annual Performance Reports due to the United States or Florida Department of Education.

Workforce Programs

It is mandatory that these programs use Social Security numbers as an identifier for program enrollment and completion. Also, Social Security numbers are used for entering placement information into either the OSMIS or the Employ Florida Marketplace statewide data collection and reporting system. Because these are performance-based contract programs, it is required that all participants and their program-related activities be recorded in the Florida state system.

Continuing Education, Corporate & Community Training Institute (CCTI)

Because of Florida State Board of Education reporting requirements and Department of Business and Professional Regulations reporting requirements, it is mandatory for students who enroll in Continuing Education and/or CCTI courses and/or customized training seminars to submit their Social Security number.

State and Federal Reporting

It is mandatory that the College collects Social Security numbers to periodically report student/employee level data to Federal and State agencies for research and data collection.

Testing

It is mandatory that the College collects Social Security numbers for the purpose of reporting state and national standardized testing results, including but not limited to: TABE, GED®, FTCE, ACT, and CLEP.

Miscellaneous

It is mandatory to collect Social Security numbers for agency third party billings, payment collections, State and Federal data collection, tracking, benefit processing, tax reporting, and for identification and verification.

To protect your identity, IRSC will secure your Social Security number from unauthorized access and assign you a unique student identification number. This unique identification number will then be used for all associated employment and educational purposes at IRSC.

Copies of the full IRSC Notification of Social Security Number Collection and Usage document can be obtained from Student Services at all IRSC campuses.

GED® is a registered trademark of the American Council on Education (ACE) and administered exclusively by GED Testing Service LLC under license. This material is not endorsed or approved by ACE or GED Testing Service.

ACTIVITIES FOR STUDENTS

Although classes and coursework are the top priorities at IRSC, they are only one part of the student's education. The mission of the Student Activities Department is to "Develop the Whole Student" by serving as advisors, mentors and educators to provide the foundation for student engagement, leadership development and student initiated programming to promote personal, social and intellectual growth.

IRSC has more than 70 clubs and student organizations offering a wide variety of opportunities to develop leadership skills. Additionally we have professional and honor societies and a well-respected intercollegiate sports program. Campus activities are meant to enhance and expand the total learning experience. Clubs and organizations are open to all students and participation is strongly encouraged.

IRSC clubs and organizations are governed by District Board of Trustees policies and administrative procedures to ensure compliance with state and local laws and promote the safe and efficient operation of the College. Students can refer to the Student Handbook/Planner for a listing of these procedures or visit the Student Activities Office located in the Koblegard Student Union (KSU) on the Main Campus in Fort Pierce. Information is also available through RiverLife at http://www.irsc.edu/RiverLife/riverlife.aspx?id=42972092.

Campus Coalition Government

The Campus Coalition Government (CCG) is the official student government of Indian River State College, which consists of representatives who are elected or appointed to represent each of the student organizations on campus.

Communication is a key purpose of the CCG. It serves as the coordinating board between the various groups of students on campus and the administration of the College.

The CCG holds its formal General Assembly meetings on alternating Wednesdays - see the Student Handbook/Planner or check www.irsc.edu and click on **Students** on the menu bar, scroll down and click on the **Campus Coalition Government** link under the **Student Life** heading for CCG meeting dates or check RiverLife.

Clubs and Organizations

Academy of Future Teachers

Achiever's Club

Adventist Campus Ministries

Alpha Phi Sigma
National Criminal Justice Honor Society

Ambassador Club

American Association of University Women (AAUW)

American Sign Language Club

Anthropology Club

Athletic Teams:

- Baseball
- Basketball (Men)
- Basketball (Women)
- Diving (Men)/(Women)
- Softball
- Swimming (Men)/(Women)
- Volleyball

Bass Club

Brain Bowl

Caring Through Crafting

Chess Club

Christian Student Fellowship Club

Computer Science Club

Criminal Justice Club

Culinary Club

Cultural Exchange Club/AAMLI

DECA (Delta Epsilon Chi Association)

Delta Mu Epsilon (Math) Club

Economics Club

Eta Sigma Delta - IRSC Chapter

Exceptional Students Education (ESE) & Student Diversity Club

Flag Football League

Future Alumni Association

Game Design & Development Club

Gaming Anime Magic Media Arts (GAMMA)

Graphic Design/Digital Media Club

Haitian Cultural Club

Hallstrom Astronomical Society

Honors Club*

Honor Society for Nursing*

H.O.P.E.

Human Services Club

Interior Design Club

International Club

International F-1 Club

Intramurals

Investment Club

Kappa Delta Pi*

Lambda Nu Honor Society*

LEAPers

Lesbian Gay Bisexual Transgender (LGBT) Alliance

Medical Assisting Club

Medical Laboratory Technology (MLT) Club

Music

Nursing Student Association (NSA)

Phi Theta Kappa (PTK)*

Pioneer Radio

Political Science Club

Practical Nursing

River Readers Book Club

Science Club

Sigma Beta Delta Honor Society*

Spanish Club

Spoken Word & Debate Club

Student Assistance Mentorship (SAM) Program

Student Healthcare Network (SHn)

Student Veterans Organization (SVO)

Theater Scholars

Tomeu Center Mentors Club

Yoga Club

**GPA Requirement*

Phi Theta Kappa

As a society which honors high academic achievement, the Nu lota Chapter of the Phi Theta Kappa National Scholastic Fraternity promotes scholarship, encourages the development of character, and cultivates fellowship among students of community colleges, and facilitates the award of other forms of recognition for outstanding students.

To be eligible for membership in Phi Theta Kappa, IRSC students must:

- have successfully completed at least 12 semester hours of college credit coursework at IRSC;
- be currently enrolled as a degree-seeking student in at least 12 semester hours of college credit courses; and
- have a current cumulative grade point average of 3.5 or higher.

In order to maintain membership IRSC students must successfully complete at least 9 semester hours of college credit coursework each Fall and Spring semester and maintain a cumulative grade point average of 3.25 or higher. If a member of Phi Theta Kappa drops below these academic standards, he/she will be given one semester in which to restore his/her GPA and/or successful course completion to the required levels. If the standards to maintain eligibility are not met after one semester, the student will be removed from PTK membership.

Invitations to apply for membership in Phi Theta Kappa are issued to eligible students each Fall and Spring semester. Students accepted into Phi Theta Kappa are honored at either the Fall or Spring Induction Ceremony, presented with a PTK honors medallion, recognized as PTK members at the Fall or Spring Commencement Ceremony, and have the opportunity to apply for many state and national transfer scholarships designated specifically for PTK members.

Intercollegiate Athletics

As a member of the National Junior College Athletic Association and Florida College System Activities Association, Indian River State College competes on a statewide and national level in men's and women's basketball, swimming and diving, baseball, fast pitch softball, and women's volleyball.

Athletic scholarships are available in all sports. Although academics never take a backseat to athletics at IRSC, the athletic teams receive the administrative support and backing necessary to perform to the best of their abilities.

The IRSC Men's Swimming and Diving Team holds the distinction for winning the most consecutive national championships by any college or university in the United States in any intercollegiate sport. The men's team won its 42nd consecutive National Championship and the women's

team won its 38th National Championship at the 2016 NJCAA meet. In 1990, 1996, and 2003, the teams were recognized in Sports Illustrated magazine.

The IRSC Baseball Team has also gained prominence in 2011 when 3rd baseman, Cory Spangenberg was Major League Baseball's #10 overall pick in the draft. The team has also won four FCSAA state championships in 1979, 1993, 1995, and 1996, qualifying to compete in the JUCO World Series on two separate occasions. In 2002, the IRSC Softball Team won the NJCAA National Championship and have won numerous Southern Conference championships, the most recent being in 2016.

IRSC's Basketball and Volleyball teams consistently distinguish themselves in Southern Conference and state competitions. The Women's Basketball team strung together a three year championship run being named Southern Conference Champions in 2009, 2010 and 2011. The men's last championship win was in 2010. The IRSC Volleyball Team participated in the 2011 and 2013 State Tournaments and were named IRSC "Academic All-Stars" in January, 2014 with the team GPA of 3.56, the highest GPA for any team in the history of IRSC Athletics. In October, 2015, the IRSC Volleyball team was crowned, 2016 Southern Conference Champions - the first in the teams' history.

IRSC boasts a state-of-the-art Baseball/Softball Complex as home field to the IRSC Baseball and Softball teams. The complex features two fenced-in fields and two newly installed LED scoreboards. With its gymnasium, world-class aquatic complex with CTS video display board, racquetball and tennis courts, and weight training facility, IRSC encourages the well-rounded development of its students.

Intramural Sports

Indian River State College Intramural Sports program is available to all students attending IRSC. These activities provide students with an opportunity to participate in various sports; promoting social interaction, health, and student-friendly rivalry through many different forms of competition, making the program fun.

Intramural sporting events are held on the Main Campus in Fort Pierce. Information on Intramural Sports can be obtained by contacting the Student Affairs Office located in the KSU. When events are planned with established times and venues, flyers will be placed on the bulletin board just outside the Student Affairs Office and posted to the IRSC website via RiverLife.

Performing Arts and Cultural Enrichment

Cultural enrichment is a vital part of every person's education and a key facet of IRSC's Mission and Goals. In support of this, students are provided with many cultural activities at Indian River State College. Performing and Visual Arts students participate in the production of plays and musicals many times each year in the McAlpin Fine Arts Center, a professional quality 620 seat theatre, and the Wynne Black Box, a versatile venue that seats 75-100 patrons.

IRSC students have presented such notable musicals as "Chicago", "Ragtime", "Anything Goes", "Fiddler on the Roof", and dramas including "Cat on a Hot Tin Roof", and "Of Mice and Men". Other student performance groups include the song and dance troupe "Company," the Jazz Band, Wind Ensemble, College Chorale, Theatre Program, and Theatre Touring Group.

In addition, each November, Indian River State College dedicates a week to International Education activities including, a Parade of Nation, music and dance performances, an international photo competition, a global economics panel and highlights of the many Study Abroad programs available for the educational and cultural enrichment of our students.

Students Affairs

Indian River State College resembles society as a whole. The students are treated as mature adults who are responsible for their own actions. There are rules and regulations that are followed for the benefit of all, and each person has a right to expect courtesy, integrity, and good citizenship in dealing with others.

This ideology is reflected in the IRSC Pioneer Promise:

Integrity, respect, scholarship and community are the core values that guide our conduct, performance and decisions at IRSC. As an IRSC student, I promise the following:

1. Integrity - to lead by example and practice personal and academic honesty.
2. Respect - to support the learning community by recognizing and respecting the rights and contributions of others.
3. Scholarship - to value learning as my primary purpose of being a member of the IRSC community.
4. Community - to strive to give back and embrace diversity through service and compassion for others.

Dishonesty, such as cheating, plagiarism, or knowingly furnishing false information to the College is subject to disciplinary action. Upon enrollment at Indian River State College, all students assume the responsibility of compliance and cooperation with College and Campus Coalition Government policies, just as each student is responsible to the larger community, state, and nation in

which he/she lives.

The College does not permit the possession or use of alcoholic beverages on campus or at any College function. Possession of illegal narcotics is not allowed and will result in suspension of the student from the College.

Gambling is also prohibited. Students who violate the College regulations or who display misconduct either on or off campus can expect appropriate disciplinary measures to be taken; these measures include disciplinary probation, suspension and expulsion. In all disciplinary matters, the decision of the President of Indian River State College is final.

Koblegard Student Union

IRSC's Koblegard Student Union (KSU) houses a number of student-oriented activities and related departments including: the Vice President of Student Affairs Office, the Student Activities Office, the Campus Coalition Government Office, College Ombudsman, the RiverShop bookstore, shops, the Pioneer Closet, student lounge area, mailroom and River Café.

In addition, the KSU serves as the information outlet for student notices, activity bulletin boards and the Lost and Found Department. At the Student Affairs Office you can pick up your IRSC Student Photo I.D. and parking decal. These are provided at no cost to the student.

WQCS FM 88.9

Public radio station WQCS/88.9 serves a listening area from northern Palm Beach County to Melbourne. It provides local news and weather information throughout the day and a public affairs segment deals with people and issues in the communities served by the station. Staffed by professional and volunteers, WQCS has won numerous awards for broadcasting excellence.

The station also operates the WQCS Radio Reading Service. Each morning, volunteers read local newspapers and other publications on a closed-circuit sub-carrier. Approximately 500 blind and visually and physically impaired listeners receive this service via a special receiver that WQCS provides free of charge.

WQCS, a member of National Public Radio and Florida Public Broadcasting Service, and affiliated with Public Radio International, American Public Media and the Associated Press is the state-designated Emergency Alert System serving St. Lucie, Martin, Indian River and Okeechobee counties and northern Palm Beach County.

WQCS, boasting a 500 foot radio tower, is located on the Main Campus of Indian River State College at 3209 Virginia Avenue in Fort Pierce, Florida.

ACADEMIC AND SUPPORT SERVICES

Academic Support Center

The Academic Support Centers (ASCs) provide free resources and tutoring to help students meet the demands of their academic courses. Services are available at the Main Campus as well as all IRSC campuses.

All ASC locations provide academic assistance in English, reading, English for Academic Purposes, math, science, and health science. Additionally, diagnostic/prescriptive programs are available based on specific needs.

Students also have access to "Smarthinking" - free, live, online tutoring - by clicking on "Smarthinking" on their Blackboard homepage.

Other support services include the ASCs' Academic Workshop Series, the Writing Center, and computer labs.

Career and Transfer Services

With thousands of careers to choose from, many students find the selection overwhelming. For this reason, IRSC provides professional career counseling, interest surveys, and an assessment of skills and abilities through Career and Transition Services located at all IRSC campuses.

An extensive library of books, magazines, and pamphlets offers a wealth of information on existing jobs, the outlook for future employment, the qualifications and characteristics that each job demands, and the rewards and drawbacks of those occupations.

Choices, CareerScope and Bridges software are available to help students increase their self-awareness, develop career decision-making skills and education plans. Support is also provided through the Florida Virtual Campus for students at www.flvc.org which links academic data for all public universities, state college and community colleges in the State of Florida.

Career and Transition Services also assist students, alumni and IRSC employees in securing employment in the field of study for which they are trained. Services include:

- assistance in preparing employment applications
- resumes and cover letters
- developing interviewing techniques and preparation
- disseminating employer information
- facilitating direct job referrals
- furnishing resumes to potential employers.

Using the Career Portfolio online tool, students can document jobs and internships, record references, and upload their resume to potential employers. A current listing of job openings in the local area is available online and is posted at all IRSC campuses.

Child Care Services

IRSC has a full-service Center for Early Childhood Education located at its Main Campus in Fort Pierce.

The Center is open to students, staff, and community families looking for a quality educational experience for their one, two, three or four-year-old children. Four-year-olds enjoy Florida's Voluntary Prekindergarten Education (VPK) program during the morning.

Staffed by well-qualified and experienced teachers as well as IRSC college students in the Early Childhood Education program, the Center offers a developmentally appropriate learning environment year around.

For further information on either program, contact the Center for Early Childhood Education at (772) 462-7645.

Accessibility Services

Indian River State College provides reasonable accommodations to students with documented disabilities.

In accordance with Sections 1007.264 and 1007.265 of Florida Statutes and Florida State Board of Education Rules 6A-10.040, and 6A-10.041, substitutions of requirements for admission to programs, graduation, or course waivers and substitutions, or exemption of basic skills exit requirements shall be provided to eligible students with documented disabilities.

Notetakers, testing accommodations, textbooks on CD, assistive technology, scribes, readers, real-time captionists, and sign language interpreters are available through the Student Accessibility Services Office. For additional information and assistance Student Accessibility Services advisors are located at all IRSC campuses.

Student Accessibility Services is a state-designated Voter Registration Agency that provides assistance to applicants with disabilities in completing voter registration application forms and accepts completed voter registration application forms for transmittal to the appropriate election official.

Health and Wellness Center

The Health and Wellness Center focuses on optimal physical, emotional, social, and intellectual well-being of students and employees while promoting the importance of

achieving a healthy lifestyle as an essential component of academic success.

The Center strives to reduce health-related barriers to learning through the implementation of individualized health services, the development of a personal wellness plan and educational events.

Free services include:

- emergency medical care
- nursing assessment of acute and chronic health conditions
- health education
- special programs and activities
- crisis intervention and community referrals
-

Pioneer Pantry

Detailed information concerning the risks associated with Meningococcal Meningitis and Hepatitis B and the availability, effectiveness, and contraindications of any required or recommended vaccine for students, or the student's parent if the student is a minor, is available to those who have been accepted for admission to Indian River State College.

Selective Admission programs may require students to have accident and/or liability insurance. Access to coverage is available by visiting the Center or http://www.irsc.edu/students/healthandwellness/healthandwellness.aspx?id=755. Insurance coverage is underwritten and administered by independent insurance companies and is subject to the terms of the specific plan.

For additional information contact the Health and Wellness Center at 772-462-7825.

Housing - River Hammock

Located at the IRSC Main Campus is River Hammock, the student residence facility owned and operated by the Indian River State College Foundation, Inc.

Each fully-furnished apartment boasts a central living room, dining room and kitchen, as well as four private bedrooms and two baths.

Open only to students enrolled at IRSC, River Hammock offers convenience, comfort, and an environment conducive to studying – all at an affordable price. Rent includes utilities, cable and Wi-Fi Internet service.

Information and lease forms for River Hammock are available through the IRSC Foundation Office located in the Ben L. Bryan Administration Building (A-building) on the Main Campus.

Libraries

The Miley Library, located on the Main Campus in Fort Pierce, is the center of academic activity for students, faculty, and the campus community. The Library is an integral part of the intellectual life on campus and trained faculty is available to provide individual and group assistance and guidance.

The Library offers students vital resources for academic success, including access to online databases, the Internet, e-books, as well as traditional resources.

IRSC students and employees also have access to the resources available at libraries throughout Florida using reciprocal agreements or interlibrary loan. The Library is a U.S. Federal Depository Library and receives a large number of Federal documents of interest to the campus community and the citizens of the Treasure Coast.

Electronic Access to Information (LIS 1002 (p. 246)) is a recommended college credit course offered each term to teach students how to become information literate in the use of online information recourses.

Pruitt Campus Library - St. Lucie West
Operated in cooperation with Indian River State College and St. Lucie County, the library offers an exceptional learning resource center to students and residents of southern St. Lucie County including books, periodicals, and media collections which reflect the college curriculum, as well as a diverse collection of current literature.

Brackett Library - Mueller Campus, Vero Beach
The beautiful 30,000 square foot joint-use Brackett Library is operated as a partnership between IRSC and the Indian River County Library System. In addition, the Marion C. Link Electronic Resource Center provides students with online access to a wealth of information resources, including university and college library holdings, e-books, online databases, and the worldwide resources of the Internet.

Robert Morgage Library - Chastain Campus, Stuart
The Robert Morgade Library, a joint-use library partnering with the Martin County Library System, serves both students and Martin County residents housing books, periodicals, and media collections which reflect the college curriculum and Martin County resident interest.

Dixon Hendry Library Collection - Okeechobee
This collection provides students with online access to a wealth of information resources, including college library holdings, e-books, online databases, and the worldwide resources of the Internet.

Ombudsman

Indian River State College has a Student Ombudsman which helps students understand College policies and procedures, facilitates communication, and assists in conflict resolution apart from engagement in the College's formal grievance procedures.

The Student Ombudsman provides an initial point of contact to ensure student concerns and appeals regarding issues such as student's access to courses, credit granted toward the degree, and other matters are referred to the appropriate department to be resolved in a prompt, efficient and impartial manner.

Through the Student Ombudsman Office, IRSC seeks to ensure that all students are treated in a fair and equitable manner.
The Student Ombudsman assists students by:

- Listening and helping to resolve student concerns or complaints
- Clarifying College policies and procedures
- Answering questions
- Referring issues and concerns to the appropriate department or office
- Helping define available options
- Recommending revisions in College policies and procedures when appropriate
- Maintaining open and constructive communications
- Providing students with information and notification regarding opportunities for assistance and appeal, including the College's formal grievance procedures

The Director of Student Development serves as the College Ombudsman, and is accountable to the College President and the Vice President of Student Affairs. The Student Ombudsman,Rochelle Popp-Finch, can be reached at (772) 462-7476 or rfinch@irsc.edu.

RiverSupport

Student success is IRSC's first priority and sometimes issues outside the classroom can cause students' work inside the classroom to suffer. The latest research on successful course completion shows that identifying a student's challenge early in the semester provides the greatest chance for success, not only in that particular course but in reaching the overall goal of graduation.

RiverSupport, the College's Retention Management System has two parts - ReachOuts and RiverSupport Resources.

ReachOuts
Instructors identify a student's specific challenge in a course and assist the student by sending a ReachOut to the student's advisor. The advisor contacts and works with the student to find resources that will address the challenge. Constant feedback is supplied by the advisor to the instructor until the issue is resolved.

RiverSupport Resources
RiverSupport Resources aid the student in finding resources for many different barriers to successful course completion or overall college success. This list of campus, community, state and nationally located resources is available to students at www.irsc.edu 24/7, 365 days per year - click on the RiverSupport link at http://www.irsc.edu/riversupport/riversupport.aspx?id=4294972487. Resources are listed by specific challenge areas making it easy to find whatever issue a student may be experiencing.

Student Support Services Program

Student Support Services is a federally-funded program providing a wide variety of services designed to enhance academic skills, increase retention and grade point averages leading to graduation, and if appropriate, transition into an IRSC Bachelor's Degree program or transfer to a four-year college or university.

Services include academic support, personal and career counseling, informational workshops designed to promote college success and financial literacy, individual and group peer tutoring, cultural enrichment events, college/university tours, and instructional resources.

Since Student Support Services is a federally-funded program, students selected must meet one of the following criteria:
(1) low-income with verifiable financial need
(2) first generation in college or
(3) students with disabilities.

Student Support Services is committed to providing student-centered services to maximize the academic potential for each student’s success at Indian River State College.

Sending IRSC Transcripts

Students may access their unofficial transcript or submit a request for an official transcript through their **MyIRSC** account at www.irsc.edu.

Written requests for official transcripts may also be submitted to the Student Records Office or at any IRSC campus. No transcripts or education verifications will be released until all obligations to the College are satisfied.

Contact the Student Records Office for further information.

Transportation and Parking

Students driving vehicles on any IRSC campus should review and familiarize themselves with the Traffic and Parking regulations in the IRSC Student Handbook/Planner that is available at:

- New Student Orientation sessions
- Student Services
- Student Affairs/Student Activities
- www.irsc.edu

Vehicles parked at the IRSC Main Campus in Fort Pierce must display an IRSC parking decal. Decals are available at no charge in the Students Affairs Office in the Koblegard Student Union.

Students should pay particular attention to parking spaces marked "Reserved;" these spaces are not for student use. Students parking in a "Reserved" space may be ticketed and/or towed by a private towing service. Students may park in a designated "Reserved" space after 5:00 p.m. or on a Saturday or Sunday.

Unauthorized parking in:

- Handicapped only spaces
- Fire lanes
- Loading zones
- Service vehicle parking spaces
- On the grass or sidewalks
- Any area marked with yellow or white striping

is prohibited at all times and may result in ticketing and/or towing of the vehicle.

Parking and traffic control regulations regulate the safe flow of pedestrian and vehicular traffic. Drivers must adhere to all posted traffic control regulations and any verbal traffic directions of a College Security Officer.

College Security Officers are authorized by Florida State Statute and the District Board of Trustees to enforce parking and traffic regulations and issue citations for violations. Failure to adhere may result in ticketing, towing, or suspension of driving privileges on the Campus.

Failure to satisfy outstanding traffic violations may result in suspension of registration privileges and/or denial of an official transcript.

Virtual Campus-Florida

The Florida Virtual Campus, www.flvc.org, is a free online service that helps students plan and track their educational progress through college.

IRSC students can obtain transcripts, grades, transient student forms, and transfer program admission information. They also use the online service to conduct graduation checks and A.A. Degree transfer evaluations, gather information about career exploration, and for many other purposes.

ACADEMIC HONORS AND COMMENCEMENT

Academic Awards

Dean's List

The Dean's List designation is posted on the transcript at the end of each semester and students receive a congratulatory letter from the Vice President of Student Affairs.

To be eligible for this honor, students must have completed 12 or more credit hours. Students must also maintain a Grade Point Average (GPA) of 3.5 or higher with no grade lower than a C. Courses with an S/U grading method are not eligible. For Summer I or Summer II, six (6) or more credit hours must be completed.

President's List

The President's List designation is posted on the transcript at the end of the Fall and Spring semesters and students receive a congratulatory letter from the President of the College.

All students who have completed a minimum of 15 semester hours or more with the letter grade of A and a semester GPA of 4.0 will be eligible. Courses with an S/U grading method are not eligible.

Graduating with Honors

Graduating students' academic achievements are recognized during the Spring or Fall Commencement Ceremony as follows:

- GPA of 3.85 to 4.00 - Graduated with Highest Honors (Summa Cum Laude)
- GPA of 3.70 to 3.84 - Graduated with High Honors (Magna Cum Laude)
- GPA of 3.50 to 3.69 - Graduated with Honors (Cum Laude)

Students who earn Academic Honors will have it so designated on their transcript.

Computation of Academic Awards for the Baccalaureate Degree (p. 59)is based on all coursework attempted (excluding developmental education).

Computation of Academic Awards for the Associate in Arts Degree (p. 77)is based on all coursework attempted (excluding developmental education and those occupational courses that may not be counted toward an A.A. Degree).

Computation of Academic Awards for the Associate in Science (p. 95)and the Associate in Applied Science (p. 95)degrees are based on all coursework attempted (excluding developmental education).

For all degrees, undergraduate coursework attempted at other postsecondary institutions will also be used in this computation.

Graduation

Students nearing completion of required courses for their degree program should contact any IRSC campus and request or electronically print their Degree Audit which can be accessed by signing in to **MyIRSC** at www.irsc.edu, Records. This Degree Audit should be carefully reviewed with their IRSC advisor.

IRSC automatically graduates students once they have completed all requirements for their degree or certificate. This completion is posted to the student's transcript.

Commencement

Graduation is a noteworthy event, and Indian River State College holds a Commencement Ceremony at the end of both the Spring and Fall semesters to mark this milestone.

Degrees are awarded by the College President and graduates are encouraged to participate. The deadlines to apply are listed in the Academic Calendar (p. 15).

A nominal fee covers the cost of all graduation regalia. Upon successful completion of all courses, the degrees or certificates will be recorded on the student transcript, and a diploma or certificate will be mailed with six to eight weeks of the end of the term.

Honors Program

The Honors Program at Indian River State College provides students with the opportunity to expand their academic horizon and enter into a shared inquiry that leads them to further develop their intellectual capacities.

A prospective Honors Program student must have:

- An ACT composite score of 26 or higher, an SAT combined score (math plus reading) of 1100 or higher, OR
- A combined P.E.R.T. score of 350 or higher, OR
- A cumulative College grade point average of 3.3 or higher on a 4.0 scale, with a minimum of 12 credit hours excluding Developmental Education courses, OR
- A combined College Placement Test Score of 280 or above.

Requirements

Students must successfully complete all degree requirements, Service Learning and Honors designated credit courses, including IDS 1110 (p. 242), The Pursuit of Knowledge. They are expected to attend Performing & Visual Arts performances, participate in campus activities such as Brain Bowl and CCG, and are encouraged to participate in IRSC Study Abroad.

Honors Diploma - in addition to or as part of the degree requirements:

- 24 hours of Honors designated credit
- 45 hours of documented Service Learning
- An acceptable Honors Capstone Project
- Cumulative GPA of 3.5

Honors Certificate - in addition to or as a part of the degree requirements:

- 15 hours of Honors designated credit
- 15 hours of documented Service Learning
- Cumulative GPA of 3.5

Honors credit may be earned by completing the Honors Interdisciplinary Seminar, completing the Honors Capstone Project, and completing other Honors designated course work. Students interested in the Honors Program may contact the Associate Dean of Communications, Humanities and Social Sciences for application information.

Service Learning

Service Learning is an instructional method that uses experiential education to assist students in acquiring a deeper understanding of, and appreciation for, underlying concepts, ideas, and principles associated with a course of study, while also promoting and strengthening the idea of democratic citizenship.

Service Learning combines direct, hands-on experience with:

- guided reflections and analysis of what is being done
- how the student is responding to the experience
- what the student feels are the good and the bad aspects of the experience
- how the student would change the learning process and environment
- what the student has learned about the mission and infrastructure of the agency he/she is working with
- what the student sees as his/her responsibility and future role in the community.

ALUMNI RELATIONS

The Indian River State College Alumni Association was established to meet the needs of IRSC alumni.

Administered by the IRSC Foundation, Inc., the Alumni Association maintains an electronic database of IRSC alumni and provides updates and current events at the College via periodic electronic newsletters.

In addition, the Alumni Association identifies resources at IRSC that will enhance personal and professional goals of IRSC alumni.

Alumni are welcome to visit the Foundation Office on Main Campus to share information and suggestions for making the College and community a better place to live and learn.

The Foundation's website, www.irscfoundation.org/ offers a variety of options for IRSC alumni, including purchasing a commemorative brick on Alumni Row, accessing the *Connections Newsletter*, along with reviewing the arts and events schedules.

For more information, contact the Alumni Development Coordinator at (772) 462-7254.

PROGRAMS OF STUDY

The major programs of instruction available at Indian River State College are organized as follows:

- Bachelor of Science Degree
- Bachelor of Applied Science Degree
- Associate in Arts Degree
- Associate in Science Degree
- Associate in Applied Science Degree
- Technical Certificate
- Applied Technology Diploma
- Career Training Programs/Post Secondary Adult Vocational Certificate
- Adult Education
    a. GED® Preparation
    b. Adult Basic Education, English as a Second Language

Indian River State College is on a semester schedule: Fall, Spring, Summer. This allows a student to enter IRSC at various times of the year and to complete the program in his/her own time frame.

GED® is a registered trademark of the American Council on Education (ACE) and administered exclusively by GED Testing Service LLC under license. This material is not endorsed or approved by ACE or GED Testing Service.

Developmental Education

Indian River State College encourages all students to take advantage of placement testing to ensure appropriate placement into developmental or college-level courses in English, reading, and math. The P.E.R.T. is administered by IRSC for this purpose.

Students who present ACT scores of Reading 19, English 17, Math 19 or SAT scores taken before March 1, 2016, of Verbal 440, Math 440 or higher, or SAT scores taken after March 1, 2016, of Critical Reading 24 or higher, Math 24 or higher, may be exempt from taking the P.E.R.T.

Students who graduated from a Florida public high school since 2007 and students who are serving as an active duty member of any branch of the United States armed services are exempt from mandatory placement testing.

Developmental courses may not be used to meet degree requirements.

Alternative instructional opportunities are available for developmental instruction. Information is available at Contact Your Advisor (p. 33).

General Education Requirements

The General Education curriculum at Indian River State College is designed to empower students to become lifelong learners. Students who complete a degree will acquire a broad body of knowledge and experiences from the humanities, natural sciences, mathematics, and social sciences disciplines. These courses foster critical thinking, effective communication, and application of knowledge to meet the new challenges in students' everyday life.

In compliance with Rule 6A-14.0303, General Education Core Course Options, prior to the award of an Associate in Arts or Baccalaureate Degree, first-time-in-college students entering a Florida College System institution in the Fall Term, 2015, and thereafter must complete at least one course from each of the General Education subject areas to meet General Education Core Course Options.

www.fldoe.org/core/fileparse.php/5444/urlt/0074884-140303.pdf.

General Education Learning Outcomes

Communication

- Demonstrate essential skills in verbal, performative, and written communication, to include the articulation of content clearly and precisely.

Interpretation and Evaluation

- Demonstrate critical-thinking skills in the analysis of key values and ideas presented in areas such as philosophy, history, information literacy, literature, music, theatre, visual arts, and religious studies.

Behavioral and Social Analysis

- Demonstrate scientific reasoning in the analysis of various human phenomena such as human nature, human behavior, human diversity, and human social systems.

Scientific and Mathematical Reasoning

- Demonstrate scientific or mathematical reasoning in problem-solving.

Electives

Electives are courses which complement or enhance the student’s program of study. Specific electives may be required for upper-division transfer. IRSC’s advisors can

assist students in selecting electives that are appropriate for their course of study.

GORDON RULE

The Gordon Rule requires that prior to receipt of an Associate in Arts Degree from a public community college or university, or prior to entry into the upper division of a public university, a student shall successfully complete the following:

DEGREE REQUIREMENTS

Six (6) credits of English and six (6) credits of Humanities courses in which the student will demonstrate college-level writing skills through multiple assignments. Mathematics (higher than MAT 1033) - 6 credits.

To meet the requirements of the Communications and Computation Requirement (Gordon Rule), all IRSC A.A. Degree seeking students will complete:

ENC 1101	English Composition I	3

and will select one from the following:

ENC 1102	English Composition II	3
ENC 1107	Advanced College Writing	3
ENC 2210	Technical Writing	3
AML 2010	American Literature to 1865	3
AML 2020	American Literature after 1865	3
ENL 2012	English Literature to 1798	3
ENL 2022	English Literature after 1798	3
LIT 2110	World Literature: Homer to the Renaissance	3
LIT 2120	World Literature: Enlightenment to the Present	3
MMC 2100	Writing for Mass Communications I	3

Students will select two of the following Humanities courses demonstrating college-level writing skills through multiple assignments.

Students must complete at least one course from ARH 1000, HUM 1020, LIT 1000, MUL 2010, PHI 1010, THE 1000 to comply with General Education Core Course Options (p. 57).

AML 2010	American Literature to 1865	3
AML 2020	American Literature after 1865	3
ARC 1701	Architectural History I	3
ARH 1000	Art Appreciation	3
ARH 2050	History of Art (Prehistoric - Gothic)	3
ARH 2051	History of Art (Renaissance through Modern)	3
ENC 1102	English Composition II	3
ENL 2012	English Literature to 1798	3
ENL 2022	English Literature after 1798	3
ENL 2330	Introduction to Shakespeare	3
HUM 1020	Introduction to Humanities	3
HUM 1233	Humanities Literature: Baroque to Present	3
IDS 1110	The Pursuit of Knowledge	3
IDS 1955	Interdisciplinary Study Abroad	3
LIT 1000	Introduction to Literature	3
LIT 2110	World Literature: Homer to the Renaissance	3
LIT 2120	World Literature: Enlightenment to the Present	3
MMC 2100	Writing for Mass Communications I	3
MUL 2010	Survey of Music Literature	3
MUL 2012	Survey of Music Literature - Musical Theater	3
MUY 2100	Humanities: Music and Music Therapy	3
PHI 1002	Philosophical Practice	3
PHI 1010	Introduction to Philosophy	3
PHI 1103	Critical and Creative Thinking	3
PHI 1113	Reason and Emotion	3
PHI 1624	Philosophy and Popular Culture	3
PHI 1635	Ethical Issues in Health Care	3
PHI 1801	Philosophy of Art	3
PHI 2100	Introduction to Logic	3
PHI 2620	Environmental Ethics	3
PHI 2630	Introduction to Ethics	3
PHP 1791	Existentialism	3
REL 1121	Religion and American Public Life	3
REL 1300	Introduction to World Religions	3
THE 1000	Introduction to Theatre (Drama)	3
THE 2300	Survey of Dramatic Literature	3

Students will also complete 6 credits from the following courses.

Students must complete at least once course from MAC 1105, MAC 2311, MGF 2106, MGF 2107, STA 2023 to comply with General Education Core Options (p. 57).

MAC 1105	College Algebra	3
MGF 2106	Survey in Mathematics	3
MGF 2107	Explorations in Mathematics	3
MAC 1114	Plane Trigonometry	3
MAC 1140	Precalculus Algebra	3
MAC 1147	Precalculus/Trigonometry	5
MAC 2233	Business Calculus I	3
MAC 2311	Calculus I with Analytic Geometry	5
MAD 2104	Discrete Mathematics	3
MAP 2302	Differential Equations	3
MAS 2103	Linear Algebra	3
MTG 2204	Elementary Geometry	3
STA 2023	Elementary Statistics I	3

For the purpose of this rule, a grade of C or higher shall be considered successful completion.

BACHELOR DEGREE PROGRAMS

Bachelor of Science

ACCOUNTING (p. 62)

BIOLOGY (p. 63)

BUSINESS ADMINISTRATION (p. 64)

CRIMINAL JUSTICE (p. 64)

EDUCATION (p. 66)

ELEMENTARY EDUCATION with READING and ESOL ENDORSEMENTS (p. 66)
EXCEPTIONAL STUDENT EDUCATION with READING and ESOL ENDORSEMENTS (p. 67)
MIDDLE GRADES MATHEMATICS (p. 68)
SECONDARY MATHEMATICS (p. 68)
MIDDLE GRADES SCIENCE (p. 69)
SECONDARY BIOLOGY (p. 70)

HEALTHCARE MANAGEMENT (p. 71)

HUMAN SERVICES (p. 71)
YOUTH & FAMILY STUDIES (p. 72)
ADDICTIONS STUDIES (p. 73)
HUMAN SERVICES GENERALIST (p. 72)

INFORMATION TECHNOLOGY MANAGEMENT AND CYBER SECURITY (p. 73)

(p. 73)
NURSING (p. 74)

(p. 74)
PUBLIC ADMINISTRATION (p. 75)
EMERGENCY PLANNING AND MANAGEMENT CONCENTRATION (p. 75)
PUBLIC POLICY AND LEADERSHIP CONCENTRATION (p. 76)

Bachelor Of Applied Science

DIGITAL MEDIA (p. 65)
GRAPHIC DESIGN & VISUAL COMMUNICATION CONCENTRATION (p. 65)
ANIMATION, GAMING, AND MODELING CONCENTRATION (p. 66)

ORGANIZATIONAL MANAGEMENT (p. 74)

Bachelor's Degree Requirements

Students must earn at least twenty-five percent (25%) of the Baccalaureate Degree at IRSC. Students must successfully complete, with a GPA of 2.0 or higher, 36 hours of General Education credit (or equivalent) in the areas established by Indian River State College for its Baccalaureate Degree program.

Prior to completion of a Baccalaureate Degree at IRSC, students must demonstrate foreign language competence by providing evidence that documents the successful completion of two (2) credits of sequential high school foreign language instruction, or the second level of foreign language at the college level.

Students may demonstrate equivalent foreign language competence via the alternative methods specified by the Florida Department of Education including established minimum College Level Examination Program (CLEP) scores, minimum College Board MAPS Latin examination scores, or other methods as determined by IRSC.

Indian River State College reserves the right to validate the foreign language competence of any student prior to awarding the Baccalaureate Degree through methods including, but not limited to, review of official transcripts, portfolio and performance reviews, competency testing, standardized testing, or other methods determined by IRSC that are designed to assess the foreign language competencies outlined in Rule 6A-10.02412 of the Florida Administrative Code.

BACHELORS DEGREE GENERAL EDUCATION REQUIREMENTS

Bachelor Degrees

The following information must be used in conjunction with the requirements information under each degree.

Transfer from Associate Degree:

General Education Requirement: 36 credits

Electives: 24 credits

In compliance with Rule 6A-14.0303, General Education Core Course Options, prior to the award of a Baccalaureate degree, students must complete at least one course from each of the General Education subject areas listed in this section.

www.fldoe.org/core/fileparse.php/5444/urlt/0074884-140303.pdf.

- Communication:
  - ENC X101 English Composition 1; or
  - Any student who successfully completes a course with and ENC prefix for which ENC X101 is an immediate prerequisite shall be considered to have completed the communication core.
- Humanities:

- ARH X000 Art Appreciation;
- HUM X020 Introduction to Humanities;
- LIT X000 Introduction to Literature;
- MUL X010 Music Literature/Music Appreciation;
- PHI X010 Introduction to Philosophy; or
- THE X000 Theatre Appreciation

- Mathematics:
  - MAC X105 College Algebra;
  - MAC X311 Calculus I;
  - MGF X106 Liberal Arts Mathematics I
  - MGF X107 Liberal Arts Mathematics II
  - STA X023 Statistical Methods; or
  - Any student who successfully completes a mathematics course for which one of the general education core courses options in mathematics is an immediate prerequisite shall be considered to have completed the mathematics core.
- Natural Science:
  - AST X002 Descriptive Astronomy;
  - BSC X005 General Biology
  - BSC X010 General Biology I;
  - BSC X085 Anatomy and Physiology I;
  - CHM X020 Chemistry for Liberal Studies;
  - CHM X045 General Chemistry I;
  - ESC X000 Introduction to Earth Science;
  - EVR X001 Introduction to Environmental Science;
  - PHY X020 Fundamentals of Physics;
  - PHY X048 General Physics with Calculus;
  - PHY X053 General Physics I; or
  - Any student who successfully completes a natural science course for which one of the general education core course options in natural science is an immediate prerequisite shall be considered to have completed the natural science core.
- Social Sciences:
  - AMH X020 Introduction to Survey Since 1877 (also meets Civic Literacy Competency);
  - ANT X000 Introduction to Anthropology;
  - ECO X013 Principles of Macroeconomics;
  - POS X041 American Government (also meets Civic Literacy Competency);
  - PSY X012 Introduction to Psychology; or
  - SYG X000 Principles of Sociology**.**In compliance Rule 6A-10.02413, Civic Literacy Competency, effective June 19, 2018, prior to the award of a Baccalaureate degree, students must demonstrate civic literacy competency prior to graduation either through successful completion of a course or by achieving a passing score on as assessment. https://www.flrules.org/default.asp

DEGREE REQUIREMENTS

English - 6 credits

Students must complete ENC 1101 to comply with General Education Core Course Options.

ENC 1101	English Composition I	3
	And	
ENC 1102	English Composition II	3
ENC 1107	Advanced College Writing	3
ENC 2210	Technical Writing	3
AML 2010	American Literature to 1865	3
AML 2020	American Literature after 1865	3
ENL 2012	English Literature to 1798	3
ENL 2022	English Literature after 1798	3
LIT 2110	World Literature: Homer to the Renaissance	3
LIT 2120	World Literature: Enlightenment to the Present	3
MMC 2100	Writing for Mass Communications I	3

In each of the above courses, students will demonstrate college-level writing skills through multiple assignments and complete each course with a grade of C or higher.

Humanities - 6 credits

Students must complete at least one course from ARH 1000, HUM 1020, LIT 1000, MUL 2010, PHI 1010, THE 1000 to comply with General Education Core Course Options.

AML 2010	American Literature to 1865	3
AML 2020	American Literature after 1865	3
ARC 1701	Architectural History I	3
ARH 1000	Art Appreciation	3
ARH 2050	History of Art (Prehistoric - Gothic)	3
ARH 2051	History of Art (Renaissance through Modern)	3
DAN 2100	Dance Appreciation	3
ENC 1102	English Composition II	3
ENL 2012	English Literature to 1798	3
ENL 2022	English Literature after 1798	3
ENL 2330	Introduction to Shakespeare	3
HUM 1020	Introduction to Humanities	3
HUM 1233	Humanities Literature: Baroque to Present	3

IDS 1110	The Pursuit of Knowledge	3
IDS 1955	Interdisciplinary Study Abroad	3
LIT 1000	Introduction to Literature	3
LIT 2110	World Literature: Homer to the Renaissance	3
LIT 2120	World Literature: Enlightenment to the Present	3
MMC 2100	Writing for Mass Communications I	3
MUL 2010	Survey of Music Literature	3
MUL 2012	Survey of Music Literature - Musical Theater	3
MUY 2100	Humanities: Music and Music Therapy	3
PHI 1002	Philosophical Practice	3
PHI 1010	Introduction to Philosophy	3
PHI 1103	Critical and Creative Thinking	3
PHI 1113	Reason and Emotion	3
PHI 1624	Philosophy and Popular Culture	3
PHI 1635	Ethical Issues in Health Care	3
PHI 1801	Philosophy of Art	3
PHI 2100	Introduction to Logic	3
PHI 2620	Environmental Ethics	3
PHI 2630	Introduction to Ethics	3
PHP 1791	Existentialism	3
REL 1121	Religion and American Public Life	3
REL 1300	Introduction to World Religions	3
THE 1000	Introduction to Theatre (Drama)	3
THE 2300	Survey of Dramatic Literature	3

In each of the above courses, students will demonstrate college-level writing skills through multiple assignments and complete each course with a grade of C or higher.

Mathematics - 6 credits

Students must complete at least one course from MAC 1105, MAC 2311, MGF 2106, MGF 2107, STA 2023 to comply with General Education Core Course Options.

MAC 1105	College Algebra	3
MAC 1114	Plane Trigonometry	3
MAC 1140	Precalculus Algebra	3
MAC 1147	Precalculus/Trigonometry	5
MAC 2233	Business Calculus I	3
MAC 2311	Calculus I with Analytic Geometry	5
MAD 2104	Discrete Mathematics	3
MAP 2302	Differential Equations	3
MGF 2106	Survey in Mathematics	3
MGF 2107	Explorations in Mathematics	3
MTG 2204	Elementary Geometry	3
STA 2023	Elementary Statistics I	3

Students must complete each course with a grade of C or higher.

Science - 6 credits

Students must complete at least one course from AST 1002, BSC 1005, BSC 2010, BSC 2085, CHM 1020, CHM 1045, ESC 1000, EVR 1001, PHY 1020, PHY 2048, PHY 2053 to comply with General Education Core Course Options. IRSC does not offer BSC 2085, ESC 1000 or EVR 1001, but does accept these courses as Natural Science General Education.

AST 1002	General Astronomy	3
AST 1002L	General Astronomy Laboratory	1
BSC 1005	Life Science	3
BSC 1005L	Life Science Lab	1
BSC 1084	Survey of the Human Body	4
BSC 2010	General Biology I	3
BSC 2010L	General Biology I Lab	1
BSC 2011	General Biology II	3
BSC 2011L	General Biology II Lab	1
BSC 2093	Anatomy and Physiology I	3
BSC 2093L	Anatomy and Physiology I Lab	1
BSC 2094	Anatomy and Physiology II	3
BSC 2094L	Anatomy and Physiology II Lab	1
CHM 1020	Introduction to Chemistry	3
CHM 1045	General Chemistry I	3
CHM 1045L	General Chemistry I Lab	1
CHM 1046	General Chemistry II	3
CHM 1046L	General Chemistry II Lab	1
CHM 2210	Organic Chemistry I	3
CHM 2210L	Organic Chemistry I Lab	1
CHM 2211	Organic Chemistry II	3
CHM 2211L	Organic Chemistry II Lab	1
GLY 1010	Introduction to Geology	3
MET 1001	Weather and Climate	3
OCB 1000	Introduction to Marine Biology	3
OCB 1000L	Introduction to Marine Biology Lab	1
OCB 1630	Marine Ecology	3
OCB 1630L	Marine Ecology Lab	1
OCB 2010	Marine Biology	3
OCE 2001	Introduction to Oceanography	3
PCB 1030	Introduction to Ecology	3
PHY 1020	Principles of Physics	3
PHY 2048	Physics with Calculus I	3
PHY 2048L	Physics with Calculus I Lab	1
PHY 2049	Physics with Calculus II	3
PHY 2049L	Physics with Calculus II Lab	1
PHY 2053	College Physics I	3
PHY 2053L	College Physics I Lab	1
PHY 2054	College Physics II	3
PHY 2054L	College Physics II Lab	1
PSC 1121	Survey of Physical Science	3

Consult Enrollment and Student Services about specific science requirements for major and for university transfer.

Social Science - 12 credits

Students must complete at least one course from the AMH 2020, ANT 1000, ECO 2013, POS 1041, PSY 2012, SYG 2000 to comply with General Education Core Course Options.

Students must take 6 credits from the following:

AMH 2010	American History: Discovery	3

	through Reconstruction	
AMH 2020	American History: Reconstruction to the Present	3
EUH 2000	Western Civilization: Origins to 1485	3
EUH 2001	Western Civilization: 1485 to 1815	3
EUH 2002	Western Civilization: 1815 to the Present	3
WOH 2012	World History to 1500	3
WOH 2022	World History Since 1500	3
WOH 2040	World in the 20th Century	3

Social Science

Students must take 6 credits from the following:

ANT 1000	Introduction to Anthropology	3
ANT 2140	Anthropology and Human Origins	3
ANT 2149	Archaeology in Popular Culture	3
ANT 2410	Cultural Anthropology	3
DEP 2004	Human Development	3
ECO 2013	Principles of Economics Macro	3
ECO 2023	Principles of Economics Micro	3
GEA 2000	World Regional Geography	3
INR 2002	Introduction to International Relations	3
INR 2500	Model United Nations	3
POS 1041	American Government	3
PSY 2012	Introduction to Psychology	3
SPC 1017	Fundamentals of Speech Communication	3
SYG 1361	Sociology of Death	3
SYG 2000	Introduction to Sociology	3
SYG 2010	Social Problems	3

A series of college developmental reading courses will be required of all students who test into college developmental level reading.

Bachelor's Degree Program in Accounting

S0170 - 120 Credits

The Bachelor of Science Degree in Accounting prepares students to sit for the Florida Certified Public Accountant exam and to excel in careers as accountants, auditors, management analysts, financial managers, and budget managers. The program features a combination of coursework in accounting and business administration that will provide a strong foundation for success in the workplace and in multiple graduate school programs.

Requirements for graduation from the Bachelor of Science Degree in Accounting are:

1. Students must successfully complete 120 credit hours of college-level courses in the degree program, including the lower-division Associate Degree and 60 hours of specified Bachelor of Science Degree in Accounting coursework.
2. Students must achieve a cumulative GPA of not less than 2.0 on a 4.0 scale in all courses attempted (including transfer hours, but excluding college preparatory courses) and in all courses attempted at Indian River State College.

Refer to General Education Requirements (p. 59) for additional requirements.

Transfer from Associate Degree: 24 credits

General Education Requirement: 36 credits

Major Concentration Courses: 60 credits

BACHELOR OF SCIENCE DEGREE IN ACCOUNTING - S0170

DEGREE REQUIREMENTS

Common Prerequisite Required Courses (may be taken with A.A. or A.S. Degree):

ACG 2001	Financial Accounting I	3
ACG 2011	Financial Accounting II	3
ACG 2071	Managerial Accounting	3
ECO 2013	Principles of Economics Macro	3
ECO 2023	Principles of Economics Micro	3
STA 2023	Elementary Statistics I	3
MAC 2233	Business Calculus I	3
	Or	
MAC 2311	Calculus I with Analytic Geometry	5
CGS 1100	Introduction to Computer Applications for Business	3
	Or	
CGS 1060	College Computing	3

Core Accounting Concentration Required 48 credits

ACG 3401	Accounting Information Systems	3
ACG 3131	Accounting Theory I	3
GEB 3213	Business Writing	3
FIN 3403	Corporate Finance	3
ACG 3341	Cost Accounting	3
ACG 3141	Accounting Theory II	3
ECO 3411	Statistical Methods for Economics & Business	3
ISM 3011	Introduction to Management Information Systems	3
TAX 4001	Federal Taxation	3
ACG 4501	Governmental and Nonprofit Accounting	3
MAN 3303	Management Concepts	3
BUL 4310	The Legal Environment of Business	3
TAX 4101	Corporate Taxation	3

ACG 4651	Auditing	3
MAN 3063	Organizational Ethics and Values	3
MAN 3240	Organizational Behavior	3

ACG 3131 (p. 164), ACG 3141 (p. 164), ACG 3341 (p. 164), ACG 3401 (p. 165), ACG 4501 (p. 165), ACG 4651 (p. 165), TAX 4001 (p. 291), TAX 4101 (p. 291) require a grade of C or higher.

Concentration Electives (12 credits required) choose from:

ACG 3173	Accounting for Decision Makers	3
BUL 3130	Legal and Social Aspects of Business	3
GEB 4891	Strategic Planning	3
MAN 4162	Customer Relations for Managers	3
MAR 3023	Marketing Management	3
MAR 4613	Marketing Research	3
MAN 3802	Strategies and Technology Entrepreneurship	3
MAN 4301	Human Resource Management	3
MAN 4504	Operations Management	3
MAN 4046	Perspective in Leadership	3

Bachelor's Degree Program in Biology

S0070 – 120 Credits

Pursuing a career in biology opens the door to an unusually large number of immensely rewarding and exciting career options in the life sciences. The degree is preparatory for careers in such areas as agriculture, human and veterinary medicine, dentistry, pharmacy, ecology and conservation, molecular/cell biology and biotechnology.

Requirements for graduation from the Bachelor of Science Degree in Biology are:

1. Students must successfully complete 120 hours of college-level courses in the degree program, including a minimum of 60 hours in the lower-division Associate in Arts Degree and 60 hours of specified Bachelor of Science Degree in Biology coursework.
2. Students must achieve a cumulative GPA of not less than a 2.0 on a 4.0 scale in all courses attempted (including transfer hours, but, excluding college preparatory courses) and in all courses attempted at Indian River State College.
3. Students must successfully complete the Senior Research Project, BSC 4911 (p. 180), with a grade of "C" or higher.

Refer to General Education Requirements (p. 59) for additional requirements.

Transfer from Associate Degree: 24 credits

General Education Requirement: 36 credits

Core Biology Concentration: 33 credits

Major Concentration Courses: 27 credits

BACHELOR OF SCIENCE DEGREE IN BIOLOGY - S0070

DEGREE REQUIREMENTS

Common Prerequisite Required Courses (may be taken within A.A. Degree):

MAC 2311	Calculus I with Analytic Geometry	5
	Or	
MAC 2233	Business Calculus I	3
STA 2023	Elementary Statistics I	3
BSC 2010	General Biology I	3
BSC 2010L	General Biology I Lab	1
BSC 2011	General Biology II	3
BSC 2011L	General Biology II Lab	1
CHM 1045	General Chemistry I	3
CHM 1045L	General Chemistry I Lab	1
CHM 1046	General Chemistry II	3
CHM 1046L	General Chemistry II Lab	1
CHM 2210	Organic Chemistry I	3
CHM 2210L	Organic Chemistry I Lab	1
CHM 2211	Organic Chemistry II	3
CHM 2211L	Organic Chemistry II Lab	1

Requires a grade of "C" or higher.

Core Biology Concentration (Required: 33 credits)

BCH 4053	Biochemistry I	3
BCH 4053L	Biochemistry I Laboratory	1
BSC 3931	Junior Seminar I	1
BSC 3932	Junior Seminar II	1
BSC 4910	Senior Project I	1
BSC 4911	Senior Project II	1
MCB 3023	General Microbiology	3
MCB 3023L	General Microbiology Laboratory	1
PCB 3063	Introduction to Genetics	3
PCB 3063L	Introduction to Genetics Laboratory	1
PCB 3674	Evolutionary Biology	3
PCB 4024	Molecular Biology	3
PCB 4043	General Ecology	3
	And	
PHY 2053	College Physics I	3
PHY 2053L	College Physics I Lab	1
PHY 2054	College Physics II	3
PHY 2054L	College Physics II Lab	1
	Or	
PHY 2048	Physics with Calculus I	3
PHY 2048L	Physics with Calculus I Lab	1
PHY 2049	Physics with Calculus II	3
PHY 2049L	Physics with Calculus II Lab	1

Major Concentration (Molecular/Biotechnology: 27 credits)

BCH 4054	Biochemistry II	3
BOT 3015	Plant Biology	3

BSC 3464	Biotechnology I	3
BSC 3464L	Biotechnology I Laboratory	1
BSC 3465	Biotechnology II	3
BSC 3465L	Biotechnology II Laboratory	1
BSC 4422	Applications in Biotechnology	3
BSC 4434	Introduction to Bioinformatics	3
PCB 4023	Cell Biology and Physiology	3
PCB 4233	Immunology	3
PCB 4023L	Cell Biology & Physiology Laboratory	1

Bachelor's Degree Program in Business Administration

S0110 - 120 Credits

The Bachelor of Science in Business Administration prepares students for careers in the corporate sector and as entrepreneurs. You will develop knowledge and skills in management and leadership, corporate finance, strategic planning, human resources, accounting, and the strategies and technology for entrepreneurship. You will be prepared to climb the corporate ladder, start your own business, or continue on for a Master's Degree in Business Administration.

Requirements for graduation from the Bachelor of Science Degree in Business Administration are:

1.
Students must successfully complete 120 credit hours of college-level courses in the degree program, including 60 hours in the lower-division Associate Degree and 60 hours of specified Bachelors of Science Degree in Business Administration coursework.

2.
Students must achieve a cumulative GPA of not less than 2.0 on a 4.0 scale in all courses attempted (including transfer hours, but excluding college preparatory courses) and in all courses attempted at Indian River State College.

Refer to General Education Requirements (p. 59) for additional requirements.

Transfer from Associate Degree: 24 credits

General Education Requirement: 36 credits

Major Concentration Courses: 60 credits

BACHELOR OF SCIENCE DEGREE IN BUSINESS ADMINISTRATION - S0110

DEGREE REQUIREMENTS

Common Prerequisite Required Courses (may be taken with A.A. or A.S. Degree):

ACG 2001	Financial Accounting I	3
ACG 2011	Financial Accounting II	3
ACG 2071	Managerial Accounting	3
CGS 1100	Introduction to Computer Applications for Business	3
	Or	
CGS 1060	College Computing	3
ECO 2013	Principles of Economics Macro	3
ECO 2023	Principles of Economics Micro	3
MAC 2233	Business Calculus I	3
	Or	
MAC 2311	Calculus I with Analytic Geometry	5
STA 2023	Elementary Statistics I	3

Core Business Administration Concentration Required 60 credits

ISM 3011	Introduction to Management Information Systems	3
MAN 3303	Management Concepts	3
ACG 3173	Accounting for Decision Makers	3
MAN 4162	Customer Relations for Managers	3
MAN 3240	Organizational Behavior	3
FIN 3403	Corporate Finance	3
MAN 3063	Organizational Ethics and Values	3
MAR 3023	Marketing Management	3
BUL 4310	The Legal Environment of Business	3
MAN 4442	International Business	3
MAR 4613	Marketing Research	3
GEB 4891	Strategic Planning	3
MAN 4301	Human Resource Management	3
MAN 4504	Operations Management	3
MAN 4046	Perspective in Leadership	3
ECO 3411	Statistical Methods for Economics & Business	3
GEB 3213	Business Writing	3
GEB 3035	Effective Career Management	3
MAN 4940	Business Internship	6
	Or	
MAN 4970	Business Thesis	6
	Or	
MAN 4900	Capstone Project in Organizational Management	6

Bachelor's Degree Program in Criminal Justice

S0120 - 120 Credits

The Bachelor of Science Degree in Criminal Justice prepares students for leadership roles in local, state, and federal law enforcement, probation, corrections, juvenile justice, and private companies providing security services. This program is housed at the IRSC Treasure Coast Public Safety Training Complex, one of the most comprehensive public safety training facilities in the United States. You will understand the causes and responses to crime so that you will excel in a criminal justice career or in graduate school.

Requirements for graduation from the Bachelor of Science Degree in Criminal Justice are:

1. Students must successfully complete 120 credit hours of college-level courses in the degree program, including the lower-division Associate Degree and 42 hours of specified Bachelor of Science Degree in Criminal Justice coursework.
2. Students must achieve a cumulative GPA of not less than 2.0 on a 4.0 scale in all courses attempted (including transfer hours, but excluding college preparatory courses) in all courses attempted at Indian River State College.

Refer to General Education Requirements (p. 59) for additional requirements.

Transfer from Associate Degree: 42 credits

General Education Requirement: 36 credits

Major Concentration Courses: 42 credits

BACHELOR OF SCIENCE IN CRIMINAL JUSTICE - S0120

DEGREE REQUIREMENTS

Core Criminal Justice Concentration 42 credits		
CJE 3065	Police and Society	3
CCJ 3612	Criminal and Delinquent Behavior	3
CJL 3510	The American Court System	3
CJC 3011	Corrections and Penology	3
CJJ 3015	Juvenile Justice System	3
CCJ 4666	Victimology	3
CCJ 4054	Criminal Justice Ethics and Liability	3
CJL 3010	Legal Aspects of Policing	3
CJL 4415	Law and Social Control	3
CCJ 4450	Criminal Justice Administration and Management	3
CCJ 4651	Drugs and Crime	3
CCJ 4678	Race, Gender, Ethnicity and Crime	3
CCJ 3641	Organized Crime	3
CCJ 4700	Methods of Research in Criminal Justice	3
Technical Core Courses (may be taken within A.S. Degree) 18 credits:		
CCJ 2020	Introduction to Criminal Justice	3
CJL 2500	Introduction to the Courts	3
CJL 2100	Criminal Law	3
CJC 2000	Introduction to Corrections	3
CJL 2062	Constitutional Law	3
CCJ 1600	Deviant Behavior	3

Bachelor's Degree Programs in Digital Media

BACHELOR OF APPLIED SCIENCE DEGREE IN DIGITAL MEDIA

R0060 - 120 Credits

The Bachelor of Applied Science (B.A.S.) in Digital Media is designed to provide advanced skills in the theoretical and practical aspects critical to this industry: graphic design, visual communication, animation, gaming and modeling. The upper-level coursework will broaden students' knowledge in technical applications, art and design, interactive media, animation, management and entrepreneurial practices, scriptwriting, ethics, critical and creative thinking in media, and the interdisciplinary nature of art, technology, and science.

Requirements for graduation from the Bachelor of Science Degree in Digital Media are:

1. Students must successfully complete 120 credit hours of college-level courses in the degree program, including the lower-division Associate Degree, and 39 hours of specified Bachelor of Applied Science Degree in Digital Media coursework, including the capstone course.
2. Students must achieve a cumulative GPA of not less than a 2.0 on a 4.0 scale in all courses attempted (including transfer hours, but, excluding college preparatory courses) and in all courses attempted at Indian River State College.

Refer to General Education Requirements (p. 59) for additional requirements.

Transfer from Associate Degree (DMT or GDT): 45 credits

General Education Requirement: 36 credits

Major Concentration Courses: 39 credits

DEGREE REQUIREMENTS

GRAPHIC DESIGN AND VISUAL COMMUNICATION CONCENTRATION - R0040

39 Credits

DEGREE REQUIREMENTS

Core Courses (27 credits)		
ART 3252	3D Media Art and Illustration	3
CGS 4828	Advanced Web Design	3
GRA 3102	Visual Communication I	3
GRA 3154	Illustration Methods	3

GRA 3209	Advanced Typography	3
GRA 3512	Branding and Corporate Identity	3
GRA 3758	Scripting for Web Sites	3
GRA 4950	Digital Media Portfolio	3
GRA 4954	Digital Media Capstone Project	3

Concentration Electives (select 12 credits)

DIG 3253	Digital Audio Production	3
DIG 3823	Visual Communication 2	3
DIG 4394	Motion Graphics: Advanced Compositing	3
GRA 3735	Multimedia Video Production	3
GRA 4591	Art Direction and Creative Process	3
GRA 4930	Special Topics in Graphic Design	3
GRA 4941	Digital Media Internship/Practicum	3

Technical Core Courses (21 credits)

CGS 1821	Website Development	3
DIG 1000	Digital Media Principles	3
DIG 1115	Digital Imaging Fundamentals with Photoshop	3
DIG 2030	Digital Video Fundamentals	3
GRA 1129	Visualization Basics	3
GRA 1151	Illustrator Fundamentals	3
GRA 1206	Typography	3

Students who enter the program with an A.S. in Graphics Media Technology will have already satisfied the technical core courses. Students entering with an A.A. Degree or an A.S. Degree in another discipline must complete the above technical core courses.

ANIMATION, GAMING, AND MODELING CONCENTRATION - R0060

39 Credits

DEGREE REQUIREMENTS

Core Courses (30 credits)

ART 3252	3D Media Art and Illustration	3
CAP 3052	Game Design I	3
CAP 4056	Game Design II	3
DIG 4355	Artificial Effects and Environments	3
DIG 3362	3D Character Animation	3
DIG 3713	Gaming and Simulation Principles	3
DIG 4354	Character Modeling	3
DIG 4394	Motion Graphics: Advanced Compositing	3
DIG 4792	Textures and Lighting	3
GRA 4954	Digital Media Capstone Project	3

Concentration Electives (select 9 credits)

CAP 3054	Casual Game Development	3
CAP 4057	Game Networking	3
DIG 3253	Digital Audio Production	3
DIG 3375	Modeling Vehicles and Structures	3
DIG 4433	Advanced Animation Techniques	3
DIG 4780	Modeling for Real Time	3
DIG 4931	Special Topics in Digital Media	3
GRA 4941	Digital Media Internship/Practicum	3
GRA 4950	Digital Media Portfolio	3

Technical Core Courses (21 Credits)

COP 2000	Introduction to Computer Programming I	3
DIG 1000	Digital Media Principles	3
DIG 1115	Digital Imaging Fundamentals with Photoshop	3
DIG 2030	Digital Video Fundamentals	3
DIG 2302	3D Digital Animation I	3
DIG 2303	3D Digital Animation 2	3
GRA 1129	Visualization Basics	3

Students who enter the program with an A.S. in Digital Media Technology will have already satisfied the technical core courses. Students entering with an A.A. Degree or an A.S. Degree in another discipline must complete the above technical core courses.

Bachelor's Degree Programs in Education

BACHELOR OF SCIENCE DEGREE IN ELEMENTARY EDUCATION WITH READING AND ESOL ENDORSEMENTS - S0160

124 Credits

As an elementary teacher, you will help children gain the foundation necessary to be successful throughout their academic career. You will have the opportunity to shape lives and futures. This program will prepare you to teach various subject to elementary-aged children.

Requirements for graduation from the Bachelor of Science Degree in Elementary Education with Reading and ESOL Endorsements are:

1. Satisfactory completion of all three (3) parts of the Florida Teacher Certification Exam (FTCE).
2. Students must achieve a cumulative GPA of not less than a 2.5 on a 4.0 scale in all courses attempted (including transfer hours, but, excluding college preparatory courses) and in all courses attempted at Indian River State College.
3. Successful completion of Student Teaching (MAE 4945, EEX 4940, EDE 4940, or SCE 4941).
4. All Baccalaureate Education majors must achieve a grade of "C" or better in all content area courses within their declared Program of Study. Content area courses for Elementary Education with ESOL majors are: LAE 4416, EDF 4782, EDE 4223, EDE 4220, EDG 4377C and EDG 4376.

Refer to General Education Requirements (p. 59) for additional requirements.

Also required: Completion of all lower-division state-mandated common prerequisites including the Education prerequisites: EDF 2005 (p. 207), as well as EEX 2010 (p. 211).

Transfer from Associate Degree: 24 credits

General Education Requirement: 36 credits

Major Concentration Courses: 64 credits

DEGREE REQUIREMENTS

Major Concentration (64 credits)

EDF 3214	Human Development and Learning	3
EDF 4430	Measurement, Evaluation and Assessment	3
EME 3410	Integrating Technology in the Classroom	3
TSL 4081	Second Language Acquisition and Cross-Cultural Communication	3
TSL 4100	ESOL Methods, Curriculum and Assessment	3
EDG 4410	Classroom Management and Communication	3
RED 3009	Early and Emergent Literacy	3
RED 4348	Literacy Development K-12	3
RED 4519C	Diagnostic and Instructional Interventions in Reading	3
EEX 4601	Effective Behavioral Interventions and Practices in Exceptional Students	3
EDG 3620	Curriculum and Instruction	3
LAE 4416	Children's Literature in Elementary Education	3
EDF 4782	Ethics and Law	3
EDE 4223	Integrated Music, Art and Movement	3
EDE 4220	Integrated Health and Recreation	3
EDG 4377C	Integrating Mathematics and Science	3
EDG 4376	Integrating Language Arts and Social Science	3
EDE 4936	Seminar in Elementary Education	3
EDE 4940	Internship in Elementary Education	10

BACHELOR OF SCIENCE DEGREE IN EXCEPTIONAL STUDENT EDUCATION WITH READING AND ESOL ENDORSEMENTS - S0010

121 Credits

Helping children and young people overcome challenges to learning is extremely rewarding. As a specialist in Exceptional Student Education you will create opportunities that help every child succeed in the classroom. Through this IRSC program, you will gain a firm foundation in educational methods and classroom experience to help each child reach his or her full potential.

Requirements for graduation from the Bachelor of Science Degree in Exceptional Student Education with Reading and ESOL Endorsements are:

1. Satisfactory completion of all three (3) parts of the Florida Teacher Certification Exam (FTCE).
2. Students must achieve a cumulative GPA of not less than a 2.5 on a 4.0 scale in all courses attempted (including transfer hours, but, excluding college preparatory courses) and in all courses attempted at Indian River State College.
3. Successful completion of Student Teaching (MAE 4945, EEX 4940, EDE 4940, or SCE 4941).
4. All Baccalaureate Education majors must achieve a grade of "C" or better in all content area courses within their declared Program of Study. Content area courses for Exceptional Student Education with ESOL majors are exceptionalities courses. Thus, a grade of "C" or higher is required for EEX 3103, EEX 4221, EEX 4601, EEX 4264, EEX 4265.

Refer to General Education Requirements (p. 59) for additional requirements.

Also required: Completion of all lower-division state-mandated common prerequisites including the Education prerequisites: EDF 2005 (p. 207), as well as EEX 2010 (p. 211).

Transfer from Associate Degree : 24 credits

General Education Requirement: 36 credits

Major Concentration Courses: 61 credits

DEGREE REQUIREMENTS

Major Concentration (61 credits)

EDF 3214	Human Development and Learning	3
EEX 3103	Survey of Normal/Abnormal Language and Speech	1
RED 3009	Early and Emergent Literacy	3
TSL 4100	ESOL Methods, Curriculum and Assessment	3
TSL 4081	Second Language Acquisition and Cross-Cultural Communication	3
EDG 4376	Integrating Language Arts and Social Science	3
EDG 4410	Classroom Management and Communication	3
EME 3410	Integrating Technology in the	3

	Classroom	
EEX 4221	Educational Assessment of Exceptional Students	3
RED 4519C	Diagnostic and Instructional Interventions in Reading	3
EDF 4430	Measurement, Evaluation and Assessment	3
EEX 4601	Effective Behavioral Interventions and Practices in Exceptional Students	3
EEX 4264	Curriculum and Instruction for Students with Disabilities K-5	3
EEX 4265	Curriculum and Instruction for Students with Disabilities 6-12	3
EDG 4377C	Integrating Mathematics and Science	3
RED 4348	Literacy Development K-12	3
RED 4654	Differentiated Instruction Foundations and Applications	3
EEX 4940	Student Teaching/Exceptional Student Internship and Seminar	12

BACHELOR OF SCIENCE DEGREE IN MIDDLE GRADES MATHEMATICS - S0020

120 Credits

As a math teacher you will help children and young people build vitally important skills in mathematics – skills that will help them in all aspects of their lives. Mathematics is especially important as the foundation for a world-class education. Help students attain the competencies and knowledge they will need for success in the 21st century.

Requirements for graduation from the Bachelor of Science Degree in Middle Grades Mathematics are:

1. Satisfactory completion of all three (3) parts of the Florida Teacher Certification Exam (FTCE).
2. Students must achieve a cumulative GPA of not less than a 2.5 on a 4.0 scale in all courses attempted (including transfer hours, but, excluding college preparatory courses) and in all courses attempted at Indian River State College.
3. Successful completion of Student Teaching (MAE 4945, EEX 4940, EDE 4940, or SCE 4941).
4. All Baccalaureate Education majors must achieve a grade of "C" or better in all content area courses within their declared Program of Study. Content area courses are math courses for Middle Grades Mathematics majors. Thus, a grade of "C" or higher is required for MAE 4815, STA 2023, MAE 3816 and MHF 4404. See General Education Requirements for additional requirements.

Also required: Completion of all lower-division state-mandated common prerequisites including the Education prerequisite: EDF 2005.

Transfer from Associate Degree : 24 credits

General Education Requirement: 36 credits

Major Concentration Courses: 60 credits

DEGREE REQUIREMENTS

Major Concentration (60 credits)

EDF 3214	Human Development and Learning	3
EDF 4430	Measurement, Evaluation and Assessment	3
EDG 3343	Instructional Strategies	3
EDG 4410	Classroom Management and Communication	3
EDM 3001	Introduction to Middle School	3
EME 3410	Integrating Technology in the Classroom	3
MAE 3816	Elements of Geometry	3
MAE 3940	Teaching Middle School Mathematics Practicum	2
MAE 4363	Middle School/Secondary School Mathematics Methods	3
MAE 4815	Elements of Algebra	4
MAE 4941	Teaching Secondary Mathematics Practicum	2
MAE 4932	Seminar in Mathematics Education	3
MHF 4404	History of Mathematics	3
RED 3360	Teaching Reading in Middle/Secondary Schools	3
STA 2023	Elementary Statistics I	3
TSL 3080	ESOL Issues: Principles and Practices	3
MAE 4945	Student Teaching in Mathematics	10
	Math Elective	3

BACHELOR OF SCIENCE DEGREE IN SECONDARY MATHEMATICS EDUCATION - S0030

120 Credits

As a high school math teacher you will help young people build vitally important skills in mathematics – skills that will help them in all aspects of their lives. Mathematics is especially important as the foundation for a world-class education. Help students attain the competencies and knowledge they will need for success in the 21st century.

Requirements for graduation from the Bachelor of Science Degree in Secondary Mathematics Education are:

1. Satisfactory completion of all three (3) parts of the Florida Teacher Certification Exam (FTCE).
2. Students must achieve a cumulative GPA of not less than a 2.5 on a 4.0 scale in all courses attempted (including transfer hours, but, excluding college preparatory courses) and in all courses attempted at Indian River State College.
3. Successful completion of Student Teaching (MAE 4945, EEX 4940, EDE 4940, or SCE 4941).
4. All Baccalaureate Education majors must achieve a grade of "C" or better in all content area courses within their declared Program of Study. Content area courses are math courses for Secondary Mathematics majors. Thus, a grade of "C" or higher is required for MAS 3105, MHF 3202, STA 2023, MTG 3212, MHF 4404 and MAS 4203.General Education Requirements for additional requirements.

Also required: Completion of all lower-division state-mandated common prerequisites including the Education prerequisite: EDF 2005 (p. 207).

Transfer from Associate Degree: 24 credits

General Education Requirement: 36 credits

Major Concentration Courses: 60 credits

DEGREE REQUIREMENTS

Major Concentration (60 credits)		
EDF 3214	Human Development and Learning	3
EDF 4430	Measurement, Evaluation and Assessment	3
EDG 3343	Instructional Strategies	3
EDG 4410	Classroom Management and Communication	3
EME 3410	Integrating Technology in the Classroom	3
RED 3360	Teaching Reading in Middle/Secondary Schools	3
MAE 3940	Teaching Middle School Mathematics Practicum	2
MAE 4363	Middle School/Secondary School Mathematics Methods	3
MAE 4932	Seminar in Mathematics Education	3
MAE 4941	Teaching Secondary Mathematics Practicum	2
MAS 3105	Applied Linear Algebra	4
MAS 4203	Number Theory	3
MHF 3202	Sets & Logic	3
MHF 4404	History of Mathematics	3
MTG 3212	Modern Geometries	3
STA 2023	Elementary Statistics I	3
TSL 3080	ESOL Issues: Principles and Practices	3
MAE 4945	Student Teaching in Mathematics	10

BACHELOR OF SCIENCE DEGREE IN MIDDLE GRADES SCIENCE EDUCATION - S0040

120 Credits

As a science teacher you will help children and young people explore the fascinating world of science, inspiring interest in a field that will dramatically affect our lives in the 21st century. Watch your students' faces light up as they understand a new concept or become engaged in an experiment. Teaching is truly a meaningful career, and science teaching is especially important as the foundation for a world-class education.

Requirements for graduation from the Bachelor of Science Degree in Middle Grades Science Education are:

1. Satisfactory completion of all three (3) parts of the Florida Teacher Certification Exam (FTCE).
2. Students must achieve a cumulative GPA of not less than a 2.5 on a 4.0 scale in all courses attempted (including transfer hours, but, excluding college preparatory courses) and in all courses attempted at Indian River State College.
3. Successful completion of Student Teaching (MAE 4945, EEX 4940, EDE 4940, or SCE 4941).
4. All Baccalaureate Education majors must achieve a grade of "C" or better in all content area courses within their declared Program of Study. Content area courses are science courses for Middle Grades Science Education majors. Thus, a grade of "C" or higher is required for BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, CHM 1020, CHM 1045, CHM 1045L, CHM 1046, CHM 1046L, PHY 1020, PHY 2053, PHY 2053L, PHY 2054, PHY 2054L, PCB 4043 and PCB 4043L.

Refer to General Education Requirements (p. 59) for additional requirements.

Also required: Completion of all lower-division state-mandated common prerequisites including the Education prerequisite: EDF 2005. (p. 207)

Transfer from Associate Degree: 24 credits

General Education Requirement: 36 credits

Major Concentration Courses: 60 credits

DEGREE REQUIREMENTS

Major Concentration (60 credits)		
EDF 3214	Human Development and Learning	3
EDF 4430	Measurement, Evaluation and Assessment	3
EDG 3343	Instructional Strategies	3

EDG 4410	Classroom Management and Communication	3
EDM 3001	Introduction to Middle School	3
EME 3410	Integrating Technology in the Classroom	3
CHM 1020	Introduction to Chemistry	3
PHY 1020	Principles of Physics	3
PCB 4043	General Ecology	3
PCB 4043L	General Ecology Laboratory	1
RED 3360	Teaching Reading in Middle/Secondary Schools	3
SCE 3360	Middle School/Secondary Science Methods	3
SCE 3940	Teaching Middle School Science Practicum	1
SCE 4942	Teaching Secondary Science Practicum	1
SCE 4943	Seminar in Science Teaching	3
TSL 3080	ESOL Issues: Principles and Practices	3
SCE 4941	Student Teaching in Science	10
BSC 2010	General Biology I	3
	with	
BSC 2010L	General Biology I Lab	1
	Or	
CHM 1045	General Chemistry I	3
CHM 1045L	General Chemistry I Lab	1
	Or	
PHY 2053	College Physics I	3
PHY 2053L	College Physics I Lab	1
	Also choose:	
BSC 2011	General Biology II	3
BSC 2011L	General Biology II Lab	1
	Or	
CHM 1046	General Chemistry II	3
CHM 1046L	General Chemistry II Lab	1
	Or	
PHY 2054	College Physics II	3
PHY 2054L	College Physics II Lab	1

BACHELOR OF SCIENCE DEGREE IN SECONDARY BIOLOGY EDUCATION - S0050

120 Credits

As a high school biology teacher you will help young people learn about the fascinating world of biology, inspiring interest in a field that will dramatically affect our lives in the 21st century. Engage your students as they become immersed in an experiment or amazed at a new concept. Teaching is truly a meaningful career, and science teaching is especially important as the foundation of a world-class education.

Requirements for graduation from the Bachelor of Science Degree in Secondary Biology Education are:

1. Satisfactory completion of all three (3) parts of the Florida Teacher Certification Exam (FTCE).
2. Students must achieve a cumulative GPA of not less than a 2.5 on a 4.0 scale in all courses attempted (including transfer hours, but, excluding college preparatory courses) and in all courses attempted at Indian River State College.
3. Successful completion of Student Teaching (MAE 4945, EEX 4940, EDE 4940, or SCE 4941).
4. All Baccalaureate Education majors must achieve a grade of "C" or better in all content area courses within their declared Program of Study. Content area courses are science courses for Secondary Biology Education majors. Thus, a grade of "C" or higher is required for MCB 2010, MCB 2010L, BOT 3015, PCB 3063, PCB 3063L, PCB 3674, PCB 4043 and PCB 4043L.General Education Requirements for additional requirements.

Also required: Completion of all lower-division state-mandated common prerequisites including the Education prerequisite: EDF 2005. (p. 207)

Transfer from Associate Degree: 24 credits

General Education Requirement: 36 credits

Major Concentration Courses: 60 credits

DEGREE REQUIREMENTS

Major Concentration (60 credits)

BOT 3015	Plant Biology	3
EDF 3214	Human Development and Learning	3
EDF 4430	Measurement, Evaluation and Assessment	3
EDG 3343	Instructional Strategies	3
EDG 4410	Classroom Management and Communication	3
EME 3410	Integrating Technology in the Classroom	3
MCB 2010	Microbiology for Health Sciences	3
MCB 2010L	Microbiology Lab for Health Sciences	1
PCB 3063	Introduction to Genetics	3
PCB 3063L	Introduction to Genetics Laboratory	1
PCB 3674	Evolutionary Biology	3
PCB 4043	General Ecology	3
PCB 4043L	General Ecology Laboratory	1
RED 3360	Teaching Reading in Middle/Secondary Schools	3
SCE 3360	Middle School/Secondary Science Methods	3
SCE 3905	Science through Tutoring	3
SCE 3940	Teaching Middle School Science Practicum	1
SCE 4942	Teaching Secondary Science Practicum	1

SCE 4943	Seminar in Science Teaching	3
TSL 3080	ESOL Issues: Principles and Practices	3
SCE 4941	Student Teaching in Science	10

Bachelor's Degree Program in Healthcare Management

S0180 - 120 Credits

(Selective Admissions)

The Bachelor of Science Degree in Healthcare Management prepares students for entry-level management and administrative roles in a wide variety of health care settings including hospitals, public health departments, community health agencies, private clinical practices, for-profit industries/businesses, and supporting organizations. Students will participate in service learning and practicum experiences to build knowledge, skills and familiarity with multiple health care environments.

Requirements for graduation from the Bachelor of Science Degree in Healthcare Management are:

1. Students must successfully complete 120 credit hours of college-level courses in the degree program, including the lower-division Associate Degree and 42 hours of specified Bachelor of Science Degree in Healthcare Management coursework, including the capstone course.
2. Students must achieve a cumulative GPA of not less than 2.5 on a 4.0 scale in all courses attempted (including transfer hours, but excluding college preparatory courses) and in all courses attempted at Indian River State College.

Refer to General Education Requirements (p. 59) for additional requirements.

Transfer from Associate Degree: 24 credits

General Education Requirement: 36 credits

Major Concentration Courses: 60 credits

BACHELOR OF SCIENCE IN HEALTHCARE MANAGEMENT - S0180

DEGREE REQUIREMENTS

Common Prerequisite Required Courses (may be taken with A.A. or A.S. Degree)

ACG 2001	Financial Accounting I	3
ACG 2011	Financial Accounting II	3
ACG 2071	Managerial Accounting	3
ECO 2023	Principles of Economics Micro	3
STA 2023	Elementary Statistics I	3
CGS 1100	Introduction to Computer Applications for Business Or	3
CGS 1060	College Computing	3

All required common prerequisite courses require a grade of "C" or higher.

Technical Core Courses (required)

HSC 1001C	Introduction to Healthcare Management	4
HSA 2182C	Health Services Management Concepts	3
HSC 2802C	Health Science Seminar	4
HSC 1632C	Overview of Healthcare Delivery	3
HSC 2531	Medical Terminology I	3

Note: Alternative Technical Core courses from the following Health Science A.S. Degree programs will be considered: Dental Assisting Technology and Management, Dental Hygiene, Emergency Medical Services, Health Information Technology, Medical Laboratory Technology, Physical Therapist Assistant, Radiography, and Respiratory Care. Contact an IRSC academic advisor or counselor for details.

Core Healthcare Management Concentration (60 credits)

HSC 3661	Healthcare Communications	3
HSA 3113	Healthcare Trends and Issues	3
HSA 3184	Leadership and Management in Healthcare Organizations	3
HSA 4170	Healthcare Financial Management	3
HSC 4730	Foundations of Health Science Research	3
HSA 4340	Human Resources Management in Healthcare Organizations	3
HSA 4423	Healthcare Law	3
HSA 4110	Healthcare Management Competencies	3
HSA 4383	Quality Improvement in Healthcare	3
HSA 4160	Healthcare Marketing	3
HSA 4421	Policy and Governmental Regulations in Healthcare	3
HSA 4817	Practicum in Healthcare Management	3
HSA 4922	Capstone Project in Healthcare Management	6

Bachelor's Degree Programs in Human Services

BACHELOR OF SCIENCE DEGREE IN HUMAN SERVICES

120 Credits

The Bachelor of Science Degree in Human Services prepares students to work with individuals, families, dyads, and groups in a wide array of human and social services settings. The curriculum provides theoretical as well as applied training in domestic abuse, child abuse, addictions, crisis intervention, family services, high risk youth, outreach, advocacy, and human services administration.

Learning is enhanced in the state-of-the-art Human Services Suite designed to complement and facilitate practical application of skills. The Suite include a variety of individual and group therapy rooms as well as a child play therapy room and observation windows for critiquing. An Advanced Human Services Internship provides actual on-the-job work experience, further preparing students for the work place.

Requirements for graduation from the Bachelor of Science Degree in Human Services are:

1. Students must successfully complete 120 credit hours of college-level courses in the degree program, including the lower-division Associate Degree, and 45 hours of specified Bachelor of Science Degree in Human Services coursework.
2. Students must achieve a cumulative GPA of not less than a 2.0 on a 4.0 scale in all courses attempted (including transfer hours, but, excluding college preparatory courses) and in all courses attempted at Indian River State College.

Refer to General Education Requirements (p. 59) for additional requirements.

Transfer from Associate Degree: 39 credits

General Education Requirement: 36 credits

Human Services Core Courses: 24 credits

Major Concentration Courses: 21 credits

DEGREE REQUIREMENTS

Core Courses (24 Credits)

HUS 3300	Humanistic and Existential Counseling Theory	3
HUS 3314	Cognitive and Behavioral Theory	3
HUS 3340	Trauma and Post-Traumatic Stress Disorder	3
HUS 3360	Sexual Abuse of Children and Adolescents	3
HUS 3650	Administration in Human Services	3
MHS 3460	Crisis Intervention	3
HUS 4945	Capstone - Advanced Internship in Human Services	6

Technical Core Courses (may be taken within A.S. Degree) (18 credits)

CLP 2140	Abnormal Psychology	3
HUS 1001	Introduction to Human Services	3
HUS 1200	Group Dynamics	3
HUS 2302	Techniques of Interviewing and Intervention	3
HUS 2301	Counseling Techniques	3
HUS 2500	Introduction to Ethics in Human Services	3

Students who enter the program with an A.S. in Human Services will have already satisfied the technical core courses. Students entering with an A.A. Degree or an A.S. Degree in another discipline must complete the above technical courses.

HUMAN SERVICES GENERALIST CONCENTRATION - S0080

DEGREE REQUIREMENTS (21 CREDITS)

Course Selection

HUS 3350	Issues in Domestic Abuse and Family Violence	3
HUS 3351	Family Systems and Dynamics	3
HUS 3409	Addictive Experiences	3
HUS 3575	Human Services for Special Needs Families	3
HUS 4319	Introduction to Play Therapy	3
HUS 4352	Family Diversity in Human Services	3
HUS 4361	High Risk and Offender Youth	3
HUS 4364	Youth, Drugs, and Gangs	3
HUS 4407	Substance Abuse and Aging	3
HUS 4410	Internet Addictions	3
HUS 4416	Issues in Impulse Control	3
HUS 4442	Addictions Family Counseling	3
HUS 4462	Gender Issues in Treatment and Recovery	3
HUS 4574	Issues of Aging and Family Dynamics	3

Select 21 credits from above courses.

YOUTH AND FAMILY STUDIES CONCENTRATION - S0090

DEGREE REQUIREMENTS (21 CREDITS)

Course Selection

HUS 3350	Issues in Domestic Abuse and Family Violence	3
HUS 3351	Family Systems and Dynamics	3
HUS 3575	Human Services for Special Needs Families	3
HUS 4319	Introduction to Play Therapy	3
HUS 4352	Family Diversity in Human Services	3
HUS 4361	High Risk and Offender Youth	3
HUS 4364	Youth, Drugs, and Gangs	3
HUS 4442	Addictions Family Counseling	3
HUS 4574	Issues of Aging and Family	3

	Dynamics	

Select 21 credits from above courses.

ADDICTIONS STUDIES CONCENTRATION - S0100

DEGREE REQUIREMENTS (21 CREDITS)

Required Courses

HUS 3409	Addictive Experiences	3
HUS 4361	High Risk and Offender Youth	3
HUS 4364	Youth, Drugs, and Gangs	3
HUS 4407	Substance Abuse and Aging	3
HUS 4410	Internet Addictions	3
HUS 4416	Issues in Impulse Control	3
HUS 4442	Addictions Family Counseling	3
HUS 4462	Gender Issues in Treatment and Recovery	3

Select 21 credits from above courses.

Bachelor's Degree Program in Information Technology Management and Cyber Security

S0130 - 120 Credits

The Bachelor of Science degree in Information Technology Management and Cyber Security prepares students for high-demand careers in business, government, and nonprofit organizations. You will gain advanced skills in building, operating, and maintaining computer networks and ensuring the safety and security of the data moving through these networks. You will be prepared to troubleshoot problems and manage the technology, data, and people associated with large and small IT operations and departments.

Requirements for graduation from the Bachelor of Science Degree in Information Technology Management and Cyber Security are:

1.
Students must successfully complete 120 credit hours of college-level courses in the degree program, including the lower-division Associate Degree and 39 hours of specified Bachelor of Science Degree in Information Technology Management and Cyber Security coursework.

2.
Students must achieve a cumulative GPA of not less than 2.0 on a 4.0 scale in all courses attempted (including transfer hours, but excluding college preparatory courses) and in all courses attempted at Indian River State College.

Refer to General Education Requirements (p. 59) for additional requirements.

Transfer from Associate Degree: 45 credits

General Education Requirement: 36 credits

Major Concentration Courses: 39 credits

BACHELOR OF SCIENCE DEGREE IN INFORMATION TECHNOLOGY MANAGEMENT AND CYBER SECURITY - S0130

DEGREE REQUIREMENTS

Common Prerequisite Required Courses may be taken with A.S.Degree

SPC 1608	Public Speaking	3
MAC 1105	College Algebra	3
COP 2000	Introduction to Computer Programming I	3
CGS 1540	Database Fundamentals	3
CTS 1650	CCNA1: Introduction to Networks	3
STA 2023	Elementary Statistics I	3
ECO 2013	Principles of Economics Macro	3
	Or	
ECO 2023	Principles of Economics Micro	3

Technical Core Courses (may be taken within A.S. Degree) 21 credits:

CET 1178	A+ Certification Hardware	3
CTS 1334	Windows Server	3
CGS 1540	Database Fundamentals	3
CTS 1104	Windows OS Fundamentals	3
CTS 1650	CCNA1: Introduction to Networks	3
COP 2000	Introduction to Computer Programming I	3
CTS 2106	Linux Fundamentals	3

Major Concentration 33 credits

CIS 4200	Security Penetration Testing	3
CNT 4406	Network Security and Cryptography	3
ISM 3133	Systems Analysis and Design	3
ISM 3212	Database Design and Administration	3
ISM 3321	Cyber Security Essentials	3
ISM 4117	Data Mining and Data Warehousing	3
ISM 4220	Network Technologies for Information Professionals	3
ISM 4320	Applications in Information Security	3
ISM 4323	Information Security Policy Administration	3
ISM 4324	Computer Forensics	3
ISM 4881	Capstone in Information Technology Management	3

Course Selection 6 credits

CAP 4304	Text Mining	3
CAP 4744	Data Visualization and Reporting	3
CAP 4784	Big Data	3
CAP 4793	Advanced Data Analytics	3

CTS 3470	Foundations in Data Analytics	3
CTS 4425	Web Application Development	3
ISM 3011	Introduction to Management Information Systems	3

Select 6 credits

Bachelor's Degree Program in Nursing

S0060 - 121 Credits

Today's challenging and demanding health care environment requires highly adaptable employees with a broad base of knowledge and leadership skills. Professional nurses must be effective in leading an increasingly diverse group of employees and managing complex resources within the health care industry.

The Bachelor of Science in Nursing Degree will provide access to upper-level courses to residents of the Treasure Coast who already have an Associate in Science Degree in Nursing. These Baccalaureate courses will allow nurses to further their career by providing them with an educational background and practical experience to become qualified nurse leaders.

Requirements for graduation from the Bachelor of Science Degree in Nursing are:

1. Students must successfully complete 121 hours of specified college-level credit courses in the degree program, including the 72 credits in the lower division Associate in Science Degree in Nursing and the additional 49 credit hours of Bachelor of Science in Nursing courses.
2. Students must achieve a cumulative GPA of not less than a 2.0 on a 4.0 scale in all courses attempted (including transfer hours, but, excluding college preparatory courses) and in all courses attempted at Indian River State College.

Refer to General Education Requirements (p. 59) for additional requirements.

All core curriculum (NUR prefix), English, Mathematics, Humanities and Natural Science courses require a grade of "C" or higher.

Transfer from Associate Degree: 54 credits

General Education Requirements: 36 credits

Major Concentration Courses: 31 credits

BACHELOR OF SCIENCE IN NURSING - S0060

DEGREE REQUIREMENTS

Major Concentration (31 credits)

NUR 3065C	Nursing Assessment	3
NUR 3125	Pathophysiology	3
NUR 3145	Pharmacology	3
NUR 3164	Nursing Research and Informatics	3
NUR 3826	Ethical and Legal Issues in Health Care	3
NUR 3846	Nursing Theory	3
NUR 4636C	Community Health Nursing	4
NUR 4655	Nursing in a Diverse Culture	3
NUR 4827	Leadership and Management in Professional Nursing	3
NUR 4837	Health Care Policy and Economics	3

Bachelor's Degree Program in Organizational Management

R0010 - 120 Credits

The Bachelor of Applied Science Degree in Organizational Management provides access to students who already have skills in a technical area and wish to advance to higher level supervisory and management positions within business, industry, and governmental organizations. This upper-level coursework will broaden students' knowledge in applied management practices and will prepare them for supervisory and management opportunities within their chosen field.

Requirements for graduation from the Bachelor of Science Degree in Organizational Management are:

1. Students must successfully complete 120 credit hours of college-level courses in the degree program, including the lower-division Associate Degree, and the 42 hours of Bachelor of Applied Science Degree in Organizational Management coursework, including the capstone course.
2. Students must achieve a cumulative GPA of not less than a 2.0 on a 4.0 scale in all courses attempted (including transfer hours, but, excluding college preparatory courses) and in all courses attempted at Indian River State College.

Refer to General Education Requirements (p. 59) for additional requirements.

Transfer from Associate Degree: 42 credits

General Education Requirement: 36 credits

Major Concentration Courses: 42 credits

BACHELOR OF APPLIED SCIENCE DEGREE IN ORGANIZATIONAL MANAGEMENT - R0010

DEGREE REQUIREMENTS

Major Concentration Courses 42 credits

BUL 3130	Legal and Social Aspects of Business	3
GEB 3035	Effective Career Management	3
GEB 3213	Business Writing	3
GEB 4891	Strategic Planning	3
MAN 3240	Organizational Behavior	3
MAN 3303	Management Concepts	3
MAN 4301	Human Resource Management	3
MAN 4162	Customer Relations for Managers	3
MAN 4504	Operations Management	3
MAR 3023	Marketing Management	3
ACG 3024	Accounting for Non-Financial Majors	3
	Or	
FIN 3400	Financial Management	3
GEB 4970	Senior Management Project	3
	Or	
MAN 4900	Capstone Project in Organizational Management	6

If GEB 4970 is selected student must take six (6) credits in electives.

Electives – Select 3 - 6 credits:

GEB 4930	Selected Topics in Management	3
MAN 4442	International Business	3
MAR 4613	Marketing Research	3

Bachelor's Degree Programs in Public Administration

BACHELOR OF SCIENCE DEGREE IN PUBLIC ADMINISTRATION

120 credits

Requirements for graduation from the Bachelor of Science Degree in Public Administration are:

1.
Students must successfully complete 120 credit hours of college-level courses in the degree program, including the lower-division Associate Degree and 42 hours of specified Bachelor of Science Degree in Public Administration coursework.

2.
Students must achieve a cumulative GPA of not less than 2.0 on a 4.0 scale in all courses attempted (including transfer hours, but excluding college preparatory courses) and in all courses attempted at Indian River State College.

Refer to General Education Requirements (p. 59) for additional requirements.

Transfer from Associate Degree: 42 credits

General Education Requirement: 36 credits

Major Concentration Courses: 42 credits

DEGREE REQUIREMENTS

Common Prerequisite Courses required - 9 credits

CGS 1060	College Computing	3
	Or	
CGS 1100	Introduction to Computer Applications for Business	3
ECO 2013	Principles of Economics Macro	3
	Or	
ECO 2023	Principles of Economics Micro	3
POS 1041	American Government	3

Required Common Prerequisite Courses may be taken as part of the A.A. or A.S. Degree.

Technical Core - 18 credits

Required Technical Core courses may be drawn from Criminal Justice, Paralegal Studies, Fire Science, Public Administration, Emergency Administration and Management, or Emergency Medical Services disciplines (all 18 credits must be within one discipline). Contact an academic advisor for more details.

EMERGENCY PLANNING AND MANAGEMENT CONCENTRATION - S0140

42 Credits

The Public Administration concentration in Emergency Planning and Management prepares students to play a key role in community, state, and federal planning and response to natural disasters and manmade emergencies. Students gain a solid background in multi-agency incident command, emergency services public policy, emergency planning, administrative law, and public finance. This program prepares students to work with local fire departments, county and state emergency response teams, and federal homeland security initiatives.

Refer to General Education Requirements (p. 59) for additional requirements.

DEGREE REQUIREMENTS

Core Courses - 42 credits

PAD 3003	Intro to Public Administration	3
PAD 3104	Organizational Behavior and Administration	3
FES 3803	Multi-Agency Incident Command	3
DSC 3079	Foundations of Public Safety	3
DSC 3215	Emergency Planning	3
DSC 4931	Contemporary Issues in Public	3

	Safety	
PAD 3223	Public Budgeting and Finance	3
PAD 3034	Policy Development and Implementation	3
PAD 4046	Values, Ethics, and Conflict Resolution	3
DSC 4218	Emergency Planning II	3
PAD 4603	Administrative Law for Public Administrators	3
FES 3003	Emergency Services Public Policy	3
PAD 4879	Capstone in Public Administration	3
PAD 4414	Public Personnel Management	3

PUBLIC POLICY AND LEADERSHIP CONCENTRATION - S0150

42 Credits

The Public Administration concentration in Public Policy and Leadership prepares students to effectively manage people and projects, provide top-quality service, and ensure the efficient and effective use of resources as a professional in a local, county, state, or federal position. Students are prepared to lead the implementation of public service programs, analyze emerging public policy proposals, or continue their studies in graduate school or law school.

Refer to General Education Requirements (p. 59) for additional requirements.

DEGREE REQUIREMENTS

Core Courses - 42 credits

PAD 3003	Intro to Public Administration	3
PAD 3104	Organizational Behavior and Administration	3
PAD 4806	State and Local Government Administration	3
PAD 3330	Urban and Regional Planning	3
PAD 3431	Leadership	3
PAD 4442	Public Relations for Public Managers	3
PAD 4332	Strategic Planning	3
PAD 3223	Public Budgeting and Finance	3
PAD 3034	Policy Development and Implementation	3
PAD 4046	Values, Ethics, and Conflict Resolution	3
PAD 4603	Administrative Law for Public Administrators	3
PAD 4320	Program Evaluation in Public Management	3
PAD 4879	Capstone in Public Administration	3
PAD 4414	Public Personnel Management	3

ASSOCIATE IN ARTS DEGREE

A.A. DEGREE GENERAL EDUCATION (p. 78)

ACCOUNTING (p. 81)

AGRICULTURAL (FOOD & RESOURCE) ECONOMICS (p. 82)

AGRICULTURE (GENERAL) (p. 82)

ANTHROPOLOGY (p. 82)

ART (GENERAL) (p. 82)

BIOLOGY (GENERAL) (p. 83)

BIOLOGY (PREPROFESSIONAL) (p. 83)

BIOTECHNOLOGY (p. 83)

BUSINESS ADMINISTRATION (p. 84)

CHEMISTRY (p. 84)

COMPUTER AND INFORMATION SCIENCES (p. 84)

COMPUTER ENGINEERING (p. 85)

CRIMINAL JUSTICE (p. 85)

DANCE (p. 85)

DRAMATIC ARTS/THEATRE (p. 85)

ECONOMICS (BUSINESS) (p. 86)

ECONOMICS (SOCIAL SCIENCES) (p. 86)

EDUCATION (ELEMENTARY/SPECIAL) (p. 86)

EDUCATION (SECONDARY) (p. 86)

EDUCATOR PREPARATION INSTITUTE (p. 87)

ENGINEERING (p. 87)

ENGLISH (p. 87)

ENVIRONMENTAL SCIENCE (p. 88)

FINANCE/MARKETING (p. 88)

FOREIGN LANGUAGE (p. 88)

FORESTRY/WILDLIFE ECOLOGY & CONSERVATION (p. 89)

HEALTH SCIENCE (p. 89)

HISTORY (p. 89)

HUMANITIES (p. 89)

JOURNALISM (p. 90)

MARINE/AQUATIC BIOLOGY (p. 90)

MATHEMATICS (p. 90)

MULTIMEDIA STUDIES (p. 91)

MUSIC (p. 91)

PARKS & RECREATION MANAGEMENT (p. 91)

PHILOSOPHY (p. 92)

PHYSICAL EDUCATION (p. 92)

PHYSICS (p. 92)

POLITICAL SCIENCE (p. 92)

PSYCHOLOGY (p. 93)

PUBLIC ADMINISTRATION (p. 93)

SOCIAL WORK (p. 93)

SOCIOLOGY (p. 94)

The programs listed above are a representative sample of the many A.A. tracks available. If you wish to pursue a transfer major not listed, please consult with an IRSC Advisor at any campus to plan an appropriate program of study.

College Transfer Program

The Associate in Arts Degree program is designed for students who intend to continue their education through enrollment in a Baccalaureate Degree program. The A.A. Degree program certifies that the student has completed the first half (freshman and sophomore years) of a four-year college program.

Length of programs may vary depending on the major area of study and the college or university the student plans to attend. With the A.A. Degree, the student is classified as a junior and may then enroll in programs leading to a Baccalaureate Degree.

Associate in Arts Degree Requirements

As its primary function, the Associate in Arts Degree program gives the student an academic experience in preparation for continued success in his or her college career. A major component of the A.A. Degree program is the General Education Requirement.

To meet the requirements for the Associate in Arts Degree, the student must complete 36 semester hours of General Education, plus 24 semester hours of elective prerequisite courses designed for the Associate in Arts Degree major (excluding occupational courses). Effective with the Spring 2016 term, new Associate in Arts degree seeking students are required to complete SLS 1101 (p. 286) Student Success during their first semester of attendance. Please see your advisor for details. Sixty (60) semester hours must

be earned for the A.A. Degree. In addition to the above requirements, students must:

1. Complete at least 25% of the coursework required for their program at Indian River State College.
2. Submit the required placement scores (ACT, SAT, P.E.R.T.) to IRSC. Students who present ACT scores of Reading 19, English 17, Math 19 or SAT scores taken before March 1, 2016, of Verbal 440, Mathematics 440, or higher, or SAT scores taken after March 1, 2016, of Critical Reading 24 or higher, Math 24 or higher, may be exempt from taking the P.E.R.T.

   Students who graduated from a Florida public high school since 2007 and students who are serving as an active duty member of any branch of the United States armed services are exempt from mandatory placement testing. Non-exempt students who test into developmental courses must successfully complete the required courses in English, math, and reading.
3. Achieve a grade point average of not less than 2.0 in all courses taken at IRSC (excluding occupational courses), and all courses attempted (including transfer hours), and complete the requirements of the Communications and Computation Rule (Gordon Rule).
4. Prior to completion of an Associate in Arts Degree at IRSC, students must demonstrate foreign language competence by providing evidence that documents the successful completion of two (2) credits of sequential high school foreign language instruction, or by passing the second level of foreign language at the college level. Students may demonstrate equivalent foreign language competence via the alternative methods specified by the Florida Department of Education including established minimum College Level Examination Program (CLEP) scores, minimum College Board MAPS Latin examination scores, or other methods as determined by IRSC. Indian River State College reserves the right to validate the foreign language competence of any student prior to awarding the Associate in Arts Degree through methods including, but not limited to, review of official transcripts, portfolio and performance reviews, competency testing, standardized testing, or other methods determined by IRSC that are designed to assess the foreign language competencies outlined in Rule 6A-10.02412 of the Florida Administrative Code. Some majors and universities require additional foreign language competencies. Please consult an advisor regarding your foreign language transfer requirements.
5. Be recommended by the faculty to the President of the College for the confirmation of the degree.

It is the responsibility of the student to check his or her records to ensure that all of the above graduation requirements are met. An advisor will assist with course selections and in determining status toward meeting the graduation requirements.

A.A. DEGREE GENERAL EDUCATION

In compliance with Rule 6A-14.0303, General Education Core Course Options, prior to the award of an Associate in Arts degree, students must complete at least one course from each of the General Education subject areas listed in this section.
www.fldoe.org/core/fileparse.php/5444.urlt/0074884-140303.pdf

- Communication:
  - ENC X101 English Composition 1; or
  - Any student who successfully completes a course with and ENC prefix for which ENC X101 is an immediate prerequisite shall be considered to have completed the communication core.
- Humanities:
  - ARH X000 Art Appreciation;
  - HUM X020 Introduction to Humanities;
  - LIT X000 Introduction to Literature;
  - MUL X010 Music Literature/Music Appreciation;
  - PHI X010 Introduction to Philosophy; or
  - THE X000 Theatre Appreciation
- Mathematics:
  - MAC X105 College Algebra;
  - MAC X311 Calculus I;
  - MGF X106 Liberal Arts Mathematics I
  - MGF X107 Liberal Arts Mathematics II
  - STA X023 Statistical Methods; or
  - Any student who successfully completes a mathematics course for which one of the general education core courses options in mathematics is an immediate prerequisite shall be considered to have completed the mathematics core.
- Natural Science:
  - AST X002 Descriptive Astronomy;
  - BSC X005 General Biology
  - BSC X010 General Biology I;
  - BSC X085 Anatomy and Physiology I;

- CHM X020 Chemistry for Liberal Studies;
- CHM X045 General Chemistry I;
- ESC X000 Introduction to Earth Science;
- EVR X001 Introduction to Environmental Science;
- PHY X020 Fundamentals of Physics;
- PHY X048 General Physics with Calculus;
- PHY X053 General Physics I; or
- Any student who successfully completes a natural science course for which one of the general education core course options in natural science is an immediate prerequisite shall be considered to have completed the natural science core.

- Social Sciences:
  - AMH X020 Introduction to Survey Since 1877 (also meets Civic Literacy Competency);
  - ANT X000 Introduction to Anthropology;
  - ECO X013 Principles of Macroeconomics;
  - POS X041 American Government (also meets Civic Literacy Competency);
  - PSY X012 Introduction to Psychology; or
  - SYG X000 Principles of Sociology.In compliance Rule 6A-10.02413, Civic Literacy Competency, effective June 19, 2018, prior to the award of an Associate in Arts degree, students must demonstrate civic literacy competency prior to graduation either through successful completion of a course or by achieving a passing score on as assessment. https://www.flrules.org/default.asp

Required Courses for Graduation - (A.A. Degree) – 36 Semester Hours

General Education teaches students a broad base of knowledge and develops higher order thinking skills. Through the General Education requirements within the Associate in Arts degree, the student will:

- demonstrate essential skills in verbal, performative, and written communication, to include the articulation of content clearly and precisely
- demonstrate critical thinking skills in the analysis of key values and ideas presented in areas such as philosophy, history, information literacy, literature, music, theatre, visual arts, and religious studies
- demonstrate scientific reasoning in the analysis of various human phenomena such as human nature, human behavior, human diversity, and human social systems
- demonstrate scientific or mathematical reasoning in problem solving

DEGREE REQUIREMENTS

English - 6 credits

Students must complete ENC 1101 to comply with General Education Core Course Options.

ENC 1101	English Composition I	3
	And	
ENC 1102	English Composition II	3
ENC 1107	Advanced College Writing	3
ENC 2210	Technical Writing	3
AML 2010	American Literature to 1865	3
AML 2020	American Literature after 1865	3
ENL 2012	English Literature to 1798	3
ENL 2022	English Literature after 1798	3
LIT 2110	World Literature: Homer to the Renaissance	3
LIT 2120	World Literature: Enlightenment to the Present	3
MMC 2100	Writing for Mass Communications I	3

In each of the above courses, students will demonstrate college-level writing skills through multiple assignments and complete each course with a grade of "C" or higher.

Humanities - 6 credits

Students must complete at least one course from ARH 1000, HUM 1020, LIT 1000, MUL 2010, PHI 1010, THE 1000 to comply with General Education Core Course Options.

AML 2010	American Literature to 1865	3
AML 2020	American Literature after 1865	3
ARC 1701	Architectural History I	3
ARH 1000	Art Appreciation	3
ARH 2050	History of Art (Prehistoric - Gothic)	3
ARH 2051	History of Art (Renaissance through Modern)	3
DAN 2100	Dance Appreciation	3
ENC 1102	English Composition II	3
ENL 2012	English Literature to 1798	3
ENL 2022	English Literature after 1798	3
ENL 2330	Introduction to Shakespeare	3
HUM 1020	Introduction to Humanities	3
HUM 1233	Humanities Literature: Baroque to Present	3
IDS 1110	The Pursuit of Knowledge	3
IDS 1955	Interdisciplinary Study Abroad	3
LIT 1000	Introduction to Literature	3
LIT 2110	World Literature: Homer to the Renaissance	3
LIT 2120	World Literature: Enlightenment to the Present	3
MMC 2100	Writing for Mass Communications I	3
MUL 2010	Survey of Music Literature	3
MUL 2012	Survey of Music Literature - Musical	3

	Theater	
MUY 2100	Humanities: Music and Music Therapy	3
PHI 1002	Philosophical Practice	3
PHI 1010	Introduction to Philosophy	3
PHI 1103	Critical and Creative Thinking	3
PHI 1113	Reason and Emotion	3
PHI 1624	Philosophy and Popular Culture	3
PHI 1635	Ethical Issues in Health Care	3
PHI 1801	Philosophy of Art	3
PHI 2100	Introduction to Logic	3
PHI 2620	Environmental Ethics	3
PHI 2630	Introduction to Ethics	3
PHP 1791	Existentialism	3
REL 1121	Religion and American Public Life	3
REL 1300	Introduction to World Religions	3
THE 1000	Introduction to Theatre (Drama)	3
THE 2300	Survey of Dramatic Literature	3

In each of the above courses, students will demonstrate college-level writing skills through multiple assignments and complete each course with a grade of "C" or higher.

Mathematics - 6 credits

Students must complete at least one course from MAC 1105, MAC 2311, MGF 2106, MGF 2107, STA 2023 to comply with General Education Core Course Options.

Effective Fall 2017, Associate in Arts degree-seeking students must enroll in the first required math course appropriate for their degree by the time they have earned fifteen college credits or reached the 25% benchmark toward degree. These students must enroll in a math course each subsequent semester until the math General Education requirement has been met.

MAC 1105	College Algebra	3
MAC 1114	Plane Trigonometry	3
MAC 1140	Precalculus Algebra	3
MAC 1147	Precalculus/Trigonometry	5
MAC 2233	Business Calculus I	3
MAC 2311	Calculus I with Analytic Geometry	5
MAD 2104	Discrete Mathematics	3
MAP 2302	Differential Equations	3
MGF 2106	Survey in Mathematics	3
MGF 2107	Explorations in Mathematics	3
MTG 2204	Elementary Geometry	3
STA 2023	Elementary Statistics I	3

Students must complete each course with a grade of C or higher.

Science - 6 credits

Students must complete at least one course from AST 1002, BSC 1005, BSC 2010, BSC 2085, CHM 1020, CHM 1045, ESC 1000, EVR 1001, PHY 1020, PHY 2048, PHY 2053 to comply with General Education Core Course Options. IRSC does not offer BSC 2085, ESC 1000, or EVR 1001, but does accept the courses as Natural Science General Education.

AST 1002	General Astronomy	3
AST 1002L	General Astronomy Laboratory	1
BSC 1005	Life Science	3
BSC 1005L	Life Science Lab	1
BSC 1084	Survey of the Human Body	4
BSC 2010	General Biology I	3
BSC 2010L	General Biology I Lab	1
BSC 2011	General Biology II	3
BSC 2011L	General Biology II Lab	1
BSC 2093	Anatomy and Physiology I	3
BSC 2093L	Anatomy and Physiology I Lab	1
BSC 2094	Anatomy and Physiology II	3
BSC 2094L	Anatomy and Physiology II Lab	1
CHM 1020	Introduction to Chemistry	3
CHM 1045	General Chemistry I	3
CHM 1045L	General Chemistry I Lab	1
CHM 1046	General Chemistry II	3
CHM 1046L	General Chemistry II Lab	1
CHM 2210	Organic Chemistry I	3
CHM 2210L	Organic Chemistry I Lab	1
CHM 2211	Organic Chemistry II	3
CHM 2211L	Organic Chemistry II Lab	1
GLY 1010	Introduction to Geology	3
MET 1001	Weather and Climate	3
OCB 1000	Introduction to Marine Biology	3
OCB 1000L	Introduction to Marine Biology Lab	1
OCB 1630	Marine Ecology	3
OCB 1630L	Marine Ecology Lab	1
OCB 2010	Marine Biology	3
OCE 2001	Introduction to Oceanography	3
PCB 1030	Introduction to Ecology	3
PHY 1020	Principles of Physics	3
PHY 2048	Physics with Calculus I	3
PHY 2048L	Physics with Calculus I Lab	1
PHY 2049	Physics with Calculus II	3
PHY 2049L	Physics with Calculus II Lab	1
PHY 2053	College Physics I	3
PHY 2053L	College Physics I Lab	1
PHY 2054	College Physics II	3
PHY 2054L	College Physics II Lab	1
PSC 1121	Survey of Physical Science	3

Consult Enrollment and Student Services about specific science requirements for major and for university transfer.

Social Science - Students must take 6 credits from the following

Students must take at least one course from the following AMH 2020, ANT 1000, ECO 2013, POS 1041, PSY 2012, SYG 2000 to comply with General Education Core Course Options.

Students must take 12 credits total of Social Science courses.

AMH 2010	American History: Discovery	3

	through Reconstruction	
AMH 2020	American History: Reconstruction to the Present	3
EUH 2000	Western Civilization: Origins to 1485	3
EUH 2001	Western Civilization: 1485 to 1815	3
EUH 2002	Western Civilization: 1815 to the Present	3
WOH 2012	World History to 1500	3
WOH 2022	World History Since 1500	3
WOH 2040	World in the 20th Century	3

Social Science - Students must take 6 credits from the following

ANT 1000	Introduction to Anthropology	3
ANT 2140	Anthropology and Human Origins	3
ANT 2149	Archaeology in Popular Culture	3
ANT 2410	Cultural Anthropology	3
DEP 2004	Human Development	3
ECO 2013	Principles of Economics Macro	3
ECO 2023	Principles of Economics Micro	3
GEA 2000	World Regional Geography	3
INR 2002	Introduction to International Relations	3
INR 2500	Model United Nations	3
POS 1041	American Government	3
PSY 2012	Introduction to Psychology	3
SPC 1017	Fundamentals of Speech Communication	3
SYG 1361	Sociology of Death	3
SYG 2000	Introduction to Sociology	3
SYG 2010	Social Problems	3

Students must take 12 credits total of Social Science courses.

Electives – 24 Credits

No upper level or courses with the designation (N) are permitted in the Associate in Arts Degree program.

Required Prerequisites

(See Program Listings or Advisor)

To earn the Associate in Arts Degree, certain General Education requirements and elective courses must be satisfactorily completed. Although A.A. students at Indian River State College do not declare majors, students must select prerequisite courses which will best prepare them for transfer into a particular major field at a specific college or university.

In planning the program of study at Indian River State College, students are advised to seek the aid of an advisor. An advisor can help review selections of courses acceptable for meeting the General Education requirements, since specific General Education courses may be recommended for a particular major. In addition, an advisor can suggest prerequisites and sequences of courses for a specific major.

The length of programs may vary depending on the major area of study and the college or university the student plans to attend.

The listings are examples of programs that meet the requirements for the Associate in Arts Degree and include prerequisite electives generally recommended for certain majors at most of the state (public) universities. Students should check, however, that the suggested courses meet the requirement for the major field at the specific college or university that they plan to attend. Choice of program and selection of courses are the student's responsibility.

The Program Code required for the IRSC Application for Admission is the five digit number following the Program Title.

ACCOUNTING TRACK - 11010

See General Education Degree Requirements (p. 79) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System Programs:

ACG 2001	Financial Accounting I	3
ACG 2011	Financial Accounting II	3
ACG 2071	Managerial Accounting	3
CGS 1100	Introduction to Computer Applications for Business	3
ECO 2013	Principles of Economics Macro	3
ECO 2023	Principles of Economics Micro	3
MAC 2233	Business Calculus I	3
STA 2023	Elementary Statistics I	3

Recommended Electives*:

BUL 2241	Business Law I	3

*Rule requirements to sit for the CPA Examination in Florida as of April, 2013:

Applicants sitting for the exam must have completed 120 semester (or 160 quarter) hours from an accredited college or university, unless one is using the provisions of the unaccredited institutions rule, as explained below. The accounting education program must include 24 semester (or 36 quarter) hours of upper division accounting to include coverage of taxation, auditing, cost/managerial, financial, and accounting information systems.

The business education program must include 24 semester hours of upper division general business courses with some exceptions. One microeconomics, one macroeconomics, one statistics, one business law, and one introduction to computers course may be lower division. As part of the general business hours, applicants are required to have a total of 6 semester (or eight quarter) hours of business law

courses, which must cover contracts, torts, and the Uniform Commercial Code.

Excess upper division accounting courses maybe used to meet the general business requirement. However, elementary accounting classes are never acceptable for credit. Neither are courses for non-accounting majors and any MBA courses that are equivalent to elementary accounting.
http://www.myfloridalicense.com/dbpr/cpa/faq-exam.html.

ECO-2013 (p. 206), ECO-2023 (p. 206), MAC-2233 (p. 248), and STA-2023 (p. 289) are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A. A. General Education requirements at IRSC.

AGRICULTURAL (FOOD AND RESOURCE) ECONOMICS TRACK - 11020

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs:

ACG 2001	Financial Accounting I	3
ACG 2011	Financial Accounting II	3
ACG 2071	Managerial Accounting	3
BSC 1005	Life Science	3
BSC 1005L	Life Science Lab	1
MAC 2233	Business Calculus I	3
STA 2023	Elementary Statistics I	3
SPC 1608	Public Speaking	3
CHM 1020	Introduction to Chemistry	3

Recommended Electives:

MAT 1033	Intermediate Algebra	3

CHM-1020 (p. 184), BSC-1005 (p. 178), BSC-1005L (p. 178), MAC-2233 (p. 248), and STA-2023 (p. 289) are part of the General Education Requirements at IRSC. (36 credits)

These courses can be used to meet A. A. General Education requirements at IRSC.

AGRICULTURE (GENERAL) TRACK - 11030

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs:

BSC 2010	General Biology I	3
BSC 2010L	General Biology I Lab	1
BSC 2011	General Biology II	3
BSC 2011L	General Biology II Lab	1
CGS 1060	College Computing	3
CHM 1045	General Chemistry I	3
CHM 1045L	General Chemistry I Lab	1
CHM 1046	General Chemistry II	3
CHM 1046L	General Chemistry II Lab	1
ECO 2013	Principles of Economics Macro	3
	Or	
ECO 2023	Principles of Economics Micro	3
MAC 1105	College Algebra	3
MAC 1114	Plane Trigonometry	3
MAC 1140	Precalculus Algebra	3
SPC 1608	Public Speaking	3
STA 2023	Elementary Statistics I	3
SYG 2000	Introduction to Sociology	3
	Or	
PSY 2012	Introduction to Psychology	3

All above courses excluding SPC 1608 and CGS 1060 are part of the General Education Requirements at IRSC. (36 credits)

These courses can be used to meet A. A. General Education requirements at IRSC.

ANTHROPOLOGY TRACK - 11040

See General Education Requirements (p. 78)for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs:

ANT 2410	Cultural Anthropology	3
ANT 2140	Anthropology and Human Origins	3

Recommended Electives:

CGS 1060	College Computing	3
ECO 2013	Principles of Economics Macro	3
ECO 2023	Principles of Economics Micro	3
GEA 2000	World Regional Geography	3
MAT 1100	Quantitative Reasoning	3

ANT 2410, ANT 2140, ECO 2013, ECO 2023, and GEA 2000 are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A. A. General Education requirements at IRSC.

ART-GENERAL TRACK - 11060

See General Education Requirements (p. 78)for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs:

ARH 2050	History of Art (Prehistoric - Gothic)	3
ARH 2051	History of Art (Renaissance through Modern)	3
ART 1201C	Color and Design I	3
ART 1203C	Color and Design II	3
ART 1300C	Drawing I	3
ART 1301C	Drawing II	3
ART 1200C	Three Dimensional Design (3D Art Studio)	1 - 3
ART 1701C	Introduction to Sculpture	3

Recommended Electives:

ART 2500C	Painting I	3
ART 2330C	Figure and Form	3
GRA 2111C	Graphics	3

ARH 2050 and ARH 2051 are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A. A. General Education requirements at IRSC.

BIOLOGY-GENERAL TRACK - 11070

See General Education Requirements (p. 78) for additional requirements.

This Biology General A.A. track is designed for students intending to enter the workforce directly after graduation as a lab technician, science teacher, or field technician.

This is not designed for students pursuing advanced degrees in the sciences or medical fields e.g. medical, dental, pharmacy, veterinary schools, or graduate schools (master's or doctoral programs.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida university system programs:

BSC 2010	General Biology I	3
BSC 2010L	General Biology I Lab	1
BSC 2011	General Biology II	3
BSC 2011L	General Biology II Lab	1
CHM 1045	General Chemistry I	3
CHM 1045L	General Chemistry I Lab	1
CHM 1046	General Chemistry II	3
CHM 1046L	General Chemistry II Lab	1
CHM 2210	Organic Chemistry I	3
CHM 2210L	Organic Chemistry I Lab	1
CHM 2211	Organic Chemistry II	3
CHM 2211L	Organic Chemistry II Lab	1
MAC 2311	Calculus I with Analytic Geometry	5
	Or	
MAC 2233	Business Calculus I	3
MAC 2312	Calculus II	4
	Or	
STA 2023	Elementary Statistics I	3

All above courses excluding MAC 2312 are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A. A. General Education requirements at IRSC.

BIOLOGY-PREPROFESSIONAL TRACK - 11560

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida university system programs:

BSC 2010	General Biology I	3
BSC 2010L	General Biology I Lab	1
BSC 2011	General Biology II	3
BSC 2011L	General Biology II Lab	1
CHM 1045	General Chemistry I	3
CHM 1045L	General Chemistry I Lab	1
CHM 1046	General Chemistry II	3
CHM 1046L	General Chemistry II Lab	1
CHM 2210	Organic Chemistry I	3
CHM 2210L	Organic Chemistry I Lab	1
CHM 2211	Organic Chemistry II	3
CHM 2211L	Organic Chemistry II Lab	1
MAC 2311	Calculus I with Analytic Geometry	5
STA 2023	Elementary Statistics I	3

BIOTECHNOLOGY TRACK - 11480

See General Education Requirements (p. 78)for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs:

MAC 2311	Calculus I with Analytic Geometry	5
	Or	
MAC 2233	Business Calculus I	3
STA 2023	Elementary Statistics I	3
BSC 2010	General Biology I	3
BSC 2010L	General Biology I Lab	1
BSC 2011	General Biology II	3
BSC 2011L	General Biology II Lab	1
CHM 1045	General Chemistry I	3
CHM 1045L	General Chemistry I Lab	1

CHM 1046	General Chemistry II	3
CHM 1046L	General Chemistry II Lab	1
CHM 2210	Organic Chemistry I	3
CHM 2210L	Organic Chemistry I Lab	1
CHM 2211	Organic Chemistry II	3
CHM 2211L	Organic Chemistry II Lab	1
PHY 2053	College Physics I	3
PHY 2053L	College Physics I Lab	1
PHY 2054	College Physics II	3
PHY 2054L	College Physics II Lab	1

Recommended electives:

All courses above are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A. A. General Education requirements at IRSC.

BUSINESS ADMINISTRATION TRACK - 11080

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs:

ACG 2001	Financial Accounting I	3
ACG 2011	Financial Accounting II	3
ACG 2071	Managerial Accounting	3
CGS 1100	Introduction to Computer Applications for Business	3
ECO 2013	Principles of Economics Macro	3
ECO 2023	Principles of Economics Micro	3
MAC 2233	Business Calculus I	3
STA 2023	Elementary Statistics I	3

Recommended electives:

MAT 1033	Intermediate Algebra	3

ECO 2013, ECO 2023, MAC 2233, STA 2023, POS 1041 AND SYG 2000 are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A. A. General Education requirements at IRSC.

CHEMISTRY TRACK - 11090

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs:

CHM 1045	General Chemistry I	3
CHM 1045L	General Chemistry I Lab	1
CHM 1046	General Chemistry II	3
CHM 1046L	General Chemistry II Lab	1
CHM 2210	Organic Chemistry I	3
CHM 2210L	Organic Chemistry I Lab	1
CHM 2211	Organic Chemistry II	3
CHM 2211L	Organic Chemistry II Lab	1
MAC 2311	Calculus I with Analytic Geometry	5
MAC 2312	Calculus II	4
	Also choose:	
PHY 2048	Physics with Calculus I	3
PHY 2048L	Physics with Calculus I Lab	1
PHY 2049	Physics with Calculus II	3
PHY 2049L	Physics with Calculus II Lab	1
	Or	
PHY 2053	College Physics I	3
PHY 2053L	College Physics I Lab	1
PHY 2054	College Physics II	3
PHY 2054L	College Physics II Lab	1

Recommended electives:

MAC 1105	College Algebra	3
MAC 1114	Plane Trigonometry	3
MAC 1140	Precalculus Algebra	3

All courses above excluding MAC 2312 are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A. A. General Education requirements at IRSC.

COMPUTER AND INFORMATION SCIENCES TRACK - 11100

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Requirements electives

ACG 2001	Financial Accounting I	3
ACG 2011	Financial Accounting II	3
ACG 2071	Managerial Accounting	3
CGS 1060	College Computing	3
	Or	
CGS 1100	Introduction to Computer Applications for Business	3
ECO 2013	Principles of Economics Macro	3
ECO 2023	Principles of Economics Micro	3
MAC 2233	Business Calculus I	3
STA 2023	Elementary Statistics I	3
SPC 1017	Fundamentals of Speech Communication	3
	Or	
SPC 1608	Public Speaking	3

Required courses available at IRSC needed for transfer to Florida university system programs:

COP 2000	Introduction to Computer	3

	Programming I	
MAC 2311	Calculus I with Analytic Geometry	5
MAC 2312	Calculus II	4
PHY 2048	Physics with Calculus I	3
PHY 2048L	Physics with Calculus I Lab	1
PHY 2049	Physics with Calculus II	3
PHY 2049L	Physics with Calculus II Lab	1

ECO 2013, ECO 2023, MAC 2311, MAC 2233, STA 2023, PHY 2048, PHY 2048L, PHY 2049, PHY 2049L, STA 2023, and SPC 1017 are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A. A. General Education requirements at IRSC.

COMPUTER ENGINEERING TRACK - 11110

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs:

MAC 2311	Calculus I with Analytic Geometry	5
MAC 2312	Calculus II	4
MAC 2313	Calculus III	5
MAP 2302	Differential Equations	3
COP 2000	Introduction to Computer Programming I	3
PHY 2048	Physics with Calculus I	3
PHY 2048L	Physics with Calculus I Lab	1
PHY 2049	Physics with Calculus II	3
PHY 2049L	Physics with Calculus II Lab	1
CHM 1045	General Chemistry I	3
CHM 1045L	General Chemistry I Lab	1

All above courses excluding MAC 2312, MAC 2313, COP 2000, and COP 2334 are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A. A. General Education requirements at IRSC.

CRIMINAL JUSTICE TRACK - 11120

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Recommended electives:

CCJ 2020	Introduction to Criminal Justice	3
CJL 2100	Criminal Law	3
CCJ 1600	Deviant Behavior	3
CJL 2062	Constitutional Law	3
CJL 2500	Introduction to the Courts	3
MAT 1100	Quantitative Reasoning	3

DANCE TRACK - 11540

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Recommended electives

DAA 1103	Intermediate Modern Dance II	3
DAA 1203	Intermediate Ballet II	3
DAA 1500	Jazz Dance	2
TPA 1200	Beginning Stagecraft	3
TPP 1110	Acting	3

Required courses available at IRSC needed for transfer to Florida University System programs:

DAA 1610	Dance Composition I	2
DAA 1680	Dance Performance	1
DAA 1100	Modern Dance I	3
DAA 1101	Modern Dance II	3
DAA 1102	Intermediate Modern Dance I	3
DAA 1200	Ballet I	3
DAA 1201	Ballet II	3
DAA 1202	Intermediate Ballet I	3
TPA 1200	Beginning Stagecraft	3
	Or	
TPA 1232	Theatre Costuming I	3

DRAMATIC ARTS/THEATRE TRACK - 11430

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs

THE 1000	Introduction to Theatre (Drama)	3
THE 2300	Survey of Dramatic Literature	3
TPA 2290	Technical Theatre	1
TPA 1200	Beginning Stagecraft	3
TPP 1190	Rehearsal and Performance Lab	1
	Or	
TPP 1110	Acting	3

Students must take an additional 9 credits from THE, TPA and/or TPP courses.

Recommended electives:

MAT 1033	Intermediate Algebra	3
	Or	
MAT 1100	Quantitative Reasoning	3

TPA 1930	Directing Seminar	1
TPP 1533	Stage Combat	1
MVV 1111	Class Voice I & II	1
DAA 1100	Modern Dance I	3
DAA 1101	Modern Dance II	3

THE 1000 and THE 2300 are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A. A. General Education requirements at IRSC.

ECONOMICS-BUSINESS TRACK - 11140

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs:

ACG 2001	Financial Accounting I	3
ACG 2011	Financial Accounting II	3
ACG 2071	Managerial Accounting	3
CGS 1100	Introduction to Computer Applications for Business	3
ECO 2013	Principles of Economics Macro	3
ECO 2023	Principles of Economics Micro	3
MAC 2233	Business Calculus I	3
STA 2023	Elementary Statistics I	3

Recommended electives:

MAT 1033	Intermediate Algebra	3

ECO 2013, ECO 2023, MAC 2233, and STA 2023 are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A. A. General Education requirements at IRSC.

ECONOMICS-SOCIAL SCIENCES TRACK - 11150

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida university system programs:

ECO 2013	Principles of Economics Macro	3
ECO 2023	Principles of Economics Micro	3

Recommended electives:

ACG 2001	Financial Accounting I	3
ACG 2011	Financial Accounting II	3
ACG 2071	Managerial Accounting	3
CGS 1100	Introduction to Computer Applications for Business	3
MAC 2233	Business Calculus I	3
POS 1041	American Government	3
SPC 1608	Public Speaking	3
STA 2023	Elementary Statistics I	3
SYG 2000	Introduction to Sociology	3

ECO 2013, ECO 2023, MAC 2233, POS 1041, STA 2023, SYG 2000 are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A. A. General Education requirements at IRSC.

ELEMENTARY AND SPECIAL EDUCATION TRACK - 11160

It is recommended that students take the General Knowledge examination during their last year prior to transfer. Specific courses and/or transfer requirements may vary. Please consult an advisor.

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs

EDF 2005	Introduction to the Teaching Profession	3

At least 6 credits in courses with an international or diversity focus. Foreign language may be used to meet this requirement.

Recommended electives:

EDP 2002	Introduction to Educational Psychology	3
EEX 2010	Introduction to Special Education	3

SECONDARY EDUCATION TRACK - 11170

It is recommended that students take the General Knowledge examination during their last year prior to transfer. Specific courses and/or transfer requirements may vary. Please consult an advisor.

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs

EDF 2005	Introduction to the Teaching Profession	3

Secondary Education Majors must complete additional hours in their areas of specialization.

At least 6 credits in courses with an international or diversity focus. Foreign language may be used to meet this requirement.

EDUCATOR PREPARATION INSTITUTE - F0020

This program of study was designed for non-education post-baccalaureate degree holders. The EPI offers the opportunity to become a highly skilled certified teacher building on the participant's content area skills and incorporating the critical competencies that are required of effective teachers.

DEGREE REQUIREMENTS

Required courses:

EDF 2005	Introduction to the Teaching Profession	3
EDF 2085	Introduction to Diversity & Exceptionalities for Educators	3
EME 2040	Introduction to Technology for Educators	3
EDF 3214	Human Development and Learning	3
RED 3360	Teaching Reading in Middle/Secondary Schools	3
EDG 3343	Instructional Strategies	3
EDG 3949	EPI Practicum	1
EDG 4410	Classroom Management and Communication	3

Recommended electives:

EDP 2002	Introduction to Educational Psychology	3
TSL 3080	ESOL Issues: Principles and Practices	3

ENGINEERING TRACK - 11180

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs

CHM 1045	General Chemistry I	3
CHM 1045L	General Chemistry I Lab	1
MAC 2311	Calculus I with Analytic Geometry	5
MAC 2312	Calculus II	4
MAC 2313	Calculus III	5
MAP 2302	Differential Equations	3
PHY 2048	Physics with Calculus I	3
PHY 2048L	Physics with Calculus I Lab	1

Excluding MAC 2312 (p. 248), and MAC 2313 (p. 248) above courses are part of the General Education Requirements at IRSC. (36 credits)

Course selection dependent upon University Track selected.

Recommended electives:

EGN 1002	Introduction to Engineering	3
PHY 2049	Physics with Calculus II	3
PHY 2049L	Physics with Calculus II Lab	1
EGN 1111	Engineering Graphics	3
ETD 1320	Introduction to AutoCAD	3
GIS 1060	Introduction to GIS with ArcGIS	3

Course selection above is based on the program track at your chosen university.

ENGLISH TRACK - 11190

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs:

ENC 1101	English Composition I	3
ENC 1102	English Composition II	3

Recommended electives:

AML 2010	American Literature to 1865	3
AML 2020	American Literature after 1865	3
CRW 2001	Creative Writing I	3
CRW 2002	Creative Writing II	3
ENL 2012	English Literature to 1798	3
ENL 2022	English Literature after 1798	3
LIT 2110	World Literature: Homer to the Renaissance	3

LIT 2120	World Literature: Enlightenment to the Present	3
MMC 1000	Survey of Mass Communication	3
REA 1205	Advanced College Reading I	3

ENC 1101, ENC 1102, AML 2010, AML 2020, ENL 2012, ENL 2022, LIT 2110, and LIT 2120 are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A. A. General Education requirements at IRSC.

ENVIRONMENTAL SCIENCE TRACK - 11200

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs

BSC 2010	General Biology I	3
BSC 2010L	General Biology I Lab	1
BSC 2011	General Biology II	3
BSC 2011L	General Biology II Lab	1
CHM 1045	General Chemistry I	3
CHM 1045L	General Chemistry I Lab	1
CHM 1046	General Chemistry II	3
CHM 1046L	General Chemistry II Lab	1
PHY 2053	College Physics I	3
PHY 2053L	College Physics I Lab	1
PHY 2054	College Physics II	3
PHY 2054L	College Physics II Lab	1
MAC 2311	Calculus I with Analytic Geometry	5
STA 2023	Elementary Statistics I	3
ECO 2013	Principles of Economics Macro	3
	Or	
ECO 2023	Principles of Economics Micro	3
POS 1041	American Government	3
GLY 1010	Introduction to Geology	3

All courses above are part of the General Education Requirements at IRSC. (36 credits)

FINANCE/MARKETING TRACK - 11210

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs:

ACG 2001	Financial Accounting I	3
ACG 2011	Financial Accounting II	3
ACG 2071	Managerial Accounting	3
CGS 1100	Introduction to Computer Applications for Business	3
ECO 2013	Principles of Economics Macro	3
ECO 2023	Principles of Economics Micro	3
MAC 2233	Business Calculus I	3
STA 2023	Elementary Statistics I	3

Recommended electives:

MAT 1033	Intermediate Algebra	3

ECO 2013, ECO 2023, MAC 2233, and STA 2023 are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A. A. General Education requirements at IRSC.

FOREIGN LANGUAGE TRACK - 11220

Universities may require Foreign Language Majors to have a second foreign language as a minor. Students should consult Enrollment and Student Services for specific requirements for the university of their choice.

See General Education Requirements (p. 78) for additional requirements.

The following are required courses available at IRSC needed for transfer to Florida University System Programs:

DEGREE REQUIREMENTS

Spanish language courses:

SPN 1120	Elementary Spanish I	4
SPN 1121	Elementary Spanish II	4
SPN 2220	Intermediate Spanish I	4
SPN 2221	Intermediate Spanish II	4

French language courses:

FRE 1120	Elementary French I	4
FRE 1121	Elementary French II	4

German language courses:

GER 1120	Elementary German I	4
GER 1121	Elementary German II	4

American Sign Language courses:

ASL 1140	American Sign Language I	4
ASL 1150	American Sign Language II	4

FORESTRY WILDLIFE ECOLOGY AND CONSERVATION TRACK - 11230

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Recommended electives

MAC 1105	College Algebra	3
MAC 1114	Plane Trigonometry	3
MAC 1140	Precalculus Algebra	3

Required courses available at IRSC needed for transfer to Florida University System programs

BSC 2010	General Biology I	3
BSC 2010L	General Biology I Lab	1
BSC 2011	General Biology II	3
BSC 2011L	General Biology II Lab	1
ECO 2023	Principles of Economics Micro	3
STA 2023	Elementary Statistics I	3
CHM 1045	General Chemistry I	3
CHM 1045L	General Chemistry I Lab	1
MAC 2311	Calculus I with Analytic Geometry	5
CHM 1046	General Chemistry II	3
CHM 1046L	General Chemistry II Lab	1

All above courses are part of the General Education Requirements at IRSC. (36 credits)

These courses can be used to meet A.A. General Education requirements at IRSC.

HEALTH SCIENCE TRACK - 11550

See General Education Requirements (p. 78)for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs:

BSC 2010	General Biology I	3
BSC 2010L	General Biology I Lab	1
BSC 2093	Anatomy and Physiology I	3
BSC 2093L	Anatomy and Physiology I Lab	1
BSC 2094	Anatomy and Physiology II	3
BSC 2094L	Anatomy and Physiology II Lab	1
DEP 2004	Human Development	3
MAC 1105	College Algebra	3
PSY 2012	Introduction to Psychology	3
STA 2023	Elementary Statistics I	3

Course selection above is based on the program track at your chosen university.

Recommended electives

HUN 1201	Nutrition	3
CHM 1020	Introduction to Chemistry	3

HISTORY TRACK - 11240

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs

AMH 2010	American History: Discovery through Reconstruction	3
AMH 2020	American History: Reconstruction to the Present	3
EUH 2000	Western Civilization: Origins to 1485	3
EUH 2001	Western Civilization: 1485 to 1815	3
EUH 2002	Western Civilization: 1815 to the Present	3
WOH 2012	World History to 1500	3
WOH 2022	World History Since 1500	3
WOH 2040	World in the 20th Century	3

Choose six credits from the courses above.

Recommended electives:

ANT 2410	Cultural Anthropology	3
INR 2002	Introduction to International Relations	3

All above courses are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A.A. General Education requirements at IRSC.

HUMANITIES TRACK - 11250

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Recommended electives:

ARH 1000	Art Appreciation	3
HUM 1020	Introduction to Humanities	3
LIT 1000	Introduction to Literature	3
MUL 2010	Survey of Music Literature	3
PHI 1010	Introduction to Philosophy	3
THE 1000	Introduction to Theatre (Drama)	3

All courses above are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A. A. General Education requirements at IRSC.

JOURNALISM TRACK - 11260

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs:

SPC 1608	Public Speaking	3
AMH 2010	American History: Discovery through Reconstruction	3
AMH 2020	American History: Reconstruction to the Present	3
POS 1041	American Government	3
ECO 2013	Principles of Economics Macro	3
	Or	
ECO 2023	Principles of Economics Micro	3
PSY 2012	Introduction to Psychology	3

Recommended electives:

INR 2002	Introduction to International Relations	3
JOU 1100	News Reporting and Writing	3
MMC 1000	Survey of Mass Communication	3
MAT 1100	Quantitative Reasoning	3

AMH 2010, AMH 2020, POS 1041, ECO 2013, ECO 2023, PSY 2012, CPO 2002, and INR 2002 are part of the General Education Requirements at IRSC. (36 credits).

MARINE/AQUATIC BIOLOGY TRACK - 11280

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs

BSC 2010	General Biology I	3
BSC 2010L	General Biology I Lab	1
BSC 2011	General Biology II	3
BSC 2011L	General Biology II Lab	1
CHM 1045	General Chemistry I	3
CHM 1045L	General Chemistry I Lab	1
CHM 1046	General Chemistry II	3
CHM 1046L	General Chemistry II Lab	1
CHM 2210	Organic Chemistry I	3
CHM 2210L	Organic Chemistry I Lab	1
CHM 2211	Organic Chemistry II	3
CHM 2211L	Organic Chemistry II Lab	1
MAC 2311	Calculus I with Analytic Geometry	5
	Or	
MAC 2233	Business Calculus I	3
MAC 2312	Calculus II	4
	Or	
STA 2023	Elementary Statistics I	3

Recommended electives:

MAC 1105	College Algebra	3
MAC 1114	Plane Trigonometry	3
MAC 1140	Precalculus Algebra	3

All courses above excluding MAC 2312 are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A. A. General Education requirements at IRSC.

MATHEMATICS TRACK - 11290

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs

MAC 2311	Calculus I with Analytic Geometry	5
MAC 2312	Calculus II	4
MAC 2313	Calculus III	5
MAP 2302	Differential Equations	3
COP 2000	Introduction to Computer Programming I	3
	Completion of one laboratory-based science course designed for science majors:	
BSC 2010	General Biology I	3
BSC 2010L	General Biology I Lab	1
BSC 2011	General Biology II	3
BSC 2011L	General Biology II Lab	1
CHM 1045	General Chemistry I	3
CHM 1045L	General Chemistry I Lab	1
CHM 1046	General Chemistry II	3
CHM 1046L	General Chemistry II Lab	1
PHY 2048	Physics with Calculus I	3
PHY 2048L	Physics with Calculus I Lab	1
PHY 2049	Physics with Calculus II	3
PHY 2049L	Physics with Calculus II Lab	1
PHY 2053	College Physics I	3
PHY 2053L	College Physics I Lab	1

PHY 2054	College Physics II	3
PHY 2054L	College Physics II Lab	1

Recommended electives:

MAC 1105	College Algebra	3
MAC 1114	Plane Trigonometry	3
MAC 1140	Precalculus Algebra	3
STA 2023	Elementary Statistics I	3

All courses above excluding the COP 2000, MAC 2312, and MAC 2313 are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A. A. General Education requirements at IRSC.

MULTIMEDIA STUDIES TRACK - 11440

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs:

MMC 1000	Survey of Mass Communication	3

Recommended electives:

CGS 1100	Introduction to Computer Applications for Business	3
LIT 2110	World Literature: Homer to the Renaissance	3
LIT 2120	World Literature: Enlightenment to the Present	3
MAT 1100	Quantitative Reasoning	3

ENG 1123, ENG 1124, LIT 2110, and LIT 2120 are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A. A. General Education requirements at IRSC.

MUSIC TRACK - 11300

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs

MUT 1111	Theory of Music I	3
MUT 1112	Theory of Music II	3
MUT 2116	Theory of Music III	3
MUT 2117	Theory of Music IV	3
MUT 1241	Sightsinging and Ear Training I & II	1
	Or	
MUT 1221	Introduction to Sightsinging	2
MUN 2140	Wind Ensemble	1
MUN 2310	College Chorale	1
MVK 1111	Class Piano I and II	2
MVK 2121	Class Piano III and IV	2

The above courses are part of the Performing Ensembles, requiring 4 semesters.

MUN 2140:4 semesters x 1 credit

MUN 2310: 4 semesters x 1 credit

MUT 1241: 2 semesters x 1 credit

MVK 1111: 2 semesters x 2 credits

MVK 2121: 2 semesters x 2 credits

Applied Music: 4 semesters x 1 ½ credits

Recommended electives:

MUL 2010	Survey of Music Literature	3
MUN 2130	Symphonic Band	1
MUN 2290	Theatre Orchestra	1
MUN 2012	Instrumental Ensemble	1
MUN 2710	Stage/Jazz Band	1
MUN 2720	Vocal Ensemble Company	1
MUO 2020	Music Theatre	1
MUT 1001	Fundamentals of Theory	3
MUT 1221	Introduction to Sightsinging	2

MUL 2010 is part of the General Education Requirements at IRSC. (36 credits).

MUT 1221: 2 semesters x 2 credits

PARKS AND RECREATION MANAGEMENT TRACK - 11270

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs:

DEP 2004	Human Development	3
PSY 2012	Introduction to Psychology	3
HFT 1000	Introduction to Hospitality and Tourism	3
CGS 1060	College Computing	3
	Or	
CGS 1100	Introduction to Computer Applications for Business	3
SYG 2000	Introduction to Sociology	3
SPC 1608	Public Speaking	3
ECO 2013	Principles of Economics Macro	3
	Or	
ECO 2023	Principles of Economics Micro	3

BSC 2010	General Biology I	3
BSC 2010L	General Biology I Lab	1

Course selection above is based on the program track at your chosen university.

Recommended electives:

MAT 1100	Quantitative Reasoning	3
PEO 2013	Sports Officiating	3
PET 2622	Care and Prevention of Athletic Injuries	3
PET 2760	Principles of Coaching	3

PSY 2012, SYG 2000, ECO 2013, ECO 2023, DEP 2004, and BSC 2010 are part of the General Education Requirements at IRSC. (36 credits).

PHILOSOPHY TRACK - 11340

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Recommended electives:

HUM 1020	Introduction to Humanities	3
MAT 1100	Quantitative Reasoning	3
PHI 1010	Introduction to Philosophy	3
PHI 1103	Critical and Creative Thinking	3
PHI 1930	Eastern Philosophies	3
PHI 2100	Introduction to Logic	3
PHI 2630	Introduction to Ethics	3

HUM 1020, PHI 1010, PHI 1103, PHI 2100, and PHI 2630 are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A. A. General Education requirements at IRSC.

PHYSICAL EDUCATION TRACK - 11111

It is recommended that students take the General Knowledge examination during their last year prior to transfer. Specific courses and/or transfer requirements may vary. Please consult an advisor.

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs

EDF 2005	Introduction to the Teaching Profession	3
HLP 1081	Personal Wellness	3
BSC 2093	Anatomy and Physiology I	3
BSC 2093L	Anatomy and Physiology I Lab	1
BSC 2094	Anatomy and Physiology II	3
BSC 2094L	Anatomy and Physiology II Lab	1
	Or	
PET 2622	Care and Prevention of Athletic Injuries	3

At least 6 credits in courses with an international or diversity focus. Foreign language may be used to meet this requirement.

Recommended electives:

DEP 2004	Human Development	3
MAT 1100	Quantitative Reasoning	3
HLP 1081	Personal Wellness	3

BSC 2010, BSC 2093, BSC 2094, and DEP 2004 are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A. A. General Education requirements at IRSC.

PHYSICS TRACK - 11360

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs:

CHM 1045	General Chemistry I	3
CHM 1045L	General Chemistry I Lab	1
CHM 1046	General Chemistry II	3
CHM 1046L	General Chemistry II Lab	1
MAC 2311	Calculus I with Analytic Geometry	5
MAC 2312	Calculus II	4
MAC 2313	Calculus III	5
PHY 2048	Physics with Calculus I	3
PHY 2048L	Physics with Calculus I Lab	1
PHY 2049	Physics with Calculus II	3
PHY 2049L	Physics with Calculus II Lab	1

Recommended electives:

MAC 1105	College Algebra	3
MAC 1114	Plane Trigonometry	3
MAC 1140	Precalculus Algebra	3

All courses above excluding MAC 2312 an MAC 2313 are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A. A. General Education requirements at IRSC.

POLITICAL SCIENCE TRACK - 11370

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University system programs:

POS 1041	American Government	3
	Or	
INR 2002	Introduction to International Relations	3

Recommended electives:

ECO 2013	Principles of Economics Macro	3
ECO 2023	Principles of Economics Micro	3
MAT 1100	Quantitative Reasoning	3
SYG 2010	Social Problems	3

POS 1041, CPO 2002, INR 2002, ECO 2013, ECO 2023, and SYG 2010 are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A. A. General Education requirements at IRSC.

PSYCHOLOGY TRACK - 11390

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs

PSY 2012	Introduction to Psychology	3
STA 2023	Elementary Statistics I	3
BSC 2010	General Biology I	3
	Or	
BSC 1005	Life Science	3
PPE 2001	Person and Personality Development	3
	Or	
DEP 2004	Human Development	3
	Or	
CLP 2140	Abnormal Psychology	3

Recommended electives:

BSC 2010L	General Biology I Lab	1
BSC 2011	General Biology II	3
BSC 2011L	General Biology II Lab	1
PPE 2001	Person and Personality Development	3
CLP 2140	Abnormal Psychology	3
DEP 2004	Human Development	3
SYG 2010	Social Problems	3
MAT 1100	Quantitative Reasoning	3
SPC 1017	Fundamentals of Speech Communication	3

All above courses excluding CLP 2140 and MAT 1100 are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A.A. General Education requirements at IRSC.

PUBLIC ADMINISTRATION TRACK - 11400

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs:

POS 1041	American Government	3
CGS 1060	College Computing	3
	Or	
CGS 1100	Introduction to Computer Applications for Business	3
ECO 2013	Principles of Economics Macro	3
	Or	
ECO 2023	Principles of Economics Micro	3

Recommended electives:

ANT 2410	Cultural Anthropology	3
ECO 2023	Principles of Economics Micro	3
SPC 1608	Public Speaking	3
MAT 1100	Quantitative Reasoning	3

ECO 2013, POS 1041, ANT 2410, and ECO 2023 are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A.A. General Education requirements at IRSC.

SOCIAL WORK TRACK - 11410

See General Education Requirements (p. 78) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs

POS 1041	American Government	3
PSY 2012	Introduction to Psychology	3
ECO 2013	Principles of Economics Macro	3
	Or	
ECO 2023	Principles of Economics Micro	3
SYG 2000	Introduction to Sociology	3
	Or	
SYG 2010	Social Problems	3
BSC 1005	Life Science	3
	Or	
BSC 2010	General Biology I	3

Recommended electives:

CLP 2140	Abnormal Psychology	3
ECO 2023	Principles of Economics Micro	3
MAT 1100	Quantitative Reasoning	3
SPC 1608	Public Speaking	3
SYG 1250	Multicultural Issues	3
CGS 1060	College Computing	3
	Or	

LIS 2005	Advanced Electronic Access to Information	3

All courses above excluding CGS 1060, LIS 2005, CLP 2140, HUS 2500, MAT 1033, REA 1933, SPC 1608, and SYG 1250 are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A. A. General Education requirements at IRSC.

SOCIOLOGY TRACK - 11420

See General Education Requirements (p. 79) for additional requirements.

DEGREE REQUIREMENTS

Required courses available at IRSC needed for transfer to Florida University System programs:

SYG 2000	Introduction to Sociology	3
SYG 2010	Social Problems	3
	Or	
SYG 1250	Multicultural Issues	3
	Or	
SYG 1361	Sociology of Death	3

Recommended electives:

MAT 1100	Quantitative Reasoning	3
POS 1041	American Government	3
PSY 2012	Introduction to Psychology	3
SPC 1608	Public Speaking	3
SYG 1250	Multicultural Issues	3
SYG 1361	Sociology of Death	3

SYG 2000, SYG 2010, SYG 1361, POS 1041, and PSY 2012 are part of the General Education Requirements at IRSC. (36 credits).

These courses can be used to meet A. A. General Education requirements at IRSC.

ASSOCIATE IN SCIENCE/ASSOCIATE IN APPLIED SCIENCE DEGREES AND TECHNICAL CERTIFICATE PROGRAMS

ACCOUNTING TECHNOLOGY (p. 98)
Certificate in:
Accounting Technology Specialist (p. 99)
Accounting Technology Operations (p. 99)
Accounting Applications (p. 99)

AIR CONDITIONING, REFRIGERATION & HEATING SYSTEMS TECHNOLOGY (p. 101)
Certificate in:
Residential Air Conditioning Refrigeration and Heating Systems Assistant (p. 102)
Air Conditioning Refrigeration and Heating Systems Technology (p. 102)

AQUACULTURE MANAGEMENT (p. 100)
Certificate in:
Aquaculture Technology (p. 101)

AUTOMOTIVE SERVICE MANAGEMENT TECHNOLOGY (p. 102)
Certificate in:
Automotive Service Technician (p. 103)
General Automotive Technician (p. 103)

BUILDING CONSTRUCTION TECHNOLOGY (p. 104)

BUSINESS ADMINISTRATION (p. 104)
Certificate in:
Business Specialist (p. 106)
Business Operations (p. 106)
Human Resources Administrator (p. 106)
Business Management (p. 106)
Business Management Career Development Program (p. 107)
Entrepreneurship (p. 107)

CIVIL ENGINEERING TECHNOLOGY (p. 108)

COMPUTER INFORMATION TECHNOLOGY (p. 108)
Certificate in:
Computer Information Data Specialist (p. 109)
Help Desk Support Technician - 60630 (p. 109)
Information Technology Support Specialist (p. 110)
Computer Programming Specialist (p. 110)
Web Production (p. 109)
Office Specialist (p. 110)

CRIMINAL JUSTICE TECHNOLOGY A.S. (p. 110)

CULINARY MANAGEMENT (p. 111)
Certificate in:
Chefs Apprentice (p. 112)
Culinary Arts Management Operations (p. 112)
Culinary Arts (p. 112)

DENTAL ASSISTING TECHNOLOGY & MANAGEMENT (p. 113)
Applied Technology Diploma in:
Dental Assisting Technology & Mgmt (p. 114)

DENTAL HYGIENE (p. 114)

DIGITAL MEDIA TECHNOLOGY (p. 115)
Certificate in:
Digital Media Production (p. 116)
Digital Media Support (p. 116)

DRAFTING & DESIGN TECHNOLOGY (p. 116)
Certificate in:
Autocad Foundations (p. 117)
Drafting (p. 117)

EARLY CHILDHOOD EDUCATION (p. 117)
Certificate in:
Preschool-Specialization (p. 118)
Child-Care-Center-Management-Specialization (p. 118)
Child Development & Early Intervention (p. 118)

ELECTRICAL POWER TECHNOLOGY (p. 119)

ELECTRONICS ENGINEERING TECHNOLOGY (p. 120)
Certificate in:
Solar Energy Technician (p. 121)
Lasers & Photonics (p. 121)
Robotics and Simulation Technician (p. 121)
Basic Electronics (p. 121)
Electronic Technology (p. 121)

EMERGENCY ADMINISTRATION & MANAGEMENT (p. 122)
Certificate in
Emergency Management (p. 122)
Homeland Security Emergency Manager (p. 123)

EMERGENCY MEDICAL SERVICES (p. 123)
Applied Technology Diploma in:
Emergency Medical Technician Applied Technology Diploma (p. 124)
Certificate in:
Paramedic (p. 124)

FIRE SCIENCE TECHNOLOGY (p. 124)

GRAPHICS TECHNOLOGY (p. 125)
Certificate in:
Graphic Design Support (p. 126)
Graphic Design Production (p. 126)

HEALTH INFORMATION TECHNOLOGY (p. 126)
Certificate in:
Healthcare Informatics Specialist (p. 127)

Medical Coder/Biller (p. 127)

HEALTH SERVICES MANAGEMENT (p. 128)

HOSPITALITY AND TOURISM MANAGEMENT (p. 128)
Certificate in:
Guest Services Specialist (p. 129)
Event Planning Management (p. 129)
Rooms Division Management (p. 129)

INTERIOR DESIGN TECHNOLOGY (p. 130)
Certificate in:
Kitchen & Bath Design (p. 130)
Home Staging Certificate (p. 130)

LANDSCAPE & HORTICULTURE TECHNOLOGY (p. 131)
Certificate in:
Landscape & Horticulture Specialist (p. 131)
Landscape & Horticulture Professional (p. 132)
Landscape & (p. 132)Horticulture Technician (p. 132)
Applied Technology Diploma in:
Pest Control Operations - Applied Technology Diploma (p. 132)

MARKETING MANAGEMENT (p. 133)
Certificate in:
Marketing Operations (p. 133)

MEDICAL LABORATORY TECHNOLOGY (p. 134)

NURSING, A.S. DEGREE - R.N. (p. 134)

PARALEGAL STUDIES/LEGAL ASSISTING (p. 135)

PHYSICAL THERAPIST ASSISTANT (p. 136)

RADIOGRAPHY (p. 136)

RESPIRATORY CARE (p. 137)

RESTAURANT MANAGEMENT (p. 138)

SOCIAL AND HUMAN SERVICES (p. 139)

The **Associate in Science** and **Associate in Applied Science Degree** programs are designed for students wishing to develop technical skills with emphasis on 21st Century employment opportunities. These two-year degree programs focus on high technology careers; prepare students to compete effectively in the contemporary job market; and may transfer into the IRSC Baccalaureate Degree programs.

An important component of many of the Associate in Science and Associate in Applied Science Degree programs is the practical training experience. This experience is designed to complement and enhance the theoretical program requirements and is closely supervised by IRSC instructors. Descriptions for these courses are included in the Course Description (p. 164) section of the catalog. Students are encouraged to contact the department chairperson if they have questions regarding any of these courses.

The Technical Certificate is awarded to a student who has completed the required courses which are part of the A.S. or A.A.S. Degree program. Students must submit their official, final high school transcript or GED, and complete at least twenty-five percent(25%) of the Technical Certificate requirements at IRSC with a cumulative GPA of 2.0 or higher.

The Applied Technology Diploma (ATD) consists of a course of study that is part of an A.S. or an A.A.S.Degree and leads to employment. Student must submit their official, final high school transcript or GED, and complete at least twenty-five percent(25%) of the ATD requirements at IRSC with a cumulative GPA of 2.0 or higher.

The Applied Technology Diploma and the Technical Certificate are designed to prepare the student to obtain employment as a skilled/paraprofessional worker. Students may then complete the remaining requirements for the Associate in Science or Associate in Applied Science Degree programs while employed.

The A.S. and A.A.S. Degrees include a cluster of General Education courses in the areas of Humanities/Fine Arts, Natural Science/Mathematics, and Social/Behavioral Science. Students also complete credits in an area of specialty, and additional credits are earned in technical support classes.

The Advanced Technical Certificate (ATC) is a specialized certification in a technical area beyond the award of the A.S. degree.

A statewide articulation agreement between the State University System and the Community and State Colleges of Florida provides for the articulation of selected Associate in Science Degrees to selected Baccalaureate Degrees (State Board of Education Rule 6A-10.024). The programs available at IRSC are Nursing-Associate Degree, Radiography and Criminal Justice. Students should consult an advisor to determine specific requirements.

Other A.S. Degree programs not included in this agreement may also be accepted by public and private upper division institutions. This determination is made by the receiving university or college and not by Indian River State College. Students should consult an advisor to determine specific requirements.

Associate in Science/Associate in Applied Science Degree Requirements

To meet the requirements for the Associate in Science and Associate in Applied Science Degrees, the student must complete the required General Education courses and additional program requirements as specified in this catalog. In addition, the student must:

1. Complete at least 25% of the coursework required for their program at Indian River State College.
2. Submit the required placement scores (ACT, SAT, P.E.R.T.) to IRSC. Students who present ACT scores of Reading 19, English 17, Math 19 or SAT scores taken before March 1, 2016, of Verbal 440, Mathematics 440, or higher, or SAT scores taken after March 1, 2016, of Critical Reading 24 or higher, Math 24 or higher, may be exempt from taking the P.E.R.T. Students who graduated from a Florida public high school since 2007 and students who are serving as an active duty member of any branch of the United States armed services are exempt from mandatory placement testing. Non-exempt students who test into developmental courses must successfully complete the required courses in English, math, and reading. Since March 5, 2016, a new redesigned SAT test has been administered.
3. Achieve a cumulative grade point average of not less than 2.0 in all courses attempted (including transfer hours, but, excluding developmental education courses).
4. Students earning the Associate in Science Degree must earn a grade of C or higher in selected math and English courses that are designed as Gordon Rule (p. 58)courses.
5. Be recommended by the faculty to the President of the College for the confirmation of the degree.

It is the responsibility of the student to check his or her records to be ensure that all of the above graduation requirements are met. An advisor will assist students with course selections and in determining status toward meeting the graduation requirements.

Indian River State College Placement Rates:

The most recent placement rate for each program may be found at:2010-2011 Placement Rates, 2009-2010 Placement Rates,2008-2009 Placement Rates.

ASSOCIATE IN SCIENCE/ASSOCIATE IN APPLIED SCIENCE DEGREE GENERAL EDUCATION COURSES REQUIRED FOR GRADUATION

A minimum of 15 credits of General Education courses are required. See Program Guides for specific requirements. At least one course from Humanities/Fine Arts, Natural Science/Mathematics, and Social/Behavioral Science areas must be included:

DEGREE REQUIREMENTS

English

ENC 1101	English Composition I	3
	And	
ENC 1102	English Composition II	3
ENC 1107	Advanced College Writing	3
ENC 2210	Technical Writing	3
AML 2010	American Literature to 1865	3
AML 2020	American Literature after 1865	3
ENL 2012	English Literature to 1798	3
ENL 2022	English Literature after 1798	3
LIT 2110	World Literature: Homer to the Renaissance	3
LIT 2120	World Literature: Enlightenment to the Present	3
MMC 2100	Writing for Mass Communications I	3

Gordon Rule Course: must achieve a grade of C or higher for the Associate in Science Degree.

Humanities/Fine Arts

AML 2010	American Literature to 1865	3
AML 2020	American Literature after 1865	3
ARC 1701	Architectural History I	3
ARH 1000	Art Appreciation	3
ARH 2050	History of Art (Prehistoric - Gothic)	3
ARH 2051	History of Art (Renaissance through Modern)	3
DAN 2100	Dance Appreciation	3
ENC 1102	English Composition II	3
ENL 2012	English Literature to 1798	3
ENL 2022	English Literature after 1798	3
ENL 2330	Introduction to Shakespeare	3
HUM 1020	Introduction to Humanities	3
HUM 1233	Humanities Literature: Baroque to Present	3
IDS 1110	The Pursuit of Knowledge	3
IDS 1955	Interdisciplinary Study Abroad	3
LIT 1000	Introduction to Literature	3
LIT 2110	World Literature: Homer to the Renaissance	3
LIT 2120	World Literature: Enlightenment to the Present	3
MMC 2100	Writing for Mass Communications I	3
MUL 2010	Survey of Music Literature	3
MUL 2012	Survey of Music Literature - Musical Theater	3
MUY 2100	Humanities: Music and Music Therapy	3
PHI 1002	Philosophical Practice	3
PHI 1010	Introduction to Philosophy	3
PHI 1103	Critical and Creative Thinking	3
PHI 1113	Reason and Emotion	3
PHI 1624	Philosophy and Popular Culture	3
PHI 1635	Ethical Issues in Health Care	3
PHI 1801	Philosophy of Art	3
PHI 2100	Introduction to Logic	3
PHI 2620	Environmental Ethics	3
PHI 2630	Introduction to Ethics	3

PHP 1791	Existentialism	3
REL 1121	Religion and American Public Life	3
REL 1300	Introduction to World Religions	3
THE 1000	Introduction to Theatre (Drama)	3
THE 2300	Survey of Dramatic Literature	3

Gordon Rule Course: must achieve a grade of C or higher for the Associate in Science Degree.

Mathematics

MAC 1105	College Algebra	3
MAC 1114	Plane Trigonometry	3
MAC 1140	Precalculus Algebra	3
MAC 1147	Precalculus/Trigonometry	5
MAC 2311	Calculus I with Analytic Geometry	5
MAC 2233	Business Calculus I	3
MAD 2104	Discrete Mathematics	3
MAP 2302	Differential Equations	3
MGF 2106	Survey in Mathematics	3
MGF 2107	Explorations in Mathematics	3
MTG 2204	Elementary Geometry	3
STA 2023	Elementary Statistics I	3

Gordon Rule Course: must achieve a grade of C or higher for the Associate in Science Degree.

MAT 1033, MAT 1100 and MTB 1321 may only be used to meet general education requirements for A.A.S. Degree programs.

Natural Science

AST 1002	General Astronomy	3
AST 1002L	General Astronomy Laboratory	1
BSC 1005	Life Science	3
BSC 1005L	Life Science Lab	1
BSC 1084	Survey of the Human Body	4
BSC 2010	General Biology I	3
BSC 2010L	General Biology I Lab	1
BSC 2011	General Biology II	3
BSC 2011L	General Biology II Lab	1
BSC 2093	Anatomy and Physiology I	3
BSC 2093L	Anatomy and Physiology I Lab	1
BSC 2094	Anatomy and Physiology II	3
BSC 2094L	Anatomy and Physiology II Lab	1
CHM 1020	Introduction to Chemistry	3
CHM 1045	General Chemistry I	3
CHM 1045L	General Chemistry I Lab	1
CHM 1046	General Chemistry II	3
CHM 1046L	General Chemistry II Lab	1
CHM 2210	Organic Chemistry I	3
CHM 2210L	Organic Chemistry I Lab	1
CHM 2211	Organic Chemistry II	3
CHM 2211L	Organic Chemistry II Lab	1
GLY 1010	Introduction to Geology	3
MET 1001	Weather and Climate	3
OCB 1000	Introduction to Marine Biology	3
OCB 1000L	Introduction to Marine Biology Lab	1
OCB 1630	Marine Ecology	3
OCB 1630L	Marine Ecology Lab	1
OCB 2010	Marine Biology	3
OCE 2001	Introduction to Oceanography	3
PCB 1030	Introduction to Ecology	3
PHY 1020	Principles of Physics	3
PHY 2048	Physics with Calculus I	3
PHY 2048L	Physics with Calculus I Lab	1
PHY 2049	Physics with Calculus II	3
PHY 2049L	Physics with Calculus II Lab	1
PHY 2053	College Physics I	3
PHY 2053L	College Physics I Lab	1
PHY 2054	College Physics II	3
PHY 2054L	College Physics II Lab	1
PSC 1121	Survey of Physical Science	3

Social/Behavioral Science

AMH 2010	American History: Discovery through Reconstruction	3
AMH 2020	American History: Reconstruction to the Present	3
ANT 1000	Introduction to Anthropology	3
ANT 2140	Anthropology and Human Origins	3
ANT 2149	Archaeology in Popular Culture	3
ANT 2410	Cultural Anthropology	3
DEP 2004	Human Development	3
ECO 2013	Principles of Economics Macro	3
ECO 2023	Principles of Economics Micro	3
EUH 2000	Western Civilization: Origins to 1485	3
EUH 2001	Western Civilization: 1485 to 1815	3
EUH 2002	Western Civilization: 1815 to the Present	3
GEA 2000	World Regional Geography	3
INR 2002	Introduction to International Relations	3
INR 2500	Model United Nations	3
POS 1041	American Government	3
PSY 2012	Introduction to Psychology	3
SPC 1017	Fundamentals of Speech Communication	3
SYG 1361	Sociology of Death	3
SYG 2000	Introduction to Sociology	3
SYG 2010	Social Problems	3
WOH 2012	World History to 1500	3
WOH 2022	World History Since 1500	3
WOH 2040	World in the 20th Century	3

Additional Requirements - Electives

Additional credits may be required in specific technical fields to complete the degree program. Refer to the individual program listings for more information.

Accounting Technology

20450 - 60 Credits

This degree program prepares graduates for intermediate-level accounting positions within the wide range of industries prominent on the Research Coast. While providing a strong theoretical foundation, this program emphasizes the development of marketable skills required to succeed in today's highly competitive business world. Traditional classroom instruction is supplemented by "hands-on" micro-computer programming experience to mirror today's accounting services climate.

ASSOCIATE IN SCIENCE DEGREE IN ACCOUNTING TECHNOLOGY

20450 - 60 credits

DEGREE REQUIREMENTS

General Education - English

ENC 1101	English Composition I	3

General Education - Humanities/Fine Arts

See Associate in ScienceAssociate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Natural Science/Mathematics

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 6 credits

Major Field Required Courses - 33 credits

ACG 2001	Financial Accounting I	3
ACG 2011	Financial Accounting II	3
ACG 2071	Managerial Accounting	3
ACG 2100	Intermediate Accounting	3
BUL 2241	Business Law I	3
CTS 1205	Excel I	3
TAX 2000	Income Tax	3
CGS 1060	College Computing	3
	Or	
CGS 1100	Introduction to Computer Applications for Business	3
GEB 2214	Business Communications	3
	Or	
ENC 2210	Technical Writing	3
MNA 2100	Interpersonal Relations in Business	3
	Or	
SLS 1261	Essentials of Contemporary Leadership	3
MAT 1033	Intermediate Algebra	3
	Or	
MAC 1105	College Algebra or higher	3

MAC 1105 (p. 247) recommended for students seeking Bachelor's Degree Program in Accounting (p. 62).

Major Field Electives - Select 12 credits

APA 1152	Orientation to QuickBooks	1
CIS 1000	Introduction to Information Technology	3
COP 2700	Database Programming	3
ECO 2013	Principles of Economics Macro	3
ECO 2023	Principles of Economics Micro	3
FIN 2001	Introduction to Finance	3
GEB 1011	Introduction to Business	3
MAC 2233	Business Calculus I	3
MAN 2021	Principles of Management	3
MAR 2011	Principles of Marketing	3
PSY 2012	Introduction to Psychology	3
STA 2023	Elementary Statistics I	3

ECO 2013 (p. 206), ECO 2023 (p. 206), MAC 2233 (p. 248), and STA 2023 (p. 289) recommended for students seeking Bachelor's Degree Program in Accounting (p. 62).

ACCOUNTING TECHNOLOGY SPECIALIST CERTIFICATE - 60570

DEGREE REQUIREMENTS

Major Field Required Courses - 12 credits

ACG 2001	Financial Accounting I	3
ACG 2011	Financial Accounting II	3
GEB 2214	Business Communications	3
CGS 1060	College Computing	3
	Or	
CGS 1100	Introduction to Computer Applications for Business	3

ACCOUNTING TECHNOLOGY OPERATIONS CERTIFICATE - 60580

DEGREE REQUIREMENTS

Major Field Required Courses - 18 credits

ACG 2001	Financial Accounting I	3
ACG 2011	Financial Accounting II	3
ACG 2071	Managerial Accounting	3
ECO 2013	Principles of Economics Macro	3
CGS 1060	College Computing	3
	Or	
CGS 1100	Introduction to Computer Applications for Business	3
ENC 2210	Technical Writing	3
	Or	
GEB 2214	Business Communications	3

ACCOUNTING APPLICATIONS CERTIFICATE – 60010

27 Credits

Students may enhance their career success by first attaining a certificate in Accounting Applications. This certificate prepares the student for an entry level position in accounting. This may include performing accounting tasks in a variety of areas such as bookkeeping, payroll, accounts payable, accounts receivable, and tax preparation. Students are also encouraged to complete APA 1152 (p. 171) QuickBooks to be prepared for these positions. Students then have the option to complete the required General Education courses to earn the two-year A.S. Degree (p. 98), and possibly continue in the program to earn the four-year B.S. Degree (p. 62).

Gainful Employment

DEGREE REQUIREMENTS

Major Field Required Courses - 18 credits		
ACG 2001	Financial Accounting I	3
ACG 2011	Financial Accounting II	3
ACG 2071	Managerial Accounting	3
ACG 2100	Intermediate Accounting	3
TAX 2000	Income Tax	3
CGS 1100	Introduction to Computer Applications for Business	3
	Or	
CTS 1205	Excel I	3

Major Field Electives - Select 9 credits		
APA 1152	Orientation to QuickBooks	1
BUL 2241	Business Law I	3
CGS 1060	College Computing	3
COP 2700	Database Programming	3
ECO 2013	Principles of Economics Macro	3
	Or	
ECO 2023	Principles of Economics Micro	3
GEB 2214	Business Communications	3
	Or	
ENC 2210	Technical Writing	3
MNA 2100	Interpersonal Relations in Business	3
	Or	
SLS 1261	Essentials of Contemporary Leadership	3

Aquaculture Management

20880 - 60 Credits

Aquaculture is the state's fastest growing sector of agriculture and offers unmatched career opportunities. Today, all phases of aquaculture, from research to production to marketing, demand skilled employees who have the educational background and technical training to develop and apply new technological advances in the field. The A.S. degree in Aquaculture Management is designed for students who wish to enter the industry at a mid-management level after two years of college.

ASSOCIATE IN SCIENCE DEGREE IN AQUACULTURE MANAGEMENT

20880 - 60 credits

DEGREE REQUIREMENTS

General Education - English

ENC 1101	English Composition I	3

General Education - Humanities/Fine Arts

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Natural Science/Mathematics

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Humanities/Fine Arts or Natural Science/Mathematics or Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

Major Field Required Courses - 12 credits		
MAN 2021	Principles of Management	3
MAR 2011	Principles of Marketing	3
GEB 1011	Introduction to Business	3
CGS 1060	College Computing	3
	Or	
CGS 1100	Introduction to Computer Applications for Business	3

Major Field Electives - select 33 credits		
FAS 1010	Introduction to Aquaculture	3
FAS 1400	Introduction to Hydroponics	3
FAS 1402	Introduction to Aquaponics	3
FAS 2020	Principles of Fish Aquaculture	4
FAS 2150	Principles of Crustacean Aquaculture	4
FAS 2151	Principles of Molluscan Aquaculture	4
FAS 2252	Aquatic Animal Health Management	4
FAS 2412	Water Quality, Systems and Operations	4
FAS 2930	Special Topics in Aquaculture	1 - 4
FAS 2940	Aquaculture Internship	1-3
HOS 1010	Fundamentals of Horticulture	3

SBM 1000	Entrepreneurship	3
SWS 2104	Soils and Fertilizers	3

AQUACULTURE TECHNOLOGY CERTIFICATE - 60170

60170 - 26 credits

Students may enhance their career success by first attaining a certificate in Aquaculture Technology. This certificate prepares the student for an entry level position in the aquaculture industry. This may include performing aquaculture tasks in a variety of areas such as Systems Management and Operations, Health Management, or Nutrition and Feed Management in various aquatic production systems. Student then have the option to complete the required courses to earn the two-year A.S. Degree (p. 100).

Gainful Employment

DEGREE REQUIREMENTS

Select 26 credits from the following:

FAS 1010	Introduction to Aquaculture	3
FAS 1400	Introduction to Hydroponics	3
FAS 1402	Introduction to Aquaponics	3
FAS 2020	Principles of Fish Aquaculture	4
FAS 2150	Principles of Crustacean Aquaculture	4
FAS 2151	Principles of Molluscan Aquaculture	4
FAS 2252	Aquatic Animal Health Management	4
FAS 2412	Water Quality, Systems and Operations	4
FAS 2930	Special Topics in Aquaculture	1 - 4
FAS 2940	Aquaculture Internship	1-3
SBM 1000	Entrepreneurship	3
	Or	
GEB 1011	Introduction to Business	3

Air Conditioning, Refrigeration, and Heating Systems Technology

A0020 - 64 Credits

As a result of the warm weather, South Florida has one of the nation's most active air conditioning industries.Today, all phases of the air conditioning, heating, and refrigeration industry require skilled employees who have the educational background and technical training to develop and apply new technological advances in the field. At the completion of the Associate in Applied Science Degree in Air Conditioning, Refrigeration, and Heating Systems Technology, graduates are prepared for employment opportunities in residential, commercial and industrial air conditioning and refrigeration.

ASSOCIATE IN APPLIED SCIENCE DEGREE IN AIR CONDITIONING, REFRIGERATION, AND HEATING SYSTEMS TECHNOLOGY DEGREE

A0020 - 64 credits

DEGREE REQUIREMENTS

General Education - English

ENC 1101	English Composition I	3

General Education - Humanities/Fine Arts

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Natural Science/Mathematics

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

Or

SYG 2010	Social Problems	3

General Education - Humanities/Fine Arts or Natural Science/Mathematics or Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options. 3 credits

Major Field Required Courses - 37 credits

ACR 1008	Principles of A/C and Refrigeration (N)	3
ACR 1101	Applied Electricity I (Air Conditioning) (N)	3
ACR 1112	Basic Electricity for A/C and Refrigeration (N)	3
ACR 1103	HVAC Control Systems (N)	3
ACR 1113	Applied Electricity II (Air Conditioning) (N)	3
ACR 1208	Refrigerant Recovery and Reclaim (N)	1
ACR 1611	Heat (N)	3
ACR 1612	Heat Pump Systems (N)	3
ACR 1740	Components of Refrigeration (N)	3
ACR 2067	Heating and Cooling Load Calculations (N)	3
ACR 2071	Air Conditioning and Heating Service Management (N)	3
ACR 2421	Duct Systems (Air Conditioning and Heating) (N)	3

ACR 2745	Light Commercial Refrigeration and A/C (N)	3

Major Field Electives - Select 12 credits

ACR 1730	R-410A Certification (N)	1
ACR 1731	Green Mechanical Awareness Certification (N)	1
ACR 1760	Alternative Energy Applied to HVAC (N)	4
ACR 1761	Geothermal Energy for the Home Certification (N)	1
ACR 1946	Refrigeration and A/C Cooperative Work Experience I (N)	4
ACR 1947	Refrigeration and A/C Cooperative Work Experience II (N)	4
ACR 1948	Refrigeration and A/C Cooperative Work Experience III (N)	4
AER 2758	Automotive Air Conditioning and Heating (N)	4
ETM 1111	Energy in Building Design	3
GEB 1011	Introduction to Business	3

RESIDENTIAL AIR CONDITIONING, REFRIGERATION AND HEATING SYSTEMS ASSISTANT - 60640

60640 - 12 Credits

DEGREE REQUIREMENTS

Required Courses

ACR 1008	Principles of A/C and Refrigeration (N)	3
ACR 1101	Applied Electricity I (Air Conditioning) (N)	3
ACR 1112	Basic Electricity for A/C and Refrigeration (N)	3
ACR 1612	Heat Pump Systems (N)	3

AIR CONDITIONING, REFRIGERATION, AND HEATING SYSTEMS TECHNOLOGY CERTIFICATE - 60250

60250 - 24 Credits

Gainful Employment

DEGREE REQUIREMENTS

Major Field Required Courses

ACR 1008	Principles of A/C and Refrigeration (N)	3
ACR 1101	Applied Electricity I (Air Conditioning) (N)	3
ACR 1112	Basic Electricity for A/C and Refrigeration (N)	3
ACR 1113	Applied Electricity II (Air Conditioning) (N)	3
ACR 1611	Heat (N)	3
ACR 1612	Heat Pump Systems (N)	3
ACR 2067	Heating and Cooling Load Calculations (N)	3
ACR 2071	Air Conditioning and Heating Service Management (N)	3

Automotive Service Management Technology

A0030 - 68 Credits

In the Automotive Service Technology Program students receive a thorough foundation in all aspects of automotive services and maintenance. IRSC's program is certified by both the National Automotive Technicians Education Foundation (NATEF) and the National Institute of Automotive Service Excellence (ASE) in all eight categories, and provides essential training in both the theory and service of today's automotive systems and components.

ASSOCIATE IN APPLIED SCIENCE DEGREE IN AUTOMOTIVE SERVICE MANAGEMENT TECHNOLOGY

A0030 - 68 credits

DEGREE REQUIREMENTS

General Education - English

ENC 1101	English Composition I	3

General Education - Humanities/Fine Arts

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Natural Science/Mathematics

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - HumanitiesFine Arts or Natural Science/Mathematics or Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

Major Field Required Courses - 48 credits

AER 1070	Automotive Service Management (N)	2
AER 1081C	Introduction to Automotive Technology (N)	3
AER 1198	Engine Overhaul, Repair and Testing (N)	4
AER 1498	Suspension, Steering, and Alignment (N)	4
AER 1598	Automotive Brake Systems (N)	4
AER 1694C	Introduction to Automotive Electrical Systems (N)	3
AER 2298	Automatic Transmissions and Transaxles (N)	4
AER 2398	Manual Drive Train and Axles (N)	4
AER 2895C	Advanced Engine Performance (N)	4
AER 2898C	Engine Performance (N)	4
AER 2695C	Advanced Automotive Electrical Systems (N)	4
AER 2758	Automotive Air Conditioning and Heating (N)	4
DIM 2250	Hybrid and Alternative Fuel Vehicles (N)	4

Major Field Electives - Select 5 credits

AER 1810	Automotive Work Experience (N)	1 - 4
AER 1937	Special Topics in Automotive (N)	.5 - 4
CGS 1060	College Computing	3
CGS 1100	Introduction to Computer Applications for Business	3
GEB 1011	Introduction to Business	3
MNA 2100	Interpersonal Relations in Business	3
SBM 1000	Entrepreneurship	3

AUTOMOTIVE SERVICE TECHNICIAN - 60440

60440 - 24 credits

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers; provides technical skill proficiency; and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, occupation-specific skills, and knowledge of all aspects of the Transportation, Distribution and Logistics career cluster.

Gainful Employment

DEGREE REQUIREMENTS

Requirements List

AER 1081C	Introduction to Automotive Technology (N)	3
AER 1694C	Introduction to Automotive Electrical Systems (N)	3
AER 1598	Automotive Brake Systems (N)	4
AER 1498	Suspension, Steering, and Alignment (N)	4
AER 1070	Automotive Service Management (N)	2
AER 2898C	Engine Performance (N)	4
AER 2758	Automotive Air Conditioning and Heating (N)	4

GENERAL AUTOMOTIVE TECHNICIAN - 60560

60560 - 44 credits

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Transportation, Distribution and Logistics career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Transportation, Distribution and Logistics career cluster.

The content includes but is not limited to instruction in diagnosis of malfunctions in the repair of electrical, brake systems, steering and suspension systems; air conditioning system; diagnostics, automatic and manual transmissions, troubleshooting skills; and servicing, maintaining repairing all mechanical systems on gasoline automobiles including electrical, cooling, brake, suspension and related systems. The course content may include training in communication, leadership, human relations and employability skills; and safe, efficient work practices. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Automotive Service industry: planning, management, finance, technical and product skills , underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

Gainful Employment

DEGREE REQUIREMENTS

Requirements List

AER 1081C	Introduction to Automotive Technology (N)	3

AER 1694C	Introduction to Automotive Electrical Systems (N)	3
AER 1598	Automotive Brake Systems (N)	4
AER 1498	Suspension, Steering, and Alignment (N)	4
AER 1070	Automotive Service Management (N)	2
AER 2898C	Engine Performance (N)	4
AER 2758	Automotive Air Conditioning and Heating (N)	4
AER 1198	Engine Overhaul, Repair and Testing (N)	4
AER 2298	Automatic Transmissions and Transaxles (N)	4
AER 2398	Manual Drive Train and Axles (N)	4
AER 2695C	Advanced Automotive Electrical Systems (N)	4
AER 2895C	Advanced Engine Performance (N)	4

Building Construction Technology

20470 - 60 Credits

One of the prominent areas in the United States for new homes and commercial building construction, Florida provides many promising career opportunities for students involved in the building construction field. The Building Construction Technology program emphasizes practical application of management competencies needed by estimators, construction planners, field supervisors, project managers, sales managers, facility directors and managers, builders, and various entrepreneurs.

ASSOCIATE IN SCIENCE DEGREE IN BUILDING CONSTRUCTION TECHNOLOGY

20470 - 60 credits

DEGREE REQUIREMENTS

General Education - English

ENC 1101	English Composition I	3

General Education - Humanities/Fine Arts

ENC 1102	English Composition II	3

General Education - Natural Science/Mathematics

PHY 1020	Principles of Physics or higher	3
	And	
MAC 1105	College Algebra or higher	3

General Education - Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

Major Field Required Courses - 45 credits

BCN 1214	Materials and Methods of Construction - Basic Structure	3
BCN 1215	Materials & Methods of Construction - Finishes & Systems	3
BCN 1272	Plans Interpretation - Residential	3
BCN 1721	Construction Accounting and Cost Control	3
BCN 1765	Codes and Regulations	3
BCN 2440	Concrete Construction Methods	3
BCN 2592	Residential Energy Fundamentals	3
BCN 2598	Sustainable Building Systems	3
BCT 1562	Plumbing and Electrical Systems	3
BCT 1700	Construction Office Practices	3
BCT 1760	Building Codes and Specifications	3
BCT 2705	Construction Supervision	3
BCT 2770	Construction Estimating - Foundation to Basic Structure	3
BCT 2772	Construction Estimating - Finishes and Systems	3
BCN 2275	Plans Interpretation - Commercial	3

Business Administration

20780 - 60 Credits

This degree prepares students for careers as supervisors and middle managers within both profit-making and governmental sector organizations. Specialized areas include Retail Marketing, Hospitality Management, Insurance, Real Estate and Customer Service, as well as others. While providing students with a sound theoretical foundation, this degree program emphasizes the development of marketable skills in planning, organizing, interpersonal dynamics, and technology.

ASSOCIATE IN SCIENCE DEGREE IN BUSINESS ADMINISTRATION

20780 - 60 credits

DEGREE REQUIREMENTS

General Education - English

ENC 1101	English Composition I	3

General Education - Humanities/Fine Arts

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Natural Science/Mathematics

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Humanities/Fine Arts or Natural Science/Mathematics or Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

Major Field Required Courses - 30 credits

BUL 2241	Business Law I	3
FIN 2001	Introduction to Finance	3
GEB 1011	Introduction to Business	3
MAR 2011	Principles of Marketing	3
SBM 1000	Entrepreneurship	3
APA 1111	Introduction to Accounting	3
	Or	
ACG 2001	Financial Accounting I	3
GEB 2214	Business Communications	3
	Or	
ENC 2210	Technical Writing	3
MAN 2021	Principles of Management	3
	Or	
MNA 2345	Supervision	3
MNA 2100	Interpersonal Relations in Business	3
	Or	
SLS 1261	Essentials of Contemporary Leadership	3
QMB 1001	Mathematics of Business	3
	Or	
ACG 2011	Financial Accounting II	3

Major Field Electives - select 15 credits

Suggested Specialization Electives – Hospitality Management

FOS 2201	Food Service Sanitation Management	3
FSS 2263	Food Merchandising and Service	3
HFT 1000	Introduction to Hospitality and Tourism	3

Suggested Specialization Electives – Insurance Marketing

RMI 1090	Customer Service Representative	3
RMI 2500	Individual Life and Health Insurance	3
RMI 2600	Property and Casualty Insurance	12

Suggested Specialization Electives – Real Estate Marketing

REE 1040	Real Estate Principles and Practices I	4
REE 1180	Real Estate Residential Appraisal ABI	6.5

Suggested Specialization Electives – Customer Service

MKA 2021	Salesmanship	3
MKA 2161	Customer Relations	1

Suggested Specialization Electives – Finance

FIN 1100	Personal Finance	3
MKA 2021	Salesmanship	3
MKA 2161	Customer Relations	1

Suggested Specialization Electives – Golf Shop and Golf Services Management

GCO 2632	Golf Course Organization and Administration	3

Suggested Specialization Electives – Golf Facilities Administration and Management

GCO 1402	Turfgrass Science	3
GCO 1947	Golf Course Design Concepts	3
GCO 2632	Golf Course Organization and Administration	3
HFT 1000	Introduction to Hospitality and Tourism	3

Suggested Specialization Electives – Golf Facilities Food and Beverage Management

GCO 2632	Golf Course Organization and Administration	3
FOS 2201	Food Service Sanitation Management	3
FSS 2263	Food Merchandising and Service	3
MKA 2161	Customer Relations	1

Suggested Specialization Electives – Aviation

ATT 1941	Professional Development in Aviation I	3 - 6
ATF 1941	Professional Development in Aviation II	2 - 9

Major Field Electives

AMH 2010	American History: Discovery through Reconstruction	3
AMH 2020	American History: Reconstruction to the Present	3
APA 1152	Orientation to QuickBooks	1
ECO 2023	Principles of Economics Micro	3
FIN 1100	Personal Finance	3
GEB 1350	Introduction to International Business	3
GEB 2941	Applied Internship	3-4
MAN 2300	Introduction to Human Resource Management	3
MKA 1303	Mid-Management Seminar I	4
MNA 1821	Electronic Commerce	3
MNA 2932	Professional Development	.5 - 5
SLS 1421	Personal and Career Development	3
CGS 1060	College Computing	3
	Or	
CGS 1100	Introduction to Computer	3

	Applications for Business	
	Or	
CIS 1000	Introduction to Information Technology	3

Maximum of three courses with CGS, MAN, MKA, MNA, or SLS Prefix

Any one course from the following areas: courses with FRE, GER, ASL, or SPN Prefix.

Students may enhance their career success by first attaining a Certificate In Business Management (60030) by completing 24 credits from the Major Field Required or the Major Field Electives sections listed in the degree. Attaining the A.S. Degree is then simply a matter of completing the General Education required courses and the remaining 25 credits of major field and elective courses.

BUSINESS SPECIALIST CERTIFICATE - 60520

60520 - 12 credits

Students may enhance their career success by attaining a certificate as a Business Specialist. This certificate prepares the student to become proficient in planning and organizing with an emphasis on managing resources, theories of management, marketing, and decision making. Attaining the A.S. Degree is then simply a matter of completing the General Education required courses and also the remaining major field and elective courses.

DEGREE REQUIREMENTS

Major Field Required Courses

GEB 1011	Introduction to Business	3
MAN 2021	Principles of Management	3
MAR 2011	Principles of Marketing	3
SLS 1261	Essentials of Contemporary Leadership	3
	Or	
GEB 2941	Applied Internship	3-4

BUSINESS OPERATIONS CERTIFICATE - 60530

60530 - 18 credits

Students may enhance their career success by attaining a certificate in Business Operations. This certificate prepares the student to become proficient in planning and organizing with an emphasis on managing resources, theories of management, marketing, and decision making. It will also provide additional training for people that currently own or operate a small business. Attaining the A.S. Degree is then simply a matter of completing the General Education required courses and also the remaining major field and elective courses.

DEGREE REQUIREMENTS

Major Field Required Courses

BUL 2241	Business Law I	3
FIN 2001	Introduction to Finance	3
GEB 1011	Introduction to Business	3
MAN 2021	Principles of Management	3
MAR 2011	Principles of Marketing	3
SLS 1261	Essentials of Contemporary Leadership	3
	Or	
GEB 2941	Applied Internship	3-4

HUMAN RESOURCES ADMINISTRATOR - 60540

60540 - 21 credits

Students may enhance their career success by attaining a certificate as a Human Resources Administrator. This certificate prepares the student to become proficient in planning and organizing with an emphasis on managing resources, theories of management, marketing, and decision making. It will also provide additional training in human recourses management, recruitment, staffing, technical skills and employment laws. Attaining the A.S. Degree is then simply a matter of completing the General Education required courses and also the remaining major field and elective courses.

DEGREE REQUIREMENTS

Major Field Required Courses

BUL 2241	Business Law I	3
FIN 2001	Introduction to Finance	3
GEB 1011	Introduction to Business	3
MAN 2021	Principles of Management	3
MAN 2300	Introduction to Human Resource Management	3
MAR 2011	Principles of Marketing	3
SLS 1261	Essentials of Contemporary Leadership	3
	Or	
GEB 2941	Applied Internship	3-4

BUSINESS MANAGEMENT CERTIFICATE - 60030

60030 - 24 credits

Students may enhance their career success by first attaining a certificate in Business Management. This certificate prepares the student to become proficient in planning and organizing with an emphasis on managing resources, theories of management, marketing, and decision making. It will also provide additional training for small business enterprises and also for individuals that currently own or operate a small business and/or entrepreneurs. Attaining

the A.S. Degree is then simply a matter of completing the General Education required courses and the remaining 25 credits of major field and elective courses.

Gainful Employment

DEGREE REQUIREMENTS

Select any 24 credits from the following:

BUL 2241	Business Law I	3
FIN 2001	Introduction to Finance	3
GEB 1011	Introduction to Business	3
MAR 2011	Principles of Marketing	3
SBM 1000	Entrepreneurship	3
APA 1111	Introduction to Accounting	3
	Or	
ACG 2001	Financial Accounting I	3
CGS 1060	College Computing	3
	Or	
CGS 1100	Introduction to Computer Applications for Business	3
	Or	
CIS 1000	Introduction to Information Technology	3
GEB 2214	Business Communications	3
	Or	
ENC 2210	Technical Writing	3
MAN 2021	Principles of Management	3
	Or	
MNA 2345	Supervision	3
MNA 2100	Interpersonal Relations in Business	3
	Or	
SLS 1261	Essentials of Contemporary Leadership	3
QMB 1001	Mathematics of Business	3
	Or	
ACG 2011	Financial Accounting II	3
FOS 2201	Food Service Sanitation Management	3
FSS 2263	Food Merchandising and Service	3
HFT 1000	Introduction to Hospitality and Tourism	3
RMI 1090	Customer Service Representative	3
RMI 2500	Individual Life and Health Insurance	3
RMI 2600	Property and Casualty Insurance	12
REE 1040	Real Estate Principles and Practices I	4
REE 1180	Real Estate Residential Appraisal ABI	6.5
MKA 2021	Salesmanship	3
MKA 2161	Customer Relations	1
FIN 1100	Personal Finance	3
GCO 1402	Turfgrass Science	3
GCO 1947	Golf Course Design Concepts	3
GCO 2632	Golf Course Organization and Administration	3
ATF 1941	Professional Development in Aviation II	2 - 9
ATT 1941	Professional Development in Aviation I	3 - 6
AMH 2010	American History: Discovery through Reconstruction	3
AMH 2020	American History: Reconstruction to the Present	3
ECO 2023	Principles of Economics Micro	3
GEB 1350	Introduction to International Business	3
MAN 2300	Introduction to Human Resource Management	3
MKA 1303	Mid-Management Seminar I	4
MNA 1821	Electronic Commerce	3
MNA 2932	Professional Development	.5 - 5

BUSINESS MANAGEMENT CAREER DEVELOPMENT PROGRAM - 60190

60190 - 24 Credits

The Professional Career Program is a joint effort of the Career Development Program and the Business Management Department of IRSC. It is designed to enhance the job skills and education of women and men, in order to improve their potential for job satisfaction and promotion. Participants completing the 24 college credit hour curriculum are awarded a Technical Certificate in Business Management which may transfer toward the A.S. Degree in Business Administration. Three sections of a Management Seminar permit participants to achieve 12 credits for work experience during their course of study.

Gainful Employment

DEGREE REQUIREMENTS

Major Field Required Courses

CGS 1060	College Computing	3
	Or	
CGS 1100	Introduction to Computer Applications for Business	3
MAN 2021	Principles of Management	3
	Or	
MAR 2011	Principles of Marketing	3
GEB 1011	Introduction to Business	3
GEB 2941	Applied Internship	3-4
MKA 1303	Mid-Management Seminar I	4
SLS 1261	Essentials of Contemporary Leadership	3
QMB 1001	Mathematics of Business	3
MKA 2161	Customer Relations	1

ENTREPRENEURSHIP CERTIFICATE - 60430

60430 - 12 credits

The purpose of this program is to teach students the fundamentals of starting and operating a business venture while presenting entrepreneurship as a viable career option. Coursework covers opportunity recognition, business planning, cash flow and financial management, market research, e-commerce, entrepreneurship, and the overall structure of business.

DEGREE REQUIREMENTS

Major Field Required Courses		
GEB 1011	Introduction to Business	3
MAR 2011	Principles of Marketing	3
SBM 1000	Entrepreneurship	3
	and select one from the following:	
ACG 2001	Financial Accounting I	3
BUL 2241	Business Law I	3
MKA 2021	Salesmanship	3
MNA 1821	Electronic Commerce	3
GEB 2941	Applied Internship	3-4

Civil Engineering Technology

20490 - 63 Credits

Civil Engineering Technology is devoted to the application of engineering principles and the implementation of technological advances in the civil engineering design process. The program provides students with the skills necessary to enter the field as a technician. After the student obtains a sound foundation in fundamentals through general and technical core courses, the individual may pursue studies in a variety of special engineering and scientific courses according to the individual's interests and educational objectives. This degree can also be a basis for the B.A.S. in Organizational Management at Indian River State College.

ASSOCIATE IN SCIENCE DEGREE IN CIVIL ENGINEERING TECHNOLOGY

20490 - 63 credits

DEGREE REQUIREMENTS

General Education - English		
ENC 1101	English Composition I	3
General Education - Humanities/Fine Arts		
ENC 1102	English Composition II	3
General Education - Natural Science/Mathematics		
MAC 1105	College Algebra	3
	or higher	
	And	
PHY 1020	Principles of Physics	3
	or higher	

General Education - Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

Major Field Required Courses - 30 credits		
BCN 1214	Materials and Methods of Construction - Basic Structure	3
EGN 1111	Engineering Graphics	3
EGN 1002	Introduction to Engineering	3
ETD 1320	Introduction to AutoCAD	3
ETD 2340	AutoCAD Level 2	3
ETD 2551	Computer Aided Drafting - Civil	3
ETD 2554C	Computer Aided Drafting - Surveying	3
GIS 2041	Introduction to GIS and GPS Applications	3
GIS 1060	Introduction to GIS with ArcGIS	3
STA 2023	Elementary Statistics I	3
Major Field Electives - select 18 credits		
BCN 1250	Architectural Drafting Principles	3
BCN 1272	Plans Interpretation - Residential	3
BCN 2040	Zero Energy Building Design and Construction	3
BCN 2598	Sustainable Building Systems	3
BCT 1940	Professional Practice	3
ETD 1842	3D Visualization with AutoCAD	3
ETD 2395	Computer Aided Drafting - Architectural	3
OCE 2001	Introduction to Oceanography	3
PCB 1030	Introduction to Ecology	3

Computer Information Technology

20500 - 60 Credits

This degree provides excellent preparation for a career in computer information technology including but not limited to: applications specialist, programmer, network specialist, and Internet developer. The curriculum provides the conceptual and technological skills required to analyze business situations and to design and develop computer and network hardware and software.

Students are encouraged to consider an area of specialization to enhance their employability. To see recommended curriculum frameworks focused toward such specializations, refer to the semester-by-semester diagrams posted on the IRSC website under Programs and Careers and follow the links under Advanced Technology.

ASSOCIATE IN SCIENCE DEGREE IN COMPUTER INFORMATION TECHNOLOGY

20500 - 60 credits

DEGREE REQUIREMENTS

General Education - English

ENC 1101	English Composition I	3

General Education - Humanities/Fine Arts

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Natural Science/Mathematics

MAC 1105	College Algebra or higher	3

General Education - Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Humanities/Fine Arts or Natural Science/Mathematics or Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

Major Field Required Courses - 18 credits

CGS 1540	Database Fundamentals	3
CIS 1000	Introduction to Information Technology	3
CTS 1104	Windows OS Fundamentals	3
CTS 1334	Windows Server	3
CTS 2106	Linux Fundamentals	3
CTS 2120	Security Fundamentals (Security+)	3

Major Field Electives - Select 27 Credits

Networking Specialization

CET 1178	A+ Certification Hardware	3
CET 1179C	A+ Certification Software	3
CTS 1650	CCNA1: Introduction to Networks	3
CTS 2651	CCNA2: Routing & Switching Essentials	3
CTS 2652	CCNA3: Scaling Networks	3
CTS 2653	CCNA4: Connecting Networks	3

Programming Specialization

COP 2000	Introduction to Computer Programming I	3
COP 2030	Introduction to Python	3
COP 1332	Visual Basic Programming	3
COP 2661	Mobile Application Development	3
COP 2700	Database Programming	3
COP 2800	Java Programming	3
COP 2830	Web Programming	3
COP 2842	Developing Websites Using Python/MySQL	3

Other Electives

CET 1854	Introduction to Wireless Technology	3
CGS 1500	Microsoft Word	3
CGS 1522	Microsoft PowerPoint	3
CGS 1821	Website Development	3
CGS 1876	Web Animation	3
CTS 1155	Introduction to Help Desk Concepts	3
CTS 1205	Excel I	3
CTS 2342C	Windows Server Identity Services	3
SPC 1608	Public Speaking	3

Up to 3 credits from any course with CEN, CGS, CIS, CTS, or COP prefixes.

COMPUTER INFORMATION DATA SPECIALIST - 60620

60620 - 9 credits

DEGREE REQUIREMENTS

Major Field Required Courses - 9 credits

CET 1178	A+ Certification Hardware	3
CET 1179C	A+ Certification Software	3
CGS 1540	Database Fundamentals	3

HELP DESK SUPPORT TECHNICIAN - 60630

60630 - 18 credits

DEGREE REQUIREMENTS

Major Field Required Courses - 18 credits

CIS 1000	Introduction to Information Technology	3
CGS 1700	Introduction to Operating Systems	3
CET 1178	A+ Certification Hardware	3
CET 1179C	A+ Certification Software	3
CTS 1650	CCNA1: Introduction to Networks	3
CTS 2106	Linux Fundamentals	3

WEB PRODUCTION CERTIFICATE - 60410

60410 - 15 Credits

DEGREE REQUIREMENTS

Major Field Electives - Select 15 credits

CGS 1821	Website Development	3
CGS 1843	Introduction to E-Commerce	3
CGS 1876	Web Animation	3
COP 2800	Java Programming	3

COP 2830	Web Programming	3
COP 2000	Introduction to Computer Programming I	3

INFORMATION TECHNOLOGY SUPPORT SPECIALIST CERTIFICATE - 60390

60390 - 18 Credits

Gainful Employment

DEGREE REQUIREMENTS

Major Field Electives - Select 18 credits

CGS 1100	Introduction to Computer Applications for Business	3
CET 1178	A+ Certification Hardware	3
CET 1179C	A+ Certification Software	3
CTS 1650	CCNA1: Introduction to Networks	3
CTS 1104	Windows OS Fundamentals	3
CTS 1334	Windows Server	3
CTS 1155	Introduction to Help Desk Concepts	3

COMPUTER PROGRAMMING SPECIALIST CERTIFICATE - 60400

60400 - 18 Credits

DEGREE REQUIREMENTS

Major Field Electives - Select 18 credits

COP 1332	Visual Basic Programming	3
COP 2800	Java Programming	3
COP 2830	Web Programming	3
COP 2000	Introduction to Computer Programming I	3
COP 2001	Computer Programming II	3
COP 2360	C# Programming	3
COP 2700	Database Programming	3

OFFICE SPECIALIST CERTIFICATE - 60420

60420 - 18 Credits

DEGREE REQUIREMENTS

Major Field Required courses - 18 credits

CGS 1500	Microsoft Word	3
CGS 1522	Microsoft PowerPoint	3
CGS 1540	Database Fundamentals	3
CIS 1000	Introduction to Information Technology	3
CTS 1104	Windows OS Fundamentals	3
CTS 1205	Excel I	3

Criminal Justice Technology

20520 - 60 Credits

This degree offers the student a broad background in the history, philosophy, organization, management, and operation of the criminal justice system. In law enforcement, an emphasis is placed on the role of the police in the process of social control and in the legal and philosophical issues involved. In corrections, emphasis is placed on the supervision, protection, care, custody, and control of offenders. Opportunities for employment are available in law enforcement agencies, correctional institutions, juvenile courts, social service agencies, crime laboratories, and security agencies.

ASSOCIATE IN SCIENCE DEGREE IN CRIMINAL JUSTICE TECHNOLOGY

20520 - 60 credits

DEGREE REQUIREMENTS

General Education - English

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97)		3 credits
	And	
ENC 1101	English Composition I	3

General Education - Humanities/Fine Arts

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Natural Science/Mathematics

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Humanities/Fine Arts or Natural Science/Mathematics or Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

Major Field Required Courses - 18 credits

CCJ 2020	Introduction to Criminal Justice	3
CJC 2000	Introduction to Corrections	3
CJL 2500	Introduction to the Courts	3
CJL 2062	Constitutional Law	3

CJL 2100	Criminal Law	3
CCJ 1600	Deviant Behavior	3
Major Field Electives - Select 24 credits		
CCJ 2022	Contemporary Issues in Criminal Justice	1-3
CJC 2162	Probation and Parole	3
CJD 1940	Internship in Criminal Justice	3 - 4
CJE 1000	Introduction to Law Enforcement	3
CJE 1002	Police Procedures	3
CJE 1325	Foundation of Law Enforcement Leadership I	3
CJE 2300	Police Organization and Administration	3
CJE 2580	Investigative Interviews	3
CJE 2600	Criminal Investigation	3
CJJ 2002	The Juvenile and the Law	3
CJL 1000	Fundamentals of Law	3
CJL 2130	Rules of Evidence	3
CJL 2403	Criminal Procedure	3
DSC 1002	Terrorism and U.S. Security	3
ECO 2023	Principles of Economics Micro	3
POS 1041	American Government	3
SYG 2010	Social Problems	3
SPC 1608	Public Speaking	3
CGS 1100	Introduction to Computer Applications for Business	3
	Or	
CGS 1060	College Computing	3
ECO 2000	Introduction to Economics	3
	Or	
ECO 2013	Principles of Economics Macro	3

Culinary Management

20810 - 60 Credits

This degree prepares students for careers in the Culinary Industry and for food service related professional to enhance technical skill proficiency, and prepare them for career advancement in the Hospitality and Tourism career cluster, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Hospitality and Tourism career cluster. For further information on the degree program, contact The Culinary Institute at IRSC at (772) 226-2511.

ASSOCIATE IN SCIENCE DEGREE IN CULINARY MANAGEMENT

20810 - 60 credits

DEGREE REQUIREMENTS

General Education - English		
ENC 1101	English Composition I	3
General Education - Humanities/Fine Arts		
See Associate in Science Associate in Applied Science Degree General Education Options (p. 97)		3 credits
PHI 1103	Critical and Creative Thinking recommended	3
General Education - Natural Science/Mathematics		
See Associate in Science Associate in Applied Science Degree General Education Options (p. 97)		3 credits
General Education - Social Behavioral Science		
See Associate in Science Associate in Applied Science Degree General Education Options (p. 97)		3 credits
PSY 2012	Introduction to Psychology recommended	3
General Education - Humanities/Fine Arts or Natural Science/Mathematics or Social/Behavioral Science		
See Associate in Science Associate in Applied Science Degree General Education Options (p. 97)		3 credits
ECO 2013	Principles of Economics Macro	3
	Or	
ECO 2023	Principles of Economics Micro recommended	3
Major Field Required Courses - 38 credits		
HUN 1203	Culinary Nutrition	3
FOS 2201	Food Service Sanitation Management	3
FSS 1203C	Quantity Food Production I	3
FSS 1240C	Classical Cuisine	3
FSS 1246C	Baking and Pastries I	3
FSS 2204C	Quantity Food Production II	4
FSS 2206C	Quantity Food Production III	4
FSS 2242C	International and Regional Foods	3
FSS 2251	Food & Beverage Management	3
FSS 2284C	Catering and Banquet Management	3
FSS 2248C	Pantry and Garde Manger	3
FSS 2500	Food and Beverage Cost Control	3

Core culinary courses FSS 1203C, FSS 1240C, FSS 1246C, FSS 2204C, FSS-2206C (p. 226), and FSS 2242C require a grade of "C" or higher for successful program progression and completion. Students may enhance their career success by first attaining a series of college credit certificates by completing various courses found within the Major Field Required and Major Field Required Electives area of the A.S. in Culinary Management degree.

Major Field Required Electives - Select 7 credits		
APA 1111	Introduction to Accounting	3
CGS 1100	Introduction to Computer Applications for Business	3
FSS 1930	Creative Culinary Cooking	.5 -

		3
FSS 2263	Food Merchandising and Service	3
FSS 2942	Internship in Culinary Management	1-3
FSS 2950C	Culinary Competition	1-2
GEB 1011	Introduction to Business	3
HFT 2223	Human Relations and Supervisory Development	3
MAN 2021	Principles of Management	3
MAR 2011	Principles of Marketing	3
MNA 2345	Supervision	3
MKA 1303	Mid-Management Seminar I	4

CHEF'S APPRENTICE - 60470

60470 - 12 Credits

This certificate program is part of the Culinary Management A.S. degree program and trains students in basic, entry-level skills related to the food service and hospitality industry. Content includes but is not limited to sanitation and safety; maintenance and operation of equipment; recognition and identification of foods; proper storage of foods; methods of food preparation; usage of foods; methods of cooking; communication skills; math skills; computer applications; professionalism; culinary organization; and food and beverage purchasing.

DEGREE REQUIREMENTS

Major Field Required Courses 12 credits

CGS 1100	Introduction to Computer Applications for Business	3
FOS 2201	Food Service Sanitation Management	3
FSS 1203C	Quantity Food Production I	3
FSS 2251	Food & Beverage Management	3

FSS 1203C requires a grade of "C" or higher for successful certificate completion.

CULINARY ARTS MANAGEMENT OPERATIONS - 60480

60480 - 18 Credits

This certificate program is part of the Culinary Management A.S. degree program and prepares students for employment in commercial and institutional positions such as Bakers, Pantry Cooks, Prep Cooks, and Lead Cooks in the culinary industry and/or provides supplemental training for persons previously or currently employed in these occupations. Content includes but is not limited to sanitation and safety; maintenance and operation of equipment; recognition and identification of foods; proper storage of foods; methods of food preparation; usage of foods; methods of cooking; communication skills; math skills; computer applications; professionalism; culinary organization; and food and beverage purchasing.

DEGREE REQUIREMENTS

Major Field Required Courses - 18 credits

CGS 1100	Introduction to Computer Applications for Business	3
FOS 2201	Food Service Sanitation Management	3
FSS 1203C	Quantity Food Production I	3
FSS 1240C	Classical Cuisine	3
FSS 1246C	Baking and Pastries I	3
FSS 2251	Food & Beverage Management	3

FSS 1203C, FSS 1240C, and FSS 1246C require a grade of "C" or higher for successful certificate completion.

CULINARY ARTS - 60490

60490 - 35 Credits

This certificate program is part of the Culinary Management A.S. degree program and prepares students for employment in commercial and institutional positions such as Bakers, Pantry Cooks, Prep Cooks, and Lead Cooks in the culinary industry and/or provides supplemental training for persons previously or currently employed in these occupations. Content includes but is not limited to sanitation and safety; maintenance and operation of equipment; recognition and identification of foods; proper storage of foods; methods of preparation; usage of foods; methods of cooking; Garde manger; nutrition; baking; communication skills; math skills; computer applications; professionalism; culinary organization; food and beverage purchasing; food and beverage management. The course content also includes training in communication, leadership, human relations, employability skills and safe, efficient work practices.

Gainful Employment

DEGREE REQUIREMENTS

Major Field Required Courses - 35 credits

CGS 1100	Introduction to Computer Applications for Business	3
FOS 2201	Food Service Sanitation Management	3
FSS 1203C	Quantity Food Production I	3
FSS 1240C	Classical Cuisine	3
FSS 1246C	Baking and Pastries I	3
FSS 2204C	Quantity Food Production II	4
FSS 2206C	Quantity Food Production III	4
FSS 2248C	Pantry and Garde Manger	3
FSS 2251	Food & Beverage Management	3
FSS 2942	Internship in Culinary Management	1-3
HUN 1203	Culinary Nutrition	3

FSS 1203C, FSS 1240C, FSS 1246C, FSS 2204C, and FSS-2206C require a grade of "C" or higher for successful certificate completion.

Dental Assisting Technology and Management

20750 - 70 Credits

(Selective Admission)

Indian River State College awards a Dental Assisting Technology and Management Associate in Science Degree to each student who satisfactorily completes the required course of study. The purpose of the program is to provide students with a comprehensive general education and the fundamental entry-level skills to become competent dental assistants through specialized technical training. Additionally, students complete coursework to prepare for work in related fields such as dental marketing, dental office management, or dental education. The program is accredited by the Commission on Dental Accreditation (CODA). Upon successful completion of the curriculum, the graduate will be prepared for a career as an expanded function dental assistant as established in the state Dental Practice Act.

ASSOCIATE IN SCIENCE DEGREE IN DENTAL ASSISTING TECHNOLOGY AND MANAGEMENT

20750 - 70 credits

DEGREE REQUIREMENTS

General Education - English

ENC 1101	English Composition I	3

General Education - Humanities/Fine Arts

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Natural Science/Mathematics

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Humanities/Fine Arts or Natural Science/Mathematics or Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education courses may be taken prior to acceptance into the program or must be completed while enrolled in the program.

Major Field Required Courses - 50 credits

DEA 1028	Pre-Clinical Orientation	6
DEA 1028L	Pre-Clinical Orientation Lab	2
DES 1800	Introduction to Clinical Procedures	2
DES 1800L	Introduction to Clinical Procedures Lab	1 - 2
DES 1100	Elements of Dental Materials	2
DES 1100L	Elements of Dental Materials Lab	1
DES 1840	Preventive Dentistry	2
DES 1200L	Dental Radiography Lab	1
DES 1020	Head, Neck & Dental Anatomy	3
DEA 1805	Clinical Practice I	2
DEA 1805L	Clinical Practice I Lab	4
DES 1832	Expanded Functions I	2
DES 1832L	Expanded Functions I Lab	1
DES 1833	Expanded Functions II	2
DES 1833L	Expanded Functions II Lab	1
DES 2502	Dental Office Management	2
DEA 1136	Related Dental Theory	4
DEA 1931	Orthodontics Expanded Functions	1
DES 1051	Nitrous Oxide Monitoring	1
DES 1600	Health Office Emergencies	2
DES 1200	Dental Radiography	2
DEA 1855	Clinical Practice II	1
DEA 1855L	Clinical Practice II Lab	4

Specialization Electives - Select 5 credits:

Select 5 credits from Electives listed below:

Students may choose to specialize in an area for career opportunities by taking five credits from one of the Specializations.

Educational Methodologies And Strategies

SLS 1101	Student Success	3
EME 2040	Introduction to Technology for Educators	3
EDF 2085	Introduction to Diversity & Exceptionalities for Educators	3
HSC 1242	Instructing Health Professionals	1 - 3
CGS 1060	College Computing	3
	Or	
CGS 1100	Introduction to Computer Applications for Business	3

Marketing

GEB 1011	Introduction to Business	3
ECO 2013	Principles of Economics Macro	3
ECO 2023	Principles of Economics Micro	3
MAR 2011	Principles of Marketing	3
MKA 2021	Salesmanship	3
MKA 1303	Mid-Management Seminar I	4
CGS 1060	College Computing	3

	Or	
CGS 1100	Introduction to Computer Applications for Business	3

Practice Management

APA 1111	Introduction to Accounting	3
MAN 2021	Principles of Management	3
MAN 2300	Introduction to Human Resource Management	3
MKA 2161	Customer Relations	1
MNA 2100	Interpersonal Relations in Business	3
MNA 2345	Supervision	3
HSC 1632C	Overview of Healthcare Delivery	3
HSA 2182C	Health Services Management Concepts	3
CGS 1060	College Computing	3
	Or	
CGS 1100	Introduction to Computer Applications for Business	3

All core curriculum courses require a grade of "C" or higher.

DENTAL ASSISTING TECHNOLOGY AND MANAGEMENT - APPLIED TECHNOLOGY DIPLOMA - B0050

B0050 - 50 Credits

(Selective Admission)

Students may enhance their career success by first completing the 50 credit hour Applied Technology Diploma which is designed to prepare students for a career as an Expanded Functions Dental Assistant. Attaining the A.S. Degree is then simply a matter of completing the General Education required courses and specialty elective courses.

Gainful Employment

DEGREE REQUIREMENTS

Major Field Required Courses - 50 credits

DES 1020	Head, Neck & Dental Anatomy	3
DEA 1028	Pre-Clinical Orientation	6
DEA 1028L	Pre-Clinical Orientation Lab	2
DES 1200	Dental Radiography	2
DES 1200L	Dental Radiography Lab	1
DES 1800	Introduction to Clinical Procedures	2
DES 1800L	Introduction to Clinical Procedures Lab	1 - 2
DES 1840	Preventive Dentistry	2
DES 1832	Expanded Functions I	2
DES 1832L	Expanded Functions I Lab	1
DES 1100	Elements of Dental Materials	2
DES 1100L	Elements of Dental Materials Lab	1
DES 1600	Health Office Emergencies	2
DEA 1805	Clinical Practice I	2
DEA 1805L	Clinical Practice I Lab	4
DES 1833	Expanded Functions II	2
DES 1833L	Expanded Functions II Lab	1
DES 2502	Dental Office Management	2
DES 1051	Nitrous Oxide Monitoring	1
DEA 1855	Clinical Practice II	1
DEA 1855L	Clinical Practice II Lab	4
DEA 1931	Orthodontics Expanded Functions	1
DEA 1136	Related Dental Theory	4

All core curriculum courses require a grade of "C" or higher.

Dental Hygiene

20530 - 88 Credits

(Selective Admission)

Indian River State College awards an Associate in Science Degree in Dental Hygiene to each student who satisfactorily completes the required course of study. The purpose of the program is to prepare quality health care professionals to meet the needs of a diverse community. Graduates will possess the required entry-level skills to provide comprehensive education, preventive and therapeutic service, which reflect the core competencies essential to the dental hygiene profession. The program is accredited by the Commission on Dental Accreditation (CODA). Upon successful completion of the NBDH and state licensure exam, the graduate will be awarded the Registered Dental Hygienist (R.D.H.) credential.

ASSOCIATE IN SCIENCE DEGREE IN DENTAL HYGIENE

20530 - 88 credits

DEGREE REQUIREMENTS

General Education – Humanities/Fine Arts

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97).		3 credits
PHI 1103	Critical and Creative Thinking recommended	3

General Education - Natural Science/Mathematics

BSC 2093	Anatomy and Physiology I	3
BSC 2093L	Anatomy and Physiology I Lab	1
BSC 2094	Anatomy and Physiology II	3
BSC 2094L	Anatomy and Physiology II Lab	1
CHM 1020	Introduction to Chemistry or higher	3

General Education - Social/Behavioral Science

PSY 2012	Introduction to Psychology	3
SYG 2000	Introduction to Sociology	3

General Education courses may be taken prior to acceptance into the program or must be completed while enrolled in the program.

Major Field Required Courses - 68 credits

DEH 1003	Pre-Clinical Dental Hygiene	1
DEH 1003L	Pre-Clinical Dental Hygiene Lab	2
DEH 1130	Oral Embryology and Histology	2
DEH 1300	Pharmacology	2
DEH 1800	Clinical Dental Hygiene I	2
DEH 1800L	Clinical Dental Hygiene I Lab	3
DEH 1802	Clinical Dental Hygiene II	2
DEH 1802L	Clinical Dental Hygiene II Lab	2
DEH 2400	General and Oral Pathology	2
DEH 2602	Periodontology	2
DEH 2602L	Periodontology Lab	1
DEH 2702	Community Dental Health	2
DEH 2702L	Community Dental Health Lab	1
DEH 2804	Clinical Dental Hygiene III	2
DEH 2804L	Clinical Dental Hygiene III Lab	4
DEH 2806	Clinical Dental Hygiene IV	2
DEH 2806L	Clinical Dental Hygiene IV Lab	5
DES 1020	Head, Neck & Dental Anatomy	3
DES 1051	Nitrous Oxide Monitoring	1
DES 1100	Elements of Dental Materials	2
DES 1100L	Elements of Dental Materials Lab	1
DES 1200	Dental Radiography	2
DES 1200L	Dental Radiography Lab	1
DES 1600	Health Office Emergencies	2
DES 1800	Introduction to Clinical Procedures	2
DES 1800L	Introduction to Clinical Procedures Lab	1 - 2
DES 1840	Preventive Dentistry	2
DES 2051C	Pain Control and Anesthesia	2
DES 2530C	Expanded Functions for Dental Hygienists	2
HUN 1201	Nutrition	3
SPC 1608	Public Speaking	3
MCB 2010	Microbiology for Health Sciences	3
MCB 2010L	Microbiology Lab for Health Sciences	1

All core curriculum and natural science courses require a grade of "C" or higher. BSC-2093 (p. 179) and BSC-2093L (p. 179) must be completed prior to taking DEH courses. Dental Hygiene applicants are required to take BSC-2010 (p. 179) and BSC-2010L (p. 179), as a prerequisite for BSC-2093 (p. 179) and BSC-2093L (p. 179). CHM-1020 (p. 184) and BSC-2094 (p. 179) and BSC-2094L (p. 179) must be completed by the end of the Fall semester, first year. MCB-2010 (p. 253) and MCB-2010L (p. 253) must be completed by the end of the Spring semester, first year.

Digital Media Technology

20760 - 60 Credits

This program prepares students for careers in the rapidly emerging digital media, modeling, simulation, and gaming industries. Specializations within this degree include computer graphic design, animation, modeling, and entry-level game development. This degree requires the integration of art principles, design concepts, communication skills, and computer fluency to enter the field of digital media technology as a technical specialist. Students obtain a solid foundation in digital media through a core of required courses and continue their education and training in their preferred area of specialization. This degree can also be a basis for the B.A.S. in Digital Media at Indian River State College.

ASSOCIATE IN SCIENCE DEGREE IN DIGITAL MEDIA TECHNOLOGY

20760 - 60 credits

DEGREE REQUIREMENTS

General Education - English

ENC 1101	English Composition I	3

General Education - Humanities/Fine Arts

ENC 1102	English Composition II	3

General Education - Natural Science/Mathematics

PHY 1020	Principles of Physics or higher	3
	And	
MAC 1105	College Algebra or higher	3

General Education - Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

Field Required Courses - 36 credits

DIG 1000	Digital Media Principles	3
DIG 1115	Digital Imaging Fundamentals with Photoshop	3
DIG 2030	Digital Video Fundamentals	3
DIG 2251	Digital Audio Fundamentals	3
DIG 2302	3D Digital Animation I	3
DIG 2303	3D Digital Animation 2	3
DIG 2430	Digital Story Development for Film and Gaming	3
DIG 2581	Digital Media Portfolio Fundamentals	3
GRA 1129	Visualization Basics	3
GRA 1151	Illustrator Fundamentals	3
GRA 2160	Digital Animation I	3
GRA 2161	Digital Animation 2	3

Electives - Select 9 credits

ART 1201C	Color and Design I	3
ART 1203C	Color and Design II	3
ART 1300C	Drawing I	3

CGS 1821	Website Development	3
COP 2800	Java Programming	3
COP 2000	Introduction to Computer Programming I	3
COP 2001	Computer Programming II	3
DIG 1930	Special Topics in Digital Media	.5 - 3
DIG 2116	Photoshop Level 2	3
DIG 2203	Digital Video 2 Production	3
DIG 2500	Fundamentals of Interactive Web Design	3
GRA 1206	Typography	3
GRA 1121	Publication Design	3
GRA 2152	Illustrator Level 2	3
PGY 1800	Principles of Digital Photography	3
PGY 1801	Introduction to Digital Photography	1

DIGITAL MEDIA SUPPORT CERTIFICATE - 60360

60360 - 15 Credits

The Digital Media Support Certificate offers basic preparation for a career as a Digital Media Support Technician or developer. Students are trained in video creation and 2D/3D animation production techniques as well as basic graphic design, photo enhancement, illustrations, layout, and non-linear video editing techniques.

DEGREE REQUIREMENTS

Major Field Required Courses – 15 credits

DIG 1115	Digital Imaging Fundamentals with Photoshop	3
DIG 2030	Digital Video Fundamentals	3
DIG 2203	Digital Video 2 Production	3
GRA 2160	Digital Animation I	3
GRA 2161	Digital Animation 2	3
	Or	
CGS 1876	Web Animation	3

DIGITAL MEDIA PRODUCTION CERTIFICATE - 60370

60370 - 24 Credits

The Digital Media Production Certificate offers advanced preparation for a career as a Digital Media Production Creator or Web Production Assistant. Students are trained in the advanced operations of digital media creation, Web content design, and animation development as well as complex graphic design, photo enhancement, illustrations, layout, and non-linear video editing and production techniques.

Gainful Employment

DEGREE REQUIREMENTS

Major Field Required Courses – 24 credits

DIG 1115	Digital Imaging Fundamentals with Photoshop	3
GRA 1151	Illustrator Fundamentals	3
DIG 2302	3D Digital Animation I	3
CGS 1821	Website Development	3
GRA 2161	Digital Animation 2	3
DIG 2030	Digital Video Fundamentals	3
DIG 2203	Digital Video 2 Production	3
GRA 2160	Digital Animation I	3
	Or	
CGS 1876	Web Animation	3

Drafting and Design Technology

20540 - 62 Credits

This program prepares students for a career as a professional CAD technician. The disciplines covered include architecture, civil engineering, surveying, mechanical engineering, and landscape design, with emphasis in the latest technologies used for rendering, architectural "walk-through," three-dimensional computer animation, and solid and surface modeling. Surveying, architectural, civil and mechanical engineering firms, as well as county offices and manufacturing plants are among the potential employers of this program's graduates. This degree can also be a basis for the B.A.S. in Organizational Management at Indian River State College.

ASSOCIATE IN SCIENCE DEGREE IN DRAFTING AND DESIGN TECHNOLOGY

20540 - 62 credits

DEGREE REQUIREMENTS

General Education - English

ENC 1101	English Composition I	3

General Education - Humanities/Fine Arts

ENC 1102	English Composition II	3

General Education - Natural Science/Mathematics

PHY 1020	Principles of Physics or higher	3
	And	
MAC 1105	College Algebra or higher	3

General Education - Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

Major Field Required Courses - 30 credits

BCN 1250	Architectural Drafting Principles	3
BCN 2592	Residential Energy Fundamentals	3
EGN 1111	Engineering Graphics	3

ETD 1320	Introduction to AutoCAD	3
ETD 1842	3D Visualization with AutoCAD	3
ETD 2340	AutoCAD Level 2	3
ETD 2364	3D Modeling with Solidworks	3
ETD 2395	Computer Aided Drafting - Architectural	3
ETD 2551	Computer Aided Drafting - Civil	3
GIS 1060	Introduction to GIS with ArcGIS	3
Major Field Electives - Select 17 credits		
BCN 1272	Plans Interpretation - Residential	3
BCN 2040	Zero Energy Building Design and Construction	3
BCN 2598	Sustainable Building Systems	3
BCN 2599	Green Building and Energy Efficiency	3
BCT 1760	Building Codes and Specifications	3
BCT 1940	Professional Practice	3
EGN 1002	Introduction to Engineering	3
ETD 2365	Computer Aided Drafting - Mechanical	3
ETD 2554C	Computer Aided Drafting - Surveying	3
ETD 2930	Special Topics in Drafting	1 - 3
ETM 1111	Energy in Building Design	3
PGY 1801	Introduction to Digital Photography	1

AUTOCAD FOUNDATIONS CERTIFICATE - 60320

60320 - 15 Credits

The AutoCAD Foundations Certificate offers excellent preparation for a career as an entry-level CAD technician. Students are trained in the basic operations in AutoCAD's two major disciplines as well as technical drawing, dimensioning, and sketching techniques.

DEGREE REQUIREMENTS

Major Field Required Courses – 15 credits		
ETD 1320	Introduction to AutoCAD	3
ETD 2340	AutoCAD Level 2	3
ETD 2365	Computer Aided Drafting - Mechanical	3
BCN 1250	Architectural Drafting Principles	3
	Or	
EGN 1111	Engineering Graphics	3
ETD 2395	Computer Aided Drafting - Architectural	3
	Or	
ETD 2551	Computer Aided Drafting - Civil	3

DRAFTING CERTIFICATE - 60330

60330 - 24 Credits

The Drafting Certificate offers outstanding preparation for a career as a superior CAD technician. Students are trained in the advanced operations in AutoCAD's three major disciplines as well as technical drawing, dimensioning, sketching, and advanced 3D modeling techniques.

Gainful Employment

DEGREE REQUIREMENTS

Major Field Required Courses – 24 credits		
BCN 1250	Architectural Drafting Principles	3
EGN 1111	Engineering Graphics	3
ETD 1320	Introduction to AutoCAD	3
ETD 2340	AutoCAD Level 2	3
ETD 2364	3D Modeling with Solidworks	3
ETD 2365	Computer Aided Drafting - Mechanical	3
ETD 2395	Computer Aided Drafting - Architectural	3
ETD 2551	Computer Aided Drafting - Civil	3

Early Childhood Education

20480 - 60 Credits

This program is designed for students pursuing a career in the child care industry. Career goals include teaching in the private sector or teacher's aide in public and private programs.

ASSOCIATE IN SCIENCE DEGREE IN EARLY CHILDHOOD EDUCATION

20480 - 60 credits

DEGREE REQUIREMENTS

General Education - English		
ENC 1101	English Composition I	3
General Education - Humanities/Fine Arts		
PHI 1103	Critical and Creative Thinking	3
General Education - Natural Science/Mathematics		
See Associate in Science Associate in Applied Science Degree General Education Options (p. 97).		3 credits
	Or	
	Recommended	
BSC 1005	Life Science	3
General Education - Social/Behavioral Science		
See Associate in Science Associate in Applied Science Degree General Education Options (p. 97).		3 credits
	Or	
	Recommended	
PSY 2012	Introduction to Psychology	3

General Education - Natural Science/Mathematics or Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97).		3 credits
	Or	
	Recommended	
SYG 2000	Introduction to Sociology	3

Major Field Required Courses - 30 credits

CHD 1220	Introduction to Child Development	3
CHD 1332	Creative Experiences for Children	3
CHD 2800	Administering a Child Care Center	3
EDF 1021	Social Elements in Early Childhood Education	3
EEC 1202	Principles of Early Childhood Curriculum	3
EEC 1601	Observing and Recording Behavior	3
EEC 1946	Practicum in CDA Assessment	3
EEX 1013	Special Needs in Early Childhood Education	3
EEC 1730	Basic Childhood Nutrition	3
CHD 2334	Early Childhood Language Arts and Reading	3

Major Field Electives - Select 15 credits

CGS 1060	College Computing	3
	Or	
CGS 1100	Introduction to Computer Applications for Business	3
EEC 1520	Early Childhood Organizational Leadership and Mgmt.	3
EEC 1523	Programming for Early Childcare Administrators	3
EEC 1947	Practicum in Teaching Strategies	3
EEC 2948	Practicum in Early Childhood Curriculum	3
EEC 2949	Practicum Child Care Center Management	3
ENC 1102	English Composition II	3
GEB 1011	Introduction to Business	3
MGF 2106	Survey in Mathematics	3
PPE 2001	Person and Personality Development	3
HUS 1540	Family Relations	3

PRESCHOOL SPECIALIZATION - 60450

60450- 12 credits

The purpose of this program is to prepare students as early childhood educators with a preschool specialization or to provide supplementary training for persons previously or currently employed in these occupations.

The content includes but is not limited to growth and development, early childhood education; establishing and maintaining a safe, clean, healthy, learning environment; guidance techniques and classroom management; communication; identification of child abuse and neglect; implementation of rules and regulations; nutrition; family interaction; legal and professional **responsibilities**; and employability skills. This program prepares individuals to assume major care giving and educational responsibilities with home or center-based programs for preschool children.

DEGREE REQUIREMENTS

Major Field Required Courses - 12 credits

CHD 1220	Introduction to Child Development	3
CHD 1332	Creative Experiences for Children	3
EEC 1202	Principles of Early Childhood Curriculum	3
EEC 1946	Practicum in CDA Assessment	3

CHILD CARE CENTER MANAGEMENT SPECIALIZATION - 60460

60460 - 12 credits

The purpose of this program is to prepare students as child care center administrators with the knowledge and skills to effectively manage a quality childcare program or to provide supplementary training for persons previously or currently employed in these occupations.

Students must have completed the Preschool Specialization program to enroll in the Child Care Center Management Specialization program.

DEGREE REQUIREMENTS

Major Field Required Courses - 12 credits

CHD 2800	Administering a Child Care Center	3
EDF 1021	Social Elements in Early Childhood Education	3
EEC 1601	Observing and Recording Behavior	3
EEX 1013	Special Needs in Early Childhood Education	3

CHILD DEVELOPMENT AND EARLY INTERVENTION CERTIFICATE - 60040

60040 - 36 Credits

Students may enhance their career success by first attaining a Certificate in Child Development Early Intervention by completing 36 credits from the **Major Field Required** and **Major Field Electives** section of the Early Childhood Education degree. Attaining the A.S. Degree is then simply a matter of completing the **General Education required courses** and the remaining 12 credits of major field and elective courses.

Gainful Employment

DEGREE REQUIREMENTS

Major Field Electives - Select 36 credits

CHD 1220	Introduction to Child Development	3
CHD 1332	Creative Experiences for Children	3
CHD 2334	Early Childhood Language Arts and Reading	3
CHD 2800	Administering a Child Care Center	3
EDF 1021	Social Elements in Early Childhood Education	3
EEC 1202	Principles of Early Childhood Curriculum	3
EEC 1601	Observing and Recording Behavior	3
EEC 1946	Practicum in CDA Assessment	3
EEX 1013	Special Needs in Early Childhood Education	3
EEC 1730	Basic Childhood Nutrition	3
CGS 1060	College Computing	3
EEC 1520	Early Childhood Organizational Leadership and Mgmt.	3
EEC 1947	Practicum in Teaching Strategies	3
EEC 2948	Practicum in Early Childhood Curriculum	3
EEC 2949	Practicum Child Care Center Management	3
ENC 1102	English Composition II	3
MGF 2106	Survey in Mathematics	3
PPE 2001	Person and Personality Development	3
HUS 1540	Family Relations	3

Electrical Power Technology

20850 - 68 Credits

(Selective Admission)

The nuclear power industry is experiencing a period of unprecedented need for power plant technicians both nationally and within the state of Florida. The Nuclear Regulatory Commission (NRC) estimates that more than 41,000 new technicians will be needed over the next 20 years and the starting salaries for these technicians are above the national average throughout the country. The Electrical Power Technology program offers the following options: instrumentation and control, and electrical (ICE); mechanical; and radiation protection. In addition to an admissions application, candidates must successfully pass a series of tests recommended by our industrial partners. Attendance at an information session is required.

ASSOCIATE IN SCIENCE DEGREE IN ELECTRICAL POWER TECHNOLOGY

20850 - 68 credits

DEGREE REQUIREMENTS

General Education - English

ENC 1101	English Composition I	3

General Education - Humanities/Fine Arts

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Natural Science/Mathematics

MAC 1105	College Algebra or higher And	3
PHY 1020	Principles of Physics or higher	3

General Education - Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

Major Field Required Courses - 12 credits

EET 1215C	Introduction to Electronics	3
EET 1015C	DC Circuits	3
EET 1025C	AC Circuits	3
ETI 1701	Industrial Safety	3

Major Field Electives - Select 41 credits:

Instrumentation And Control And Electrical (ICE)

CHM 1020	Introduction to Chemistry	3
EET 2141C	Electronic Devices I	3
EET 2515C	Motors and Generators	3
EET 2527C	Motor Starters, Controllers, and Breakers	3
EET 2547C	Transformers and Power Distribution	3
ETI 1805C	Introduction to Rigging and Lifting	3
ETI 2315C	Fluid and Pneumatic Instrumentation	3
ETS 2520	Process Measurement Fundamentals	3
ETS 2530	Process Control Technology	3
ETS 2542	Programmable Logic Controllers I	3

Mechanical

CGS 1100	Introduction to Computer Applications for Business	3
CHM 1020	Introduction to Chemistry	3
ETD 2930	Special Topics in Drafting	1 - 3
ETI 1805C	Introduction to Rigging and Lifting	3
ETI 2408C	Welding Processes	3
ETI 2425C	Metallurgical Properties and Dynamics	3
ETI 2451C	Mechanical Maintenance for Power Plants	3
ETM 2315C	Pneumatics and Hydraulics	3
ETP 2231C	Power Plant Machines and Components I	3
ETP 2232C	Power Plant Machines and	3

	Components II	
ETP 2930	Special Topics in Electrical Power Technology	3

Radiation Protection

CGS 1100	Introduction to Computer Applications for Business	3
CHM 1045	General Chemistry I	3
CHM 1045L	General Chemistry I Lab	1
CHM 1046	General Chemistry II	3
CHM 1046L	General Chemistry II Lab	1
ETD 2930	Special Topics in Drafting	1 - 3
ETP 2210	Radiation Fundamentals	3
ETP 2211	Radiation Instrumentation	3
ETP 2212	Radiation Detection Principles	3
ETP 2213	Radiological Safety and Protection	3
ETP 2219	Radiation Protection/Capstone Project	3
ETP 2930	Special Topics in Electrical Power Technology	3

Major Field Elective

EET 1180C	Troubleshooting and Repair Techniques	3
EET 2325C	Telecommunication Circuits I	3
EET 2335C	Communication Circuits II	3
ETI 1000	Industrial Plant Tools and Equipment	3
ETP 1220	Power Plant Fundamentals	3
ETP 1230	Power Plant Systems	3
ETP 2930	Special Topics in Electrical Power Technology	3
ETP 2941	Professional Internship for Maintenance Technicians	2
ETS 2544	Programmable Logic Controllers II	3

Electronics Engineering Technology

20860 - 68 Credits

This degree will prepare you for a career exploring some of the most exciting technologies of the 21st Century. Laser technologies used in surgery and micromachining miniature medical parts; photonics systems powered with the latest electro-optical components and circuits; fiber optic networks and systems carrying internet data, video and voice; wireless networks, devices and infrastructure that enable access to all media types in any location; robotic systems used in industrial automation, and advanced instrumentation and control of food, chemical, or mining industries are among the fields available to graduates from this program.

The demand for technicians in these new technology fields is at all-times high. Starting salaries for entry-level technicians are higher than the national average. The Electronics Engineering Technology degree offers specialization options in lasers and photonics, robotics and industrial automation, process control, computer technology, telecommunication, and solar energy.

ASSOCIATE IN SCIENCE DEGREE IN ELECTRONICS ENGINEERING TECHNOLOGY

20860 - 68 credits

DEGREE REQUIREMENTS

General Education - English

ENC 1101	English Composition I	3

General Education - Humanities/Fine Arts

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Natural Science/Mathematics

MAC 1105	College Algebra or higher	3
	And	
PHY 1020	Principles of Physics or higher	3

General Education - Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

Major Field Required Courses - 39 credits

CET 1112C	Logic Circuits I	3
CET 1113C	Logic Circuits II	3
EET 1015C	DC Circuits	3
EET 1025C	AC Circuits	3
EET 1180C	Troubleshooting and Repair Techniques	3
EET 1215C	Introduction to Electronics	3
EET 2141C	Electronic Devices I	3
EET 2142C	Electronic Devices II	3
ETS 2210	Introduction to Photonics	3
ETS 2220	Fiber Optics and Data Communications	3
EET 2325C	Telecommunication Circuits I	3
ETS 2542	Programmable Logic Controllers I	3
ETS 2544	Programmable Logic Controllers II	3

Suggested Specialization Electives - Select 14 credits:

Biomedical Electronics

ETS 2424	Biomedical Electronics	3
ETS 2436	Biomedical Instrumentation	3
HSC 2531	Medical Terminology I	3

Computer Technology

CET 1178	A+ Certification Hardware	3
CET 1179C	A+ Certification Software	3
CET 1588	Network + Certification	3
CET 1854	Introduction to Wireless Technology	3
CET 2891	Wireless Network Security Certification	3

Laser-Photonics

EET 2950	Electronics Capstone Project	3
ETS 2215	Geometrical Optics	3
ETS 2230	Laser Technologies	3

Robotics-Manufacturing

EET 2950	Electronics Capstone Project	3
ETS 2550	SCADA Systems	3
ETS 2630	Manufacturing Processes	3
ETS 2676	Introduction to Robotics	3

Telecommunications

CET 1854	Introduction to Wireless Technology	3
CET 2891	Wireless Network Security Certification	3
EET 2335C	Communication Circuits II	3

Solar Energy

ETP 1420	Solar Thermal Systems	3
ETP 2410	Solar Photovoltaic Systems	3

Major Field Electives

CET 1178	A+ Certification Hardware	3
CET 1179C	A+ Certification Software	3
CET 1588	Network + Certification	3
CET 1854	Introduction to Wireless Technology	3
CET 2891	Wireless Network Security Certification	3
EET 2930	Special Topics in Electronic Engineering (N)	.5 - 3
ETS 2215	Geometrical Optics	3
ETS 2230	Laser Technologies	3
ETS 2424	Biomedical Electronics	3
ETS 2630	Manufacturing Processes	3
ETS 2676	Introduction to Robotics	3
HSC 2531	Medical Terminology I	3

SOLAR ENERGY TECHNICIAN - 60510

60510 - 12 Credits

DEGREE REQUIREMENTS

Major Field Required Courses 12 credits

EET 1015C	DC Circuits	3
EET 1025C	AC Circuits	3
ETP 1420	Solar Thermal Systems	3
ETP 2410	Solar Photovoltaic Systems	3

LASERS AND PHOTONICS CERTIFICATE - 60290

60290 - 12 Credits

DEGREE REQUIREMENTS

Major Field Required Courses – 12 credits

EET 1015C	DC Circuits	3
EET 1025C	AC Circuits	3
ETS 2210	Introduction to Photonics	3
ETS 2215	Geometrical Optics	3

ROBOTICS AND SIMULATION TECHNICIAN - 60550

60550 - 12 Credits

DEGREE REQUIREMENTS

Major Field Required Courses 12 credits

ETS 2542	Programmable Logic Controllers I	3
ETS 2544	Programmable Logic Controllers II	3
ETS 2630	Manufacturing Processes	3
ETS 2676	Introduction to Robotics	3

BASIC ELECTRONICS CERTIFICATE - 60300

60300 - 14 Credits

DEGREE REQUIREMENTS

Major Field Electives – Select 14 credits

EET 1015C	DC Circuits	3
EET 1025C	AC Circuits	3
EET 1215C	Introduction to Electronics	3
ETS 2210	Introduction to Photonics	3
	Select any one of the following courses:	
EET 2930	Special Topics in Electronic Engineering (N)	.5 - 3
CET 1112C	Logic Circuits I	3
EET 2141C	Electronic Devices I	3

ELECTRONIC TECHNOLOGY CERTIFICATE - 60310

60310 - 31 Credits

Gainful Employment

DEGREE REQUIREMENTS

Major Field Required Courses – 31 credits

CET 1112C	Logic Circuits I	3
CET 1113C	Logic Circuits II	3
EET 1015C	DC Circuits	3
EET 1025C	AC Circuits	3
EET 1215C	Introduction to Electronics	3
EET 2141C	Electronic Devices I	3
EET 2142C	Electronic Devices II	3
ETS 2210	Introduction to Photonics	3
ETS 2542	Programmable Logic Controllers I	3
ETS 2544	Programmable Logic Controllers II	3

Select any one of the following courses:

EET 2930	Special Topics in Electronic Engineering (N)	.5 - 3

EET 1180C	Troubleshooting and Repair Techniques	3
EET 2325C	Telecommunication Circuits I	3

Emergency Administration and Management

20730 - 60 Credits

This degree prepares students for careers in Emergency Management and Homeland Security. The degree is also for all professional or volunteer agency personnel interested in enhancing technical competencies and preparing themselves for advanced work in disaster relief and humanitarian operations. The curriculum is based on an all-hazards approach to emergency management and emphasizes effective operating procedures under all emergency conditions. Graduates of the program typically find employment as aid agency operators, emergency managers and planners, and homeland security specialists.

ASSOCIATE IN SCIENCE DEGREE IN EMERGENCY ADMINISTRATION AND MANAGEMENT

20730 - 60 credits

DEGREE REQUIREMENTS

General Education - English

ENC 1101	English Composition I	3

General Education - Humanities/Fine Arts

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

PHI 2630	Introduction to Ethics recommended	3

General Education - Natural Science/Mathematics

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

PSC 1121	Survey of Physical Science	3
	Or	
MET 1001	Weather and Climate recommended	3

General Education - Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

POS 1041	American Government recommended	3

POS 1041 is a required Common Prerequisite Course for transfer into the B.S. in Public Administration.

General Education - Humanities/Fine Arts or Natural Science/Mathematics or Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

ECO 2013	Principles of Economics Macro	3
	Or	
ECO 2023	Principles of Economics Micro recommended	3

ECO 2013 or ECO 2023 is a required Common Prerequisite Courses for transfer into the B.S. in Public Administration.

Major Field Required Courses - 18 credits

FFP 2801	Incident Command System	3
FFP 2820	Principles of Emergency Management	3
FFP 2840	Disaster Operations	3
DSC 1222	Psychological Management of Disasters	3
DSC 1641	Exercise Design and Evaluation	3
DSC 2949	Internship in Emergency Management	3

Major Field Electives - Select 27 credits

DSC 1002	Terrorism and U.S. Security	3
DSC 1003	Introduction to Homeland Security	3
DSC 1004	Introduction to NRF and NIMS	3
DSC 1033	Weapons of Mass Destruction	3
DSC 1035	Recognition and Investigation of Terrorism	3
DSC 1552	Critical Infrastructure Protection	3
DSC 1642	Field Training Exercise	1 - 3
DSC 1930	Current Topics in Public Safety	.5 - 5
DSC 2212	Disaster Response, Mitigation and Recovery	3
MAN 2021	Principles of Management	3
PHI 1103	Critical and Creative Thinking	3
SYG 2010	Social Problems	3
CGS 1060	College Computing	3
	Or	
CGS 1100	Introduction to Computer Applications for Business	3

EMERGENCY MANAGEMENT CERTIFICATE - 60260

60260 - 24 Credits

Gainful Employment

DEGREE REQUIREMENTS

Major Field Required Courses – 24 credits

DSC 1002	Terrorism and U.S. Security	3
DSC 1033	Weapons of Mass Destruction	3

DSC 1222	Psychological Management of Disasters	3
DSC 1641	Exercise Design and Evaluation	3
DSC 2212	Disaster Response, Mitigation and Recovery	3
FFP 2801	Incident Command System	3
FFP 2820	Principles of Emergency Management	3
FFP 2840	Disaster Operations	3

HOMELAND SECURITY EMERGENCY MANAGER CERTIFICATE - 60270

60270 - 24 Credits

Gainful Employment

DEGREE REQUIREMENTS

Major Field Required Courses – 24 credits

DSC 1002	Terrorism and U.S. Security	3
DSC 1003	Introduction to Homeland Security	3
DSC 1004	Introduction to NRF and NIMS	3
DSC 1033	Weapons of Mass Destruction	3
DSC 1035	Recognition and Investigation of Terrorism	3
DSC 1552	Critical Infrastructure Protection	3
DSC 2212	Disaster Response, Mitigation and Recovery	3
FFP 2801	Incident Command System	3

Emergency Medical Services

20550 - 73 Credits

The Associate in Science in Emergency Medical Services (EMS) degree is awarded to students completing the required course of study. The purpose of the program is to prepare competent entry-level paramedics in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. The program provides both the general education foundation of an Associate in Science degree and a 53-credit major course of study meeting the requirements set forth in the National EMS Education Standards in State of Florida statutes and administrative code for emergency medical technicians and paramedics. The program accomplishes this through classroom lecture, skills laboratory, clinical rotations, and field experience and internship courses. The Indian River State College EMS Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professional (CoAEMSP).

The program's participants will also receive the Emergency Medical Technology Applied Technology Diploma and the Paramedic Certificate as they complete the required courses for those programs making them eligible to take the National Registry of Emergency Medical Technicians' (NREMT) EMT and Paramedic certification exams. Graduates passing the NREMT exams will be awarded the Nationally Registered EMT or Paramedic credential and will be eligible to apply for State of Florida certification/licensure as an EMT or paramedic.

ASSOCIATE IN SCIENCE DEGREE IN EMERGENCY MEDICAL SERVICES

20550 - 73 credits

DEGREE REQUIREMENTS

General Education - Humanities/Fine Arts

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97) 3 credits

General Education - Natural Science/Mathematics

BSC 2010	General Biology I	3
BSC 2010L	General Biology I Lab	1
BSC 2093	Anatomy and Physiology I	3
BSC 2093L	Anatomy and Physiology I Lab	1
BSC 2094	Anatomy and Physiology II	3
BSC 2094L	Anatomy and Physiology II Lab	1

Natural Science courses require a grade of C or higher.

General Education - Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options 3 credits

General Education courses may be taken prior to acceptance into the program or must be completed while enrolled in the program.

Major Field Required Courses - 52 credits

EMS 1119	Emergency Medical Technician	9
EMS 1119L	Emergency Medical Technician Lab	2
EMS 1431	EMT Clinical/Field Experience	1
EMS 2601C	Paramedic I	12
EMS 2602C	Paramedic II	12
EMS 2664	Paramedic Clinical/Field Experience I	5
EMS 2665	Paramedic Clinical/Field Experience II	5
EMS 2659	Paramedic III	6

Major Field Electives - Select 3 credits

MAT 1033	Intermediate Algebra or higher	3
	Or	
MAT 1100	Quantitative Reasoning or higher	3

EMERGENCY MEDICAL TECHNICIAN – APPLIED TECHNOLOGY DIPLOMA - B0010

B0010 - 12 Credits

(Selective Admission)

The Applied Technology Diploma in Emergency Medical Technology is awarded to students completing the required 12-credit course of study. The program prepares competent, entry-level emergency medical technicians in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. The program meets the requirements set forth in the National EMS Education Standards in State of Florida statutes and administrative code through classroom lecture, skills laboratory, clinical rotations, and field internship courses.

Graduates of the program are eligible to take the National Registry of Emergency Medical Technicians' (NREMT) EMT certification exam. Graduates passing the exam will be awarded the Nationally Registered Emergency Medical Technician credential and will be eligible to apply for licensure with the State of Florida.

DEGREE REQUIREMENTS

Requirements List

EMS 1119	Emergency Medical Technician	9
EMS 1119L	Emergency Medical Technician Lab	2
EMS 1431	EMT Clinical/Field Experience	1

PARAMEDIC CERTIFICATE - 60130

60130 - 42 Credits

(Selective Admission)

The Paramedic certificate is awarded to students completing the required 42-credit course of study. This program prepares competent entry-level paramedics in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. The program meets the requirements set forth in the National EMS Education Standards in State of Florida statutes and administrative code for paramedic through classroom lecture, skills laboratory, clinical rotations, and field internship courses.

The Indian River State College EMS Paramedic Program is accredited by the Commission of Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Graduates of the program are eligible to take the National Registry of Emergency Medical Technicians' (NREMT) paramedic certification exam. Graduates passing the NREMT exam will be awarded the Nationally Registered Paramedic credential and will be eligible to apply for State of Florida certification/licensure as a paramedic.

All core curriculum and natural science courses require a grade of "C" or higher.

Gainful Employment

DEGREE REQUIREMENTS

Major Field Electives - select 2 credits

Any EMS, FFP, or General Education courses
2 credits

Major Field Required Courses

EMS 2601C	Paramedic I	12
EMS 2664	Paramedic Clinical/Field Experience I	5
EMS 2602C	Paramedic II	12
EMS 2665	Paramedic Clinical/Field Experience II	5
EMS 2659	Paramedic III	6

Fire Science Technology

20570 - 60 Credits

This degree prepares students for careers in the Fire Services and for the fire service or fire protection related professional to enhance technical competencies, and prepare them for career advancement. While providing a scientific understanding of fire hazards and their control, this degree will place emphasis on effective operating procedures at fires and other emergencies. Graduates of the program typically find employment as firefighters, investigators, fire protection and detection specialists, fire engineers, and safety inspectors.

ASSOCIATE IN SCIENCE DEGREE IN FIRE SCIENCE TECHNOLOGY

20570 - 60 credits

DEGREE REQUIREMENTS

General Education - English

ENC 1101	English Composition I	3

General Education - Humanities/Fine Arts

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Natural Science/Mathematics

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - English or Humanities/Fine Arts or Natural Science/Mathematics or Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

Major Field Required Courses - 15 credits

FFP 1000	Principles of Emergency Services	3
FFP 1812	Engine and Truck Company Fireground Operations	3
FFP 2801	Incident Command System	3
FFP 2810	Firefighting Tactics and Strategy I	3
FFP 2820	Principles of Emergency Management	3

Major Field Electives - Select 30 credits

CJE 2600	Criminal Investigation	3
DSC 1930	Current Topics in Public Safety	.5 - 5
EMS 1119	Emergency Medical Technician	9
EMS 1119L	Emergency Medical Technician Lab	2
EMS 1431	EMT Clinical/Field Experience	1
FFP 1040	Private Fire Brigade	3
FFP 1109	Principles of Fire and Emergency Services Safety and Survival	3
FFP 1120	Building Construction for Fire Service	3
FFP 1505	Fire Prevention	3
FFP 1521	Plans Examination and Blueprint Reading	3
FFP 1540	Fire Protection Systems	3
FFP 1610	Fire Behavior and Combustion	3
FFP 2510	Building and Fire Codes I	3
FFP 2720	Company Officer Leadership	3
FFP 2740	Fire Service Course Delivery	3
FFP 2741	Fire Service Course Design	3
FFP 2770	Legal Issues for the Fire Service	3
FFP 2781	Fire Department Organization and Administration	3
FFP 2811	Firefighting Tactics and Strategy II	3
FFP 2840	Disaster Operations	3
FFP 2949	Internship in Fire Science	1 - 4
CGS 1060	College Computing	3

Successful completion of the state certification exam (license) for this program may entitle a student to receive credit towards the A.S. Degree based on demonstrated competencies.

Graphics Technology

20580 - 64 Credits

By providing students with theoretical and classroom experience which closely parallels on-the-job activities, this program prepares students for careers in the graphics, printing, and advertising industries. Graphics Design Technology prepares students for employment as designers, commercial artists, computer graphic designers, layout production, and entry-level multimedia graphics. It requires knowledge of art, communication, and computer skills to be applied with design techniques and knowledge required to enter the field of graphic design as a technical specialist. The structure of the degree program requires the student to obtain a solid foundation in the fundamentals through general education and technical core courses. The specialization can be used to further enhance the expertise. This degree can also be a basis for the B.A.S. in Digital Media at Indian River State College.

Gainful Employment

ASSOCIATE IN SCIENCE DEGREE IN GRAPHICS TECHNOLOGY

20580 - 64 credits

DEGREE REQUIREMENTS

General Education - English

ENC 1101	English Composition I	3

General Education - Humanities/Fine Arts

ENC 1102	English Composition II	3

General Education - Natural Science/Mathematics

PHY 1020	Principles of Physics or higher And	3
MAC 1105	College Algebra or higher	3

General Education - Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

Major Field Required Courses - 42 credits

CGS 1821	Website Development	3
DIG 1000	Digital Media Principles	3
DIG 1115	Digital Imaging Fundamentals with Photoshop	3
DIG 2030	Digital Video Fundamentals	3
DIG 2251	Digital Audio Fundamentals	3
DIG 2302	3D Digital Animation I	3
DIG 2581	Digital Media Portfolio Fundamentals	3
GRA 1121	Publication Design	3
GRA 1129	Visualization Basics	3
GRA 1151	Illustrator Fundamentals	3
GRA 1206	Typography	3
GRA 2160	Digital Animation I	3
GRA 2161	Digital Animation 2	3
PGY 1800	Principles of Digital Photography	3

Major Field Electives - Select 7 credits

ART 1201C	Color and Design I	3
ART 1203C	Color and Design II	3
ART 1300C	Drawing I	3
COP 2000	Introduction to Computer Programming I	3
COP 2001	Computer Programming II	3
DIG 1930	Special Topics in Digital Media	.5 - 3
DIG 2116	Photoshop Level 2	3
DIG 2203	Digital Video 2 Production	3
DIG 2303	3D Digital Animation 2	3
GRA 2130	Presentation Technology	3
GRA 2152	Illustrator Level 2	3
GRA 2170	Introduction to Advertising Design and Graphics	3
PGY 1801	Introduction to Digital Photography	1

GRAPHIC DESIGN SUPPORT CERTIFICATE - 60340

60340 - 15 Credits

This Graphic Design Support Certificate offers basic preparation for a career as an Assistant Graphic Designer. Students are trained in image editing and graphic layout, basic graphic design, photo enhancement, illustrations and publishing techniques.

DEGREE REQUIREMENTS

Major Field Required Courses – 15 credits

DIG 1000	Digital Media Principles	3
DIG 1115	Digital Imaging Fundamentals with Photoshop	3
GRA 1151	Illustrator Fundamentals	3
DIG 2116	Photoshop Level 2	3
PGY 1800	Principles of Digital Photography	3

GRAPHIC DESIGN PRODUCTION CERTIFICATE - 60350

60350 - 24 Credits

This Graphic Design Production Certificate offers advanced preparation for a career as a Graphic Production Artist or assistant. Students are trained in graphic design techniques, image editing and enhancement, layout, Web design, typography, illustrations and publishing techniques.

Gainful Employment

DEGREE REQUIREMENTS

Major Field Required Courses – 24 credits

CGS 1821	Website Development	3
DIG 1000	Digital Media Principles	3
DIG 1115	Digital Imaging Fundamentals with Photoshop	3
GRA 1129	Visualization Basics	3
GRA 1121	Publication Design	3
GRA 1151	Illustrator Fundamentals	3
DIG 2116	Photoshop Level 2	3
GRA 1206	Typography	3

Health Information Technology

20790 - 70 Credits

(Selective Admission)

Are you ready for a rewarding career in one of the fastest growing occupations in the Health Care industry? With an Associate Degree in Health Information Technology (HIT), you will have the expertise to work in a variety of healthcare settings including hospitals, outpatient surgery centers, medical offices, government agencies and more. Health Information Technology professionals play a critical role in maintaining, collecting, and analyzing the data that doctors, nurses, and other healthcare providers rely on to deliver quality healthcare. With healthcare advancements and evolving regulations, Health Information Technology professionals can expect to be in high demand as the health sector continues to expand. If a career combining medicine and cutting edge information technology appeals to you, Indian River State College's Health Information Technology Program is a proven training ground for success.

Our 100% online program gives you flexibility in an independent learning environment and the ability to take classes off campus. Through lectures, virtual labs and internship opportunities you will master medical-legal aspects, quality improvements, healthcare data analysis, ICD-10 coding and supervision of health information employees.

The program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). Graduates of the program are eligible to take the AHUMA Health Information Technician exam to become a Registered Health Information Technician RHIT).

ASSOCIATE IN SCIENCE DEGREE IN HEALTH INFORMATION TECHNOLOGY

20790 - 70 credits

DEGREE REQUIREMENTS

General Education - English

ENC 1101	English Composition I	3

General Education - Humanities/Fine Arts

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Natural Science/Mathematics

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97) for Mathematics 3 credits

BSC 1084	Survey of the Human Body	4
	Or	
BSC 2093	Anatomy and Physiology I	3
BSC 2093L	Anatomy and Physiology I Lab	1
	And	
BSC 2094	Anatomy and Physiology II	3
BSC 2094L	Anatomy and Physiology II Lab	1

Natural Science/Mathematics courses require a grade of C or higher.

General Education - Social/Behavioral Science

PSY 2012	Introduction to Psychology	3
	Or	
SYG 2000	Introduction to Sociology	3

Major Field Required Courses - 54 credits

HSC 2531	Medical Terminology I	3
CGS 1100	Introduction to Computer Applications for Business	3
HIM 1000	Introduction to Health Information Management	3
HIM 1012	Legal Aspects of Health Information	3
HIM 1722	ICD-10-CM Coding	2
HIM 1723	ICD-10-PCS Coding	2
HIM 1282	Basic CPT Coding	3
HIM 1510C	Health Care Data Analysis	3
HIM 1442	Pharmacology for HIM	2
HIM 1273C	Billing and Reimbursement Methods	3
HIM 2433	Pathophysiology	3
HIM 2729	Intermediate Coding	4
HIM 2400	Alternative Health Care Settings	3
HIM 2112	Electronic Health Record and Technology	3
HIM 2211	Health Information Systems	3
HIM 2512	HIM Supervision and Organizational Life	2
HIM 2805L	Professional Practice Experience I	1
HIM 2506	Quality Assessment	2
HIM 2725L	Coding Lab	2
HIM 2815L	Professional Practice Experience II	1
HIM 2822	HIT Capstone Seminar	3

All natural science, math and HIM prefix courses require a grade of C or higher.

HEALTHCARE INFORMATICS SPECIALIST CERTIFICATE

60660 - 24 Credits

(Selective Admissions)

This program prepares students for employment in various healthcare settings as entry-level data analysts who are capable of acquiring, managing, analyzing and presenting data so that better clinical and business decisions can be made. This certificate is also a great supplement to HIM professionals and other health care personnel who want to increase their data management and analytic skills. The course content includes medical terminology, health care delivery systems, electronic health record systems, data management and analysis, ethical and legal concepts, health data content, statistics, and employability skills.

DEGREE REQUIREMENTS

Major Field Required Courses - 24 credits

HIM 1000	Introduction to Health Information Management	3
HIM 1012	Legal Aspects of Health Information	3
HIM 1510C	Health Care Data Analysis	3
HIM 2112	Electronic Health Record and Technology	3
HIM 2211	Health Information Systems	3
HIM 2400	Alternative Health Care Settings	3
HIM 2506	Quality Assessment	2
HIM 2805L	Professional Practice Experience I	1
HSC 2531	Medical Terminology I	3

MEDICAL CODER-BILLER CERTIFICATE

60670 - 37 credits

(Selective Admissions)

This program prepares students for employment in a variety of healthcare settings as an entry level coder, medical record coder, coding technician, or coding clerk. The content includes: medical terminology, anatomy and physiology, coding systems, fundamentals of disease process including pharmacology, health care delivery systems, basics of medical records services, ethical and legal responsibilities, safety/security procedures, basic data processing, and employability skills. The program consists of lecture, laboratory and a virtual and/or onsite practicum experience.

DEGREE REQUIREMENTS

Major Field Required Courses - 37 credits

BSC 1084	Survey of the Human Body	4
	Or	
BSC 2094	Anatomy and Physiology II	3
BSC 2094L	Anatomy and Physiology II Lab	1
	And	

HSC 2531	Medical Terminology I	3
HIM 1000	Introduction to Health Information Management	3
HIM 1012	Legal Aspects of Health Information	3
HIM 1442	Pharmacology for HIM	2
HIM 2433	Pathophysiology	3
HIM 1282	Basic CPT Coding	3
HIM 1510C	Health Care Data Analysis	3
HIM 1722	ICD-10-CM Coding	2
HIM 1723	ICD-10-PCS Coding	2
HIM 1273C	Billing and Reimbursement Methods	3
HIM 2729	Intermediate Coding	4
HIM 2805L	Professional Practice Experience I	1
	Also choose:	
HIM 2960	Coding Credential Exam Review	1
	Or	
HIM 2815L	Professional Practice Experience II	1

Health Services Management

20740 - 60 Credits

(Selective Admission)

This degree prepares students for management roles in a health care environment. The program is intended for individuals interested in entering the health care field and health care personnel who have completed a postsecondary adult vocational or college certificate from an accredited certificate program in a health science area and have successfully completed licensure/certification exams.

General Education courses may be taken prior to acceptance into the program or must be completed while enrolled in the program.

Students who have completed a postsecondary adult vocational or college certificate in an Allied Health area from a regionally accredited program, have passed the licensing exam and provide work verification in a health care field may receive up to a maximum of 14 competency credits. Before competency validation of credits can occur, the student must submit the Competency Validation Form with supplemental documents to the Health Services Management Department Chair.

ASSOCIATE IN SCIENCE DEGREE IN HEALTH SERVICES MANAGEMENT

20740 - 60 credits

DEGREE REQUIREMENTS

General Education - English		
ENC 1101	English Composition I	3
General Education - Humanities/Fine Arts		
PHI 1635	Ethical Issues in Health Care	3
	Or	
PHI 1010	Introduction to Philosophy	3
General Education - Natural Science		
BSC 1084	Survey of the Human Body	4

Natural Science requires a grade of C or higher.

General Education - Mathematics		
STA 2023	Elementary Statistics I	3
General Education - Social/Behavioral Science		
PSY 2012	Introduction to Psychology	3
	And	
ECO 2023	Principles of Economics Micro	3

General Education courses may be taken prior to acceptance into the program or must be completed while enrolled in the program.

Major Field Required Courses - 41 credits		
ACG 2001	Financial Accounting I	3
ACG 2011	Financial Accounting II	3
ACG 2071	Managerial Accounting	3
CGS 1060	College Computing	3
	Or	
CGS 1100	Introduction to Computer Applications for Business	3
GEB 1011	Introduction to Business	3
HIM 1012	Legal Aspects of Health Information	3
HSA 2182C	Health Services Management Concepts	3
HSC 1001C	Introduction to Healthcare Management	4
HSC 2802C	Health Science Seminar	4
HSC 2531	Medical Terminology I	3
HSC 1632C	Overview of Healthcare Delivery	3
HSC 1653	Healthcare Ethics	3
MNA 2345	Supervision	3

Area requires a grade of C or higher.

Competency Validation Eligible Courses:

Students who have completed a post secondary adult vocational or college certificate in an Allied Health area from an accredited program and have passed the licensing exam can receive a maximum of 18 competency credits. Before competency validation or credits can occur, the student must submit their state or national license in the respective field to the Health Science Division.

HSC 1001C	Introduction to Healthcare Management	4
HSC 2802C	Health Science Seminar	4
HSC 2531	Medical Terminology I	3
HSC 1632C	Overview of Healthcare Delivery	3

Hospitality and Tourism Management

20870 - 60 Credits

The Associate in Science in Hospitality and Tourism degree prepares students for entry-level management positions in the food & beverage, and tourism industry.

ASSOCIATE IN SCIENCE DEGREE IN HOSPITALITY AND TOURISM MANAGEMENT

20870 - 60 credits

DEGREE REQUIREMENTS

General Education - English

ENC 1101	English Composition I	3

General Education - Humanities/Fine Arts

See Associate in Science Associate in Applied Science Degree General Education Options. 3 credits

PHI 1103	Critical and Creative Thinking recommended	3

General Education - Natural ScienceMathematics

See Associate in Science Associate in Applied Science Degree General Education Options. 3 credits

General Education - SocialBehavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options. 3 credits

PSY 2012	Introduction to Psychology recommended	3

General Education - Humanities Fine Arts Natural Science/Mathematics or Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options. 3 credits

	Recommended:	
ECO 2013	Principles of Economics Macro	3
	Or	
ECO 2023	Principles of Economics Micro	3

Major Field Required Courses - 45 credits

FSS 2251	Food & Beverage Management	3
FOS 2201	Food Service Sanitation Management	3
HFT 1000	Introduction to Hospitality and Tourism	3
CGS 1100	Introduction to Computer Applications for Business	3
	Or	
CGS 1060	College Computing	3
HFT 2223	Human Relations and Supervisory Development	3
HFT 2942	Internship in Hospitality	3
FSS 2284C	Catering and Banquet Management	3
HFT 2500	Marketing & Sales in the Hospitality Industry	3
HFT 2600	Hospitality Law	3
HFT 2630	Security Issues in the Hospitality Industry	3
HFT 2210	Hospitality Mgmt & Leadership	3
HFT 1300	Managing Housekeeping Operations	3
FSS 2500	Food and Beverage Cost Control	3
HFT 1820	Food and Beverage Purchasing	3
HFT 1410	Front Office Management	3

GUEST SERVICES SPECIALIST - 60590

60590 - 15 credits

DEGREE REQUIREMENTS

Major Field Required Courses - 15 credits

HFT 1000	Introduction to Hospitality and Tourism	3
HFT 2223	Human Relations and Supervisory Development	3
HFT 2942	Internship in Hospitality	3
HFT 2630	Security Issues in the Hospitality Industry	3
FSS 2284C	Catering and Banquet Management	3

EVENT PLANNING MANAGEMENT - 60600

60600 - 24 credits

Gainful Employment

DEGREE REQUIREMENTS

Major Field Required Courses - 24 credits

FSS 2251	Food & Beverage Management	3
HFT 1000	Introduction to Hospitality and Tourism	3
HFT 2223	Human Relations and Supervisory Development	3
HFT 2942	Internship in Hospitality	3
FSS 2284C	Catering and Banquet Management	3
HFT 2500	Marketing & Sales in the Hospitality Industry	3
HFT 2600	Hospitality Law	3
HFT 2630	Security Issues in the Hospitality Industry	3

ROOMS DIVISION MANAGEMENT - 60610

60610 - 30 credits

Gainful Employment

DEGREE REQUIREMENTS

Major Field Required Courses - 30 credits

HFT 1000	Introduction to Hospitality and	3

	Tourism	
HFT 1300	Managing Housekeeping Operations	3
HFT 1410	Front Office Management	3
HFT 2210	Hospitality Mgmt & Leadership	3
HFT 2223	Human Relations and Supervisory Development	3
HFT 2942	Internship in Hospitality	3
FSS 2284C	Catering and Banquet Management	3
HFT 2500	Marketing & Sales in the Hospitality Industry	3
HFT 2600	Hospitality Law	3
HFT 2630	Security Issues in the Hospitality Industry	3

Interior Design Technology

20620 - 75 Credits

A professional interior designer is qualified by education and experience to identify, research, and creatively solve problems relating to the function and quality of man's interior environment. The interior designer is a licensed professional in Florida. Education and work experience along with passage of the state examination (NCIDQ) are the requirements to become a licensed interior designer in Florida.

ASSOCIATE IN SCIENCE DEGREE IN INTERIOR DESIGN TECHNOLOGY

20620 - 75 credits

DEGREE REQUIREMENTS

General Education - English

ENC 1101	English Composition I	3

General Education - HumanitiesFine Arts

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 6 credits

General Education - Natural Science/Mathematics

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

Major Field Required Courses - 55 credits

ETD 1320	Introduction to AutoCAD	3
IND 1015	Residential Interior Design	3
IND 1020	Principles of Interior Design	3
IND 1301	Interior Design Graphics	3
IND 1401	Technical Design I	2
IND 1423	Survey of Materials and Resources	1
IND 1429	Textiles for Interiors	3
IND 2432	Lighting for Interior Design	3
IND 1935	Building Codes and Barrier Free	3
IND 2016	Commercial Interior Design I	3
IND 2019	Commercial Interior Design II	3
IND 2100	History of Interiors I	3
IND 2134	History of Interiors II	3
IND 2209	Designing for the Aging Client	1
IND 2420	Materials and Sources of Interior Design	3
IND 2500	Interior Design Business Practices	3
IND 2608	Sustainable Design for Interiors	3
IND 2910	Kitchen and Bath Design I	3
IND 2940	Interior Design Practicum I	3
IND 2941	Interior Design Practicum II	3

Major Field Electives - Select 5 credits

IND 1462	Introduction to Architectural CAD	3
IND 2911	Kitchen and Bath Design II	2
IND 2931	Special Topics in Interior Design	.5 - 5
IND 2942	Interior Design Practicum III	4
BCN 1250	Architectural Drafting Principles	3

KITCHEN AND BATH DESIGN CERTIFICATE - 60280

60280 - 39 Credits

Gainful Employment

DEGREE REQUIREMENTS

Major Field Required Courses - 34 credits

ETD 1320	Introduction to AutoCAD	3
IND 1020	Principles of Interior Design	3
IND 1301	Interior Design Graphics	3
IND 1401	Technical Design I	2
IND 2432	Lighting for Interior Design	3
IND 1935	Building Codes and Barrier Free	3
IND 2209	Designing for the Aging Client	1
IND 2420	Materials and Sources of Interior Design	3
IND 2500	Interior Design Business Practices	3
IND 2608	Sustainable Design for Interiors	3
IND 2910	Kitchen and Bath Design I	3
IND 2911	Kitchen and Bath Design II	2
IND 2940	Interior Design Practicum I	3

Major Field Electives - Select 5 credits

IND 1423	Survey of Materials and Resources	1
IND 1462	Introduction to Architectural CAD	3
IND 2931	Special Topics in Interior Design	.5 - 5
IND 2941	Interior Design Practicum II	3
BCN 1250	Architectural Drafting Principles	3

HOME STAGING CERTIFICATE - 60500

60500 - 12 credits

DEGREE REQUIREMENTS

Major Field Required Courses - 12 credits

IND 1020	Principles of Interior Design	3
IND 1429	Textiles for Interiors	3
IND 2420	Materials and Sources of Interior Design	3
IND 2931	Special Topics in Interior Design	.5 - 5

Landscape and Horticulture Technology

20840 - 60 Credits

Horticultural Landscape Design classes are designed to expand and enhance job opportunities for students already in the landscape business. The courses prepare students for employment in the areas of landscape design and maintenance, application of pesticides for pest control and prevention, installation, design and maintenance of irrigation systems, and turf equipment repair and maintenance.

ASSOCIATE IN SCIENCE DEGREE IN LANDSCAPE AND HORTICULTURE TECHNOLOGY

20840 - 60 credits

DEGREE REQUIREMENTS

General Education - English

ENC 1101	English Composition I	3

General Education - Humanities/Fine Arts

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Natural Science/Mathematics

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 6 credits

Major Field Required Courses - 36 credits

CGS 1060	College Computing	3
	Or	
CGS 1100	Introduction to Computer Applications for Business	3
ENY 1002	Fundamentals of Entomology	3
GCO 1402	Turfgrass Science	3
GCO 2601	Materials Calculations	3
GEB 1011	Introduction to Business	3
HOS 1010	Fundamentals of Horticulture	3
IPM 1323	Application of Pesticides	3
LDE 1000	Principles of Landscape Design	3
ORH 1231	Lawn Care Maintenance	3
ORH 1510	Plant Identification	3
SWS 1102	Irrigation Systems I	3
SWS 2104	Soils and Fertilizers	3

Suggested Specialization Electives - Select 9 credits:

Suggested Specialization Electives - Landscape Management

AGR 1540C	Fundamental Principles of Arboriculture	3
BCN 1250	Architectural Drafting Principles	3
ORH 1842	Landscape Installation and Maintenance	3
ORH 2601	Retail Nursery Operations	3
ORH 2941	Landscape Field Training	3 - 6
PMA 2211	Insects and Diseases of Ornamental Plants	3

Suggested Specialization Electives - Sports Turf Management

GCO 1450	Integrated Pest Management (IPM) for Turf	3
GCO 1611	Golf Course Shop Management	3
GCO 1947	Golf Course Design Concepts	3
GCO 2632	Golf Course Organization and Administration	3
GCO 2945	Supervised Work Experience	1 - 4
ORH 2220	Turfgrass Management	3

Major Field Electives

AGR 1540C	Fundamental Principles of Arboriculture	3
BCN 1250	Architectural Drafting Principles	3
GCO 1450	Integrated Pest Management (IPM) for Turf	3
GCO 1611	Golf Course Shop Management	3
GCO 1947	Golf Course Design Concepts	3
GCO 2632	Golf Course Organization and Administration	3
GCO 2945	Supervised Work Experience	1 - 4
ORH 1105	Florida Native Landscaping	3
ORH 1842	Landscape Installation and Maintenance	3
ORH 2220	Turfgrass Management	3
ORH 2601	Retail Nursery Operations	3
ORH 2941	Landscape Field Training	3 - 6
PMA 2211	Insects and Diseases of Ornamental Plants	3

LANDSCAPE AND HORTICULTURE SPECIALIST CERTIFICATE - 60220

60220 - 12 Credits

Students may increase their opportunities for employment by completing the 12 credit Landscape and Horticulture Specialist Certificate. These courses will prepare the student to enter the green industry workforce or further their knowledge and be eligible for promotion by completing this certification.

DEGREE REQUIREMENTS

Required Courses

HOS 1010	Fundamentals of Horticulture	3
LDE 1000	Principles of Landscape Design	3
GEB 1011	Introduction to Business	3
ORH 1510	Plant Identification	3

LANDSCAPE AND HORTICULTURE PROFESSIONAL CERTIFICATE - 60230

60230 - 18 Credits

Students who complete this certification will gain advanced knowledge suitable for many facets of the Landscape and Horticulture industry. Upon completion, students will have a strong understanding of horticultural practices, an understanding of soil properties, fertility management and its environmental impacts, insect and disease identification and management, as well as basic business skills.

DEGREE REQUIREMENTS

Required Courses

GEB 1011	Introduction to Business	3
HOS 1010	Fundamentals of Horticulture	3
LDE 1000	Principles of Landscape Design	3
ORH 1510	Plant Identification	3
PMA 2211	Insects and Diseases of Ornamental Plants	3
SWS 2104	Soils and Fertilizers	3

LANDSCAPE AND HORTICULTURE TECHNICIAN CERTIFICATE - 60240

60240 - 30 Credits

Students completing the Landscape and Horticulture Technicians Certificate will have gained an advanced knowledge of common horticultural practices as well as the opportunity to specialize in retail nursery operations, landscape maintenance practices or landscape design principles.

Gainful Employment

DEGREE REQUIREMENTS

Major Field Required Courses - 15 credits

HOS 1010	Fundamentals of Horticulture	3
LDE 1000	Principles of Landscape Design	3
ORH 1510	Plant Identification	3
SWS 2104	Soils and Fertilizers	3
GEB 1011	Introduction to Business	3

Specialization Electives - Select 15 credits

With specialization in Horticulture

ORH 1105	Florida Native Landscaping	3
ORH 2601	Retail Nursery Operations	3
	Any IPM, HOS, LDE, ORH, PMA, SWS, AGR courses	9

With specialization in Landscape Maintenance

IPM 1323	Application of Pesticides	3
LDE 1000	Principles of Landscape Design	3
ORH 1231	Lawn Care Maintenance	3
PMA 2211	Insects and Diseases of Ornamental Plants	3
SWS 1102	Irrigation Systems I	3

With specialization in Landscape Design

BCN 1250	Architectural Drafting Principles	3
ETD 1320	Introduction to AutoCAD	3
ORH 1842	Landscape Installation and Maintenance	3

PEST CONTROL OPERATIONS - APPLIED TECHNOLOGY DIPLOMA - B0020

B0020 - 24 Credits

Students may increase their opportunities for employment by completing the 24 credit Pest Control Operations Applied Technology Diploma. These courses will prepare the student for the licensure exam in *Restricted Pesticides Applications.

Gainful Employment

DEGREE REQUIREMENTS

Select 24 credits from the following:

ENY 1002	Fundamentals of Entomology	3
GCO 1402	Turfgrass Science	3
GCO 1450	Integrated Pest Management (IPM) for Turf	3
GCO 2601	Materials Calculations	3
HOS 1010	Fundamentals of Horticulture	3
IPM 1323	Application of Pesticides	3
ORH 1105	Florida Native Landscaping	3
ORH 1510	Plant Identification	3
ORH 2220	Turfgrass Management	3
PMA 2211	Insects and Diseases of Ornamental Plants	3
SWS 2104	Soils and Fertilizers	3

*One year of documented experience in Pest Control is required for those seeking licensure in Restricted Pesticides Application.

Marketing Management

20650 - 60 Credits

This degree provides excellent preparation for students pursuing careers in sales and marketing within a number of industries prominent on the Research Coast. While providing a sound theoretical foundation, courses within this degree program emphasize the development of marketable skills essential to career success, including sales techniques, promotional strategies, and prudent management practices.

ASSOCIATE IN SCIENCE DEGREE IN MARKETING MANAGEMENT

20650 - 60 credits

DEGREE REQUIREMENTS

General Education - English

ENC 1101	English Composition I	3

General Education - Humanities/Fine Arts

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Natural Science/Mathematics

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Social/Behavioral Science

ECO 2013	Principles of Economics Macro	3
	Or	
ECO 2023	Principles of Economics Micro	3

General Education - Humanities/Fine Arts or Natural Science/Mathematics or Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

Major Field Required Courses - 30 credits

ADV 2000	Advertising and Sales Promotion	3
GEB 1011	Introduction to Business	3
GEB 2941	Applied Internship	3-4
MAR 2011	Principles of Marketing	3
MAR 2101	Social Media Marketing	3
MKA 2021	Salesmanship	3
QMB 1001	Mathematics of Business	3
SLS 1261	Essentials of Contemporary Leadership	3
APA 1111	Introduction to Accounting	3
	Or	
ACG 2001	Financial Accounting I	3
MAN 2021	Principles of Management	3
	Or	
MNA 2345	Supervision	3

Major Field Electives - Select 15 credits

APA 1152	Orientation to QuickBooks	1
BUL 2241	Business Law I	3
MAN 2300	Introduction to Human Resource Management	3
MNA 1821	Electronic Commerce	3
SBM 1000	Entrepreneurship	3
FIN 1100	Personal Finance	3
GEB 2214	Business Communications	3
MKA 2161	Customer Relations	1
SPC 1608	Public Speaking	3
CGS 1060	College Computing	3
	Or	
CGS 1100	Introduction to Computer Applications for Business	3
	Or	
CIS 1000	Introduction to Information Technology	3
	Maximum of two courses with CGS, MAN, MKA, MNA, HFT, or SLS prefix	

MARKETING OPERATIONS CERTIFICATE - 60070

60070 - 30 credits

Students may enhance their career success by first attaining a Certificate in Marketing Operations by completing 30 credits from the Major Field Required courses and Major Field Electives within the degree. Attaining the A.S. Degree is then simply a matter of completing the General Education required courses and the remaining 19 credits of Major Field Required and Elective courses.

Gainful Employment

DEGREE REQUIREMENTS

Major Field Required Courses - Select 30 Credits

ADV 2000	Advertising and Sales Promotion	3
GEB 1011	Introduction to Business	3
MAR 2011	Principles of Marketing	3
MKA 1303	Mid-Management Seminar I	4
MKA 2021	Salesmanship	3
MNA 1821	Electronic Commerce	3
QMB 1001	Mathematics of Business	3
SBM 1000	Entrepreneurship	3
APA 1111	Introduction to Accounting	3
	Or	
ACG 2001	Financial Accounting I	3
CGS 1060	College Computing	3
	Or	
CGS 1100	Introduction to Computer Applications for Business	3
	Or	
CIS 1000	Introduction to Information	3

	Technology	
MNA 2100	Interpersonal Relations in Business	3
	Or	
SLS 1261	Essentials of Contemporary Leadership	3
MAN 2021	Principles of Management	3
	Or	
MNA 2345	Supervision	3

Medical Laboratory Technology

20660 - 76 Credits

(Selective Admission)

Students in the Medical Lab Technology (MLT) program pursue an A.S. Degree and upon completion will be eligible to take the American Society of Clinical Pathologist Medical Laboratory Technician, and American Association of Bioanalysts Medical Technologist certification examinations. Students accepted into the MLT program receive a strong general education with a foundation in medical technology. The program consists of classroom instruction, lab practice, clinical time in a hospital lab, and culminates in a 12-week clinical practicum at a local hospital.

ASSOCIATE IN SCIENCE DEGREE IN MEDICAL LABORATORY TECHNOLOGY

20660 - 76 credits

DEGREE REQUIREMENTS

General Education - Humanities/Fine Arts

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Natural Science/Mathematics

Select 8 credits of Biological Science with lab and select 8 credits of Chemistry (CHM 1032 (p. 184)is not a Natural Science General Education course, but may be used as part of the 8 credits of Chemistry); select 3 credits of MAC-1105 (p. 247) (or higher) or STA-2023 (p. 289)

BSC 2010	General Biology I	3
BSC 2010L	General Biology I Lab	1
BSC 2011	General Biology II	3
BSC 2011L	General Biology II Lab	1
BSC 2093	Anatomy and Physiology I	3
BSC 2093L	Anatomy and Physiology I Lab	1
BSC 2094	Anatomy and Physiology II	3
BSC 2094L	Anatomy and Physiology II Lab	1
CHM 1020	Introduction to Chemistry	3
CHM 1032	Biochemistry for Health Professionals	1
CHM 1045	General Chemistry I	3
CHM 1045L	General Chemistry I Lab	1
CHM 1046	General Chemistry II	3
CHM 1046L	General Chemistry II Lab	1
MAC 1105	College Algebra	3
	or higher	
	Or	
STA 2023	Elementary Statistics I	3

General Education - Social/Behavioral Science

PSY 2012	Introduction to Psychology	3
	Or	
SYG 2000	Introduction to Sociology	3

General Education courses may be taken prior to acceptance into the program or must be completed while enrolled in the program.

Major Field Required Courses - 51 credits

MLT 1040C	Introduction to Medical Technology	3
MLT 1330	Hemostasis	2
MLT 1362	Hematology	4
MLT 1362L	Hematology Lab	1
MLT 1525	Immunohematology (Blood Bank)	4
MLT 1525L	Immunohematology Lab	1
MLT 1230	Urinalysis and Body Fluids	2
MLT 1230L	Urinalysis and Body Fluids Laboratory	1
MLT 1500C	Immunology and Serology	4
MLT 2033	Medical Laboratory Career Orientation	1
MLT 2625	Clinical Chemistry	5
MLT 2625L	Clinical Chemistry Lab	1
MLT 1199	Introduction to Molecular Diagnostics	1
MLT 1440C	Parasitology and Mycology	2
MLT 2400	Medical Microbiology	4
MLT 2400L	Medical Microbiology Lab	1
MLT 2807L	Immunohematology Clinical Practicum	3
MLT 2809L	Hematology Clinical Practicum	3
MLT 2930	Medical Lab Technology Review I	1
MLT 2931	MLT Review for the State Exam	1
MLT 2810L	Clinical Chemistry Practicum	3
MLT 2811L	Microbiology Clinical Practicum	3

All core curriculum and natural science courses require a grade of "C" or higher.

Nursing Associate Degree – R.N.

20670 - 72 Credits

(Selective Admission)

Indian River State College awards an Associate in Science Degree in Nursing to each student who satisfactorily completes the required course of study. The purpose of the program is to provide students with the knowledge and clinical experiences related to the profession of Nursing, consistent with the State of Florida Board of Nursing

licensing body and ultimately graduate competent Associate Degree Nurses. The program is accredited by the Accreditation Commission for Education in Nursing (ACEN). Upon successful completion of the NCLEX exam, the graduate will be awarded a Registered Nurse License.

ASSOCIATE IN SCIENCE DEGREE IN NURSING – R.N.

20670 - 72 credits

DEGREE REQUIREMENTS

General Education - English

ENC 1101	English Composition I	3

General Education - Humanities/Fine Arts

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Natural Science/Mathematics

BSC 2093	Anatomy and Physiology I	3
BSC 2093L	Anatomy and Physiology I Lab	1
BSC 2094	Anatomy and Physiology II	3
BSC 2094L	Anatomy and Physiology II Lab	1
CHM 1020	Introduction to Chemistry or higher	3

General Education - Social/Behavioral Science

PSY 2012	Introduction to Psychology	3
	Or	
SYG 2000	Introduction to Sociology	3

Major Field Required Courses - 52 credits

NUR 1021C	Intro to Nursing Concepts 1	10
NUR 1034C	Health-Illness-Concepts 2	11
NUR 2035C	Health-Illness Concepts 3	10
NUR 2205C	Nursing and Complex Health Concepts 4	11
DEP 2004	Human Development	3
MCB 2010	Microbiology for Health Sciences	3
MCB 2010L	Microbiology Lab for Health Sciences	1
HUN 1201	Nutrition	3

Upon acceptance, a complete health screen, drug screen and Florida Department of Law Enforcement check are required. All core curriculum (NUR prefix), English, and natural science courses require a grade of C or higher. Priority consideration for admission to the program will be given to those who have completed BSC-2093 (p. 179) and BSC-2093L (p. 179) , and MCB-2010 (p. 253) and MCB-2010L (p. 253) prior to application deadline. BSC-2093 (p. 179) and BSC-2093L (p. 179) must be completed prior to NUR-1021C (p. 261).

Paralegal Studies/Legal Assisting

20640 - 64 Credits

This program is designed for students seeking a career in a law-related field as a paraprofessional and for legal secretaries presently employed who wish to advance in their work. Upon successful completion, a student will be prepared to work under the supervision of an attorney and perform many vital functions as a legal assistant. A legal assistant may not practice law, give advice, or collect fees. Legal assistants work in law firms, legal departments of major corporations, governmental agencies (local, state, and federal), real estate departments of large businesses, title companies, trust departments of banks, brokerage houses, and insurance companies. Students are eligible to take the National Association of Legal Assistants certification exam upon completion.

ASSOCIATE IN SCIENCE DEGREE IN PARALEGAL STUDIES/LEGAL ASSISTING

20640 - 64 credits

DEGREE REQUIREMENTS

General Education - English

ENC 1101	English Composition I	3
	And	
ENC 1102	English Composition II	3

General Education - Humanities/Fine Arts

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Natural Science/Mathematics

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Social/Behavioral Science

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

Major Field Required Courses - 24 credits

PLA 1104	Legal Research and Writing I	3
PLA 1610	Real Estate and Property Law	3
PLA 2003	Introduction to Paralegal Studies	3
PLA 2058	Survey of Law	3
PLA 2114	Legal Research and Writing II	3
PLA 2203	Civil Litigation I	3
PLA 2223	Civil Litigation II	3
PLA 2433	Corporate and Business Law	3

Major Field Electives - Select 25 credits

ACG 2001	Financial Accounting I	3
CJL 2062	Constitutional Law	3
CJL 2100	Criminal Law	3
CGS 1060	College Computing	3
LIS 1002	Electronic Access to Information	1

LIS 2004	Introduction to Internet Research	1
LIS 2005	Advanced Electronic Access to Information	3
PLA 1763	Law Office Management	3
PLA 1931	Special Topics in Law	1
PLA 2117	Advanced Legal Writing	3
PLA 2273	Torts	3
PLA 2423	Contracts	3
PLA 2460	Bankruptcy Law	3
PLA 2483	Administrative Law	3
PLA 2600	Estate Planning and Probate Administration	3
PLA 2800	Family Law	3
PLA 2949	Internship in Paralegal Studies	4
CGS 1500	Microsoft Word	3

Physical Therapist Assistant

20690 - 74 Credits

(Selective Admission)

The Physical Therapist Assistant (PTA) program is an integrated curriculum of class lecture, lab, and clinical education in a variety of health care settings. Completion of the A.S. Degree program prepares the PTA to perform physical therapy procedures and related tasks under the supervision of a Physical Therapist. Graduates are eligible to take the National Physical Therapist Assistant Examination and upon satisfactory achievement, become licensed Physical Therapist Assistants. The Physical Therapist Assistant program at IRSC is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE) 1111 North Fairfax Street, Alexandria, Virginia, 22314, phone 703-706-3245, email accreditation@apta.org (p. 136), website http://www.capteonline.org (p. 136).

ASSOCIATE IN SCIENCE DEGREE IN PHYSICAL THERAPIST ASSISTANT

20690 - 74 credits

DEGREE REQUIREMENTS

Requirements - English

ENC 1101	English Composition I	3

General Education - Humanities/Fine Arts

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

Recommended:

PHI 1635	Ethical Issues in Health Care	3
	Or	
PHI 1103	Critical and Creative Thinking	3
	Or	
PHI 2630	Introduction to Ethics	3

General Education - Natural Science/Mathematics

BSC 2093	Anatomy and Physiology I	3
BSC 2093L	Anatomy and Physiology I Lab	1
BSC 2094	Anatomy and Physiology II	3
BSC 2094L	Anatomy and Physiology II Lab	1
PHY 1020	Principles of Physics	3
	or higher	

General Education - Social/Behavioral Sciences

PSY 2012	Introduction to Psychology	3

Major Field Required Courses - 54 credits

HSC 2531	Medical Terminology I	3
MAT 1033	Intermediate Algebra	3
	or higher	
PHT 1213	Foundations of Therapeutic Exercise	3
PHT 1213L	Foundations of Therapeutic Exercise Lab	2
PHT 1121	Functional Anatomy and Kinesiology	3
PHT 1121L	Functional Anatomy and Kinesiology Lab	2
PHT 1020	Principles of Practice I	2
PHT 1020L	Principles of Practice I Lab	2
PHT 1132	Musculoskeletal PT	3
PHT 1132L	Musculoskeletal PT Lab	2
PHT 1080	Principle of Practice II	2
PHT 1080L	Principles of Practice II Lab	1
PHT 2210	Principles of Practice III	3
PHT 2210L	Principles of Practice III Lab	3
PHT 2255	Neuromuscular PT	3
PHT 2255L	Neuromuscular PT Lab	2
PHT 2810	PTA Clinic I	5
PHT 2820	PTA Clinical II	5
PHT 2289	Cardiopulmonary & Systemic PT	3
PHT 2289L	Cardiopulmonary & Systemic PT Lab	2

All core curriculum, English and natural science courses require a grade of "C" or higher. General Education and required specialized electives must be completed according to the program sequence or prior to acceptance into the program.

Radiography

20700 - 77 Credits

(Selective Admission)

Graduates of this program are eligible to sit for the national certifying examination given by the American Registry of Radiologic Technologists (A.R.R.T.). The program is accredited by the Joint Review Committee on Education in Radiologic Technology. The curriculum includes General Education requirements as well as in-depth instruction in radiographic procedures, pathology, patient care, and

radiographic physics. A competency-based clinical education component is conducted at six local hospitals. Program graduates may choose to continue their education at the university level, or to specialize in other imaging modalities such as: Ultrasound, Nuclear Medicine, Radiation Therapy, or Magnetic Resonance Imaging.

ASSOCIATE IN SCIENCE DEGREE IN RADIOGRAPHY

20700 - 77 credits

DEGREE REQUIREMENTS

General Education - English

ENC 1101	English Composition I	3

General Education - Humanities/Fine Arts

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Natural Science/Mathematics

MAC 1105	College Algebra	3
BSC 2093	Anatomy and Physiology I	3
BSC 2093L	Anatomy and Physiology I Lab	1
BSC 2094	Anatomy and Physiology II	3
BSC 2094L	Anatomy and Physiology II Lab	1

General Education - Social/Behavioral Science

PSY 2012	Introduction to Psychology	3

General Education courses, CGS 1060 (p. 183)or CGS 1100 (p. 183) may be taken prior to acceptance into the program or must be completed while in the program.

Major Field Required Courses - 57 credits

RTE 1000	Introduction to Radiologic Sciences	3
RTE 1111	Patient Care for Radiologic Sciences	3
RTE 1111L	Patient Care Lab for Imaging Sciences	1
RTE 1418	Radiographic Imaging I	3
RTE 1457	Radiographic Imaging II	3
RTE 1457L	Radiographic Imaging II Lab	1
RTE 1503	Radiographic Procedures I	3
RTE 1513	Radiographic Procedures II	3
RTE 1513L	Radiographic Procedures II Lab	1
RTE 1523	Radiographic Procedures III	3
RTE 1523L	Radiographic Procedures III Lab	1
RTE 1804	Radiographic Clinical Education I	1
RTE 1814	Radiographic Clinical Education II	1
RTE 1824	Radiographic Clinical Education III	3
RTE 1834	Radiographic Clinical Education IV	3
RTE 2844	Radiographic Clinical Education V	1
RTE 2061	Radiographic Seminar	3
RTE 2385	Radiation Safety and Protection	2
RTE 2533	Radiographic Procedures IV	2
RTE 2533L	Radiographic Procedures IV Lab	1
RTE 2553	Radiographic Procedures V	2
RTE 2553L	Radiographic Procedures V Lab	1
RTE 2785	Advanced Pathophysiology	2
RTE 2854	Radiographic Clinical Education VI	1
RTE 2864	Radiographic Clinical Education VII	3
RTE 2874	Radiographic Clinical Education VIII	3
	And	
CGS 1060	College Computing	3
	Or	
CGS 1100	Introduction to Computer Applications for Business	3

Upon acceptance, a complete health screen, drug screen and Florida Department of Law Enforcement criminal background check are required. All core curriculum (RTE prefix), English, math, and natural science courses require a grade of C or higher. Priority consideration for admission to the program will be given to those who have completed Anatomy and Physiology I and corequisite lab, and other General Education courses prior to the published application deadline. Anatomy and Physiology II and corequisite lab must be completed by the end of the Spring semester, first year.

Respiratory Care

20710 - 76 Credits

(Selective Admission)

The Respiratory Care program trains students in the use of medical gases, medication, aerosols, chest physiotherapy, airway management, mechanical ventilation, and cardiopulmonary resuscitation. The program includes classroom lecture, lab experiences, and clinical experience at local hospitals. The Associate in Science in Respiratory Care program at Indian River State College is accredited by the Commission on Accreditation for Respiratory Care (www.coarc.com).

Commission on Accreditation for Respiratory Care (CoArc)
Associate in Science in Respiratory Care
P>O> Box 54876, Hurst, TX 76054-4876
817-283-2835
www.coarc.com

ASSOCIATE IN SCIENCE DEGREE IN RESPIRATORY CARE

20710 - 76 credits

DEGREE REQUIREMENTS

General Education - Humanities/Fine Arts

See Associate in Science Associate in Applied Science Degree General Education Options (p. 97). 3 credits

General Education - Natural Science/Mathematics		
BSC 2010	General Biology I	3
BSC 2093	Anatomy and Physiology I	3
BSC 2093L	Anatomy and Physiology I Lab	1
BSC 2094	Anatomy and Physiology II	3
BSC 2094L	Anatomy and Physiology II Lab	1
PHY 1020	Principles of Physics or higher	3
General Education - Social/Behavioral Science		
PSY 2012	Introduction to Psychology	3

General Education courses may be taken prior to acceptance into the program or must be completed while enrolled in the program.

Major Field Required Courses - 56 credits		
RET 1024	Introduction to Respiratory Care	3
RET 1007	Cardiopulmonary Pharmacology	2
RET 1274	Respiratory Therapy Theory I	3
RET 1485	Cardiopulmonary Anatomy and Physiology	3
RET 2275	Respiratory Care Theory II with Lab	3
RET 2503	Cardiopulmonary Diseases	2
RET 2832	Respiratory Therapy Clinic I	5
RET 2442	Respiratory Therapy Theory III with Lab	3
RET 2833	Respiratory Therapy Clinic II	2
RET 2414C	Pulmonary Function Studies with Lab	3
RET 2264	Mechanical Ventilation with Lab	3
RET 2834	Respiratory Therapy Clinic III	5
RET 2280	Critical Respiratory Care	3
RET 2835	Respiratory Therapy Clinic IV	7
RET 2714	Pediatric/Neonatal Respiratory Care	3
RET 2934	Professional Development in Respiratory Care	2
RET 2241	Introduction to ACLS for Respiratory Care	1
MAT 1033	Intermediate Algebra or higher	3

All core curriculum (RET) and natural science courses require a grade of "C" or higher. BSC-2093 (p. 179) and BSC-2093L (p. 179) lab must be completed by the end of the Fall semester, first year. MAT-1033 (p. 253), BSC-2094 (p. 179) and BSC-2094L (p. 179) must be completed by the end of the Spring semester, first year.

Restaurant Management

20800 - 64 Credits

A strong foundation in the foods and nutrition field coupled with a broad base of general academics is provided by this program. This course of study offers students the opportunity to gain field experience and practical knowledge through “hands-on” activities. With this major, one can select many productive employment possibilities from a variety of career fields such as the food processing industry, institutional food service management, and restaurant management.

ASSOCIATE IN SCIENCE DEGREE IN RESTAURANT MANAGEMENT

20800 - 64 credits

DEGREE REQUIREMENTS

General Education - English		
ENC 1101	English Composition I	3
General Education - Humanities Fine Arts		
See Associate in Science Associate in Applied Science Degree General Education Options (p. 97).		3 credits
	Or	
PHI 1103	Critical and Creative Thinking Recommended	3
General Education - Natural Science/Mathematics		
See Associate in Science Associate in Applied Science Degree General Education Options (p. 97).		3 credits
General Education - Social/Behavioral Science		
See Associate in Science Associate in Applied Science Degree General Education Options (p. 97).		3 credits
	Or	
PSY 2012	Introduction to Psychology Recommended	3
General Education - Humanities Fine Arts/Natural Science/Mathematics or Social/Behavioral Science		
See Associate in Science Associate in Applied Science Degree General Education Options (p. 97).		3 credits
	Or	
ECO 2013	Principles of Economics Macro	3
	Or	
ECO 2023	Principles of Economics Micro Recommended	3
Major Field Required Courses - 12 credits		
FOS 2201	Food Service Sanitation Management	3
FSS 1203C	Quantity Food Production I	3
FSS 2251	Food & Beverage Management	3
HUN 1203	Culinary Nutrition	3
Specialization Electives - 34 credits		
FSS 1240C	Classical Cuisine	3
FSS 1246C	Baking and Pastries I	3
FSS 2284C	Catering and Banquet Management	3
FSS 2500	Food and Beverage Cost Control	3
HFT 1000	Introduction to Hospitality and Tourism	3
HFT 1820	Food and Beverage Purchasing	3
HFT 2223	Human Relations and Supervisory	3

	Development	
HFT 2500	Marketing & Sales in the Hospitality Industry	3
HFT 2600	Hospitality Law	3
HFT 2630	Security Issues in the Hospitality Industry	3
HFT 2840	Table Service Etiquette	1
HFT 2943	Internship in Restaurant Management	1 - 3

FSS 1240C (p. 225) and FSS 1246C (p. 226) require a grade of C or higher for successful program progression and completion.

Major Field Electives - Select 3 credits

APA 1111	Introduction to Accounting	3
CGS 1100	Introduction to Computer Applications for Business	3
FSS 1930	Creative Culinary Cooking	.5 - 3
FSS 2263	Food Merchandising and Service	3
GEB 1011	Introduction to Business	3
EEC 1730	Basic Childhood Nutrition	3
MAN 2021	Principles of Management	3
MAR 2011	Principles of Marketing	3
MKA 1303	Mid-Management Seminar I	4
MNA 2100	Interpersonal Relations in Business	3
MNA 2345	Supervision	3

Social and Human Services

20600 - 60 Credits

This program prepares beginning Human Services Workers for careers in a wide variety of human services settings including children's service agencies, state attorneys' offices, substance abuse facilities, domestic abuse shelters, juvenile intervention programs, social service agencies, and mental health facilities. Students learn techniques and strategies to assist clients in identifying problematic behavior and promoting positive personal growth. Students will acquire both theoretical as well as practical expertise in the Human Services field.

ASSOCIATE IN SCIENCE DEGREE IN SOCIAL AND HUMAN SERVICES

20600 - 60 credits

DEGREE REQUIREMENTS

General Education - English

ENC 1101	English Composition I	3

General Education - Humanities/Fine Arts

PHI 1103 or HUM 1020 (p. 240) is recommended for students planning to pursue a Bachelor of Science Degree in Human Services at Indian River State College.

See Associate in Science Associate in Applied Science General Education Options. (p. 97) 3 credits

	Recommended	
PHI 1103	Critical and Creative Thinking	3
	Or	
HUM 1020	Introduction to Humanities	3

General Education - Natural Science/Mathematics

BSC-1005 (p. 178) is recommended for students planning to pursue a Bachelor of Science Degree in Human Services at Indian River State College.

See Associate in Science Associate in Applied Science General Education Options. (p. 98) 3 credits

	Recommended	
BSC 1005	Life Science	3

General Education - Social/Behavioral Science

PSY-2012 (p. 278) and SYG-2000 (p. 291) are recommended for students planning to pursue a Bachelor of Science Degree in Human Services at Indian River State College.

See Associate in Science Associate in Applied Science General Education Options. (p. 98) 6 credits

	Recommended	
PSY 2012	Introduction to Psychology	3
	And	
SYG 2000	Introduction to Sociology	3

Major Field Required Courses - 30 credits

CLP 2140	Abnormal Psychology	3
HUS 1001	Introduction to Human Services	3
HUS 1200	Group Dynamics	3
HUS 1400	Introduction to Drugs of Abuse	3
HUS 1540	Family Relations	3
HUS 2301	Counseling Techniques	3
HUS 2302	Techniques of Interviewing and Intervention	3
HUS 2401	Substance Abuse and Treatment	3
HUS 2500	Introduction to Ethics in Human Services	3
HUS 2820	Internship in Human Services	3 - 4

Major Field Electives - Select 15 credits

ENC-1102 (p. 215) and MGF-2106 (p. 255) are recommended for students planning to pursue a Bachelor of Science Degree in Human Services at Indian River State College.

A maximum of 4 credits in Foreign Language may be used as elective credits.

CCJ 1600	Deviant Behavior	3
DEP 1002	Child and Adolescent Psychology	3
ENC 1102	English Composition II	3
HSC 2400	First Aid and Safety	3
HUS 2111	Introduction to Interpersonal	3

	Behavior	
MGF 2106	Survey in Mathematics	3
	or higher	
PPE 2001	Person and Personality Development	3
SYG 2010	Social Problems	3
CGS 1060	College Computing	3
BSC 2010L	General Biology I Lab	1
	Or	
BSC 1005L	Life Science Lab	1
	and select one from the following:	
ASL 1140	American Sign Language I	4
ASL 1150	American Sign Language II	4
FRE 1120	Elementary French I	4
FRE 1121	Elementary French II	4
GER 1120	Elementary German I	4
GER 1121	Elementary German II	4
SPN 1120	Elementary Spanish I	4
SPN 1121	Elementary Spanish II	4
SPN 2220	Intermediate Spanish I	4
SPN 2221	Intermediate Spanish II	4

CAREER TRAINING PROGRAMS

ADMINISTRATIVE OFFICE SPECIALIST (p. 141)

AIR CONDITIONING, REFRIGERATION & HEATING APPRENTICESHIP (p. 142)

AIR CONDITIONING, REFRIGERATION & HEATING TECHNOLOGY I (p. 142)

AIR CONDITIONING, REFRIGERATION & HEATING TECHNOLOGY II (p. 143)

AUTOMOTIVE SERVICE TECHNOLOGY I (p. 143)

AUTOMOTIVE SERVICE TECHNOLOGY II (p. 144)

AUXILIARY LAW ENFORCEMENT OFFICER (p. 144)

AVIATION APPRENTICESHIP (p. 145)

BARBERING (p. 145)

CARPENTRY (p. 145)

CENTRAL SERVICE TECHNOLOGY (p. 146)

COMMERCIAL VEHICLE DRIVING (p. 146)

CORRECTIONAL OFFICER - BASIC RECRUIT TRAINING (p. 146)

CORRECTIONAL OFFICER CROSSOVER FROM LAW ENFORCEMENT OFFICER (p. 146)

COSMETOLOGY (p. 147)

COSMETOLOGY SPECIALIST - FACIALS (ESTHETICS)
(p. 147)

COSMETOLOGY SPECIALIST - NAILS (p. 148)

CULINARY OPERATIONS APPRENTICESHIP (p. 148)

EARLY CHILDHOOD EDUCATION (p. 148)

ELECTRICAL APPRENTICESHIP (p. 149)

FIREFIGHTING - BASIC RECRUIT TRAININ (p. 149)G

LAW ENFORCEMENT - BASIC RECRUIT TRAINING (p. 149)

LAW ENFORCEMENT OFFICER CROSSOVER FROM CORRECTIONAL OFFICER (p. 150)

LEGAL ADMINISTRATIVE SPECIALIST (p. 151)

MEDICAL ADMINISTRATIVE SPECIALIST (p. 151)

MEDICAL ASSISTING (p. 151)

NURSING ASSISTANT (p. 152)

PHARMACY TECHNICIAN (p. 152)

PHARMACY TECHNICIAN APPRENTICESHIP (p. 153)

PHLEBOTOMY (p. 153)

PLUMBING APPRENTICESHIP (p. 153)

PRACTICAL NURSING (p. 154)

PRIVATE SECURITY OFFICER (p. 154)

SPECIALIZED CAREER EDUCATION, BASIC (p. 154)

SPECIALIZED CAREER EDUCATION, ADVANCED (p. 155)

SURGICAL TECHNOLOGY (p. 155)

WELDING APPRENTICESHIP (p. 155)

WELDING TECHNOLOGY (p. 156)

A Career Training Program emphasizes specific skill development and is designed to lead to licensure or certification. Upon completion of the program, a student is well-prepared to enter the chosen career field.

Since many Selective Admissions Programs have special deadlines and admissions criteria, applicants to Selective Admission Programs should consult with an IRSC advisor well before the intended term of enrollment. Florida Statutes require students in Career Training Programs that have 450 hours or more to pass the Basic Skills Requirement, except for those students who meet the state standards for an exemption.

Non-exempt students who are enrolled in a Post-secondary Adult Vocational Program greater than 180 clock-hours must complete a basic skills examination within the first 6 weeks after admission to the program. The Test of Adult Basic Education (TABE) is administered by the Assessment Services Department at each IRSC campus. Minimum basic skills grade levels in mathematics and language must be met. Any student scoring below the acceptable levels must be provided with instruction to correct identified deficiencies. At the completion of developmental instruction, the student will be retested.

Indian River State College Placement Rates

The most recent placement rate for each program may be found at: 2010-2011 Placement Rates, 2009-2010 Placement Rates,2008-2009 Placement Rates.

ADMINISTRATIVE OFFICE SPECIALIST - 50280

1050 clock hours

This program offers students a broad foundation of knowledge and skills expanding the traditional role of Administrative Assistant. The content includes the use of technology to develop communication and decision-making skills; the performance of office procedures tasks; and the production of quality work in an efficient manner using advanced features of business software applications. The program focuses on broad, transferable skills, stresses understanding of the elements of the office support services industry, and includes an on-the-job training component. The program is offered in an open entry/open exit, self-paced, individualized format.

Gainful Employment

DEGREE REQUIREMENTS

Required program:

OTA 0005	Office Skills Training I (N)	75 hours
OTA 0006	Office Skills Training II (N)	75 hours
OTA 0001	Office Support Technology I (N)	75 hours
OTA 0002	Office Support Technology II (N)	75 hours
OTA 0100	Data Entry I (N)	75 hours
OTA 0425	Date Entry II (N)	75 hours
OTA 0031	Computer Applications I (N)	75 hours
OTA 0032	Computer Applications II (N)	75 hours
OCA 0312	Office Communications I (N)	75 hours
OCA 0313	Office Communications II (N)	75 hours
OTA 0948	Business Cooperative Education I - OJT (N)	150 hours
OTA 0949	Business Cooperative Education II - OJT (N)	150 hours

AIR CONDITIONING, REFRIGERATION, AND HEATING APPRENTICESHIP – 50010

8400 clock hours

This program is offered in partnership with State of Florida registered apprenticeship sponsors and prepares students for advancement in the air-conditioning, refrigeration, and heating trades. The program utilizes a cooperative method of instruction, requiring on-the-job training for which the student receives compensation, and classroom instruction.

EPA regulations (40 CFR Part 82, Subpart F) under Section 608 of the Clean Air Act require that technicians who maintain, service, repair, or dispose of equipment that could release ozone depleting refrigerants into the atmosphere must be certified. Starting on January 1, 2018, this requirement will also apply to appliances containing most substitute refrigerants, including HFCs.

Technicians are required to pass an EPA-approved test to earn Section 608 Technician Certification. The tests are specific to the type of equipment the technician seeks to work on. Tests must be administered by an EPA-approved certifying organization. Section 608 Technician Certification credentials do not expire. Core tests taken as an open book exam cannot be used to get your Universal Certification. The core test must be taken as a proctored exam in order to attain Universal Certification. For more information, please visit https://www.epa.gov/section608/section-608-technician-certification-0.

DEGREE REQUIREMENTS

Required program:

ACR 0940	Apprenticeship HVAC 1 (N)	90 hours
ACR 0941	Apprenticeship HVAC 2 (N)	90 hours
ACR 0942	Apprenticeship HVAC 3 (N)	90 hours
ACR 0943	Apprenticeship HVAC 4 (N)	90 hours
ACR 0944	Apprenticeship HVAC 5 (N)	90 hours
ACR 0945	Apprenticeship HVAC 6 (N)	90 hours
ACR 0947	Apprenticeship HVAC 7 (N)	90 hours
ACR 0948	Apprenticeship HVAC 8 (N)	90 hours
ACR 0946	Apprenticeship HVAC On-the-Job Training (N)	640 hours

ACR V946: Apprenticeship HVAC On the Job Training: *This course is repeated twelve (12) times throughout the program to document the on-the-job requirement for apprentices.

AIR CONDITIONING, REFRIGERATION, AND HEATING TECHNOLOGY I – 50680

750 clock hours

This is an open-entry program which allows students to register any time during the semester. Upon successful completion of the program, students can enter the workforce as Air Conditioning, Refrigeration and Heating Mechanic Assistants.

EPA regulations (40 CFR Part 82, Subpart F) under Section 608 of the Clean Air Act require

that technicians who maintain, service, repair, or dispose of equipment that could release ozone depleting refrigerants into the atmosphere must be certified. Starting on January 1, 2018, this requirement will also apply to appliances containing most substitute refrigerants, including HFCs.

Technicians are required to pass an EPA-approved test to earn Section 608 Technician Certification. The tests are specific to the type of equipment the technician seeks to work on. Tests must be administered by an EPA-approved certifying organization. Section 608 Technician Certification credentials do not expire. Core tests taken as an open book exam cannot be used to get your Universal Certification. The core test must be taken as a proctored exam in order to attain Universal Certification. For more information, please visit https://www.epa.gov/section608/section-608-technician-certification-0.

Gainful Employment

DEGREE REQUIREMENTS

Required program:

ACR 0523	HVAC/R1 (N)	150 hours
ACR 0100	HVAC/R2 (N)	150 hours
ACR 0525	HVAC/R3 (N)	150 hours
ACR 0548	HVAC/R4 (N)	150 hours
ACR 0607	HVAC/R5 (N)	150 hours

Elective:

ACR 0930	Special Topics in HVAC (N)	15 - 150 hours

AIR CONDITIONING, REFRIGERATION, AND HEATING TECHNOLOGY II - 50690

600 clock hours

This open-entry program allows students to continue their study in advanced air conditioning, refrigeration and heating technology with an emphasis on commercial installation, maintenance, and diagnostics. Upon successful completion of the program, students can enter the workforce as Air Conditioning, Refrigeration and Heating Mechanics. Students must complete Air Conditioning, Refrigeration and Heating Technology I before enrolling in this program.

EPA regulations (40 CFR Part 82, Subpart F) under Section 608 of the Clean Air Act require that technicians who maintain, service, repair, or dispose of equipment that could release ozone depleting refrigerants into the atmosphere must be certified. Starting on January 1, 2018, this requirement will also apply to appliances containing most substitute refrigerants, including HFCs.

Technicians are required to pass an EPA-approved test to earn Section 608 Technician Certification. The tests are specific to the type of equipment the technician seeks to work on. Tests must be administered by an EPA-approved certifying organization. Section 608 Technician Certification credentials do not expire. Core tests taken as an open book exam cannot be used to get your Universal Certification. The core test must be taken as a proctored exam in order to attain Universal Certification. For more information, please visit https://www.epa.gov/section608/section-608-technician-certification-0.

Gainful Employment

DEGREE REQUIREMENTS

Required program:

ACR 0701	HVAC/R6 (N)	150 hours
ACR 0571	HVAC/R7 (N)	150 hours
ACR 0578	HVAC/R8 (N)	150 hours
ACR 0431	HVAC/R9 (N)	150 hours

AUTOMOTIVE SERVICE TECHNOLOGY I - 50700

1050 clock hours

This program prepares students for employment and/or specialized training in the automotive industry. It also provides supplemental training for persons previously or currently employed in the automotive industry.

Any person who repairs or services a motor vehicle air conditioning (MVAC) system for consideration (payment or bartering) must be properly trained and certified under section 609 of the Clean Air Act by an EPA-approved program. All technicians servicing MVAC-like appliances must be certified.

EPA-approved technician training and certification (TT&C) programs provide education on the proper use of MVAC servicing equipment, the applicable regulatory requirements, the importance of refrigerant recovery, as well as the effects of improper handling of refrigerants on the ozone layer and climate. To be certified, technicians must be trained by an EPA-approved program and pass a test demonstrating their knowledge in these areas. For more information, please visit https://www.epa.gov/mvac/section-609-technician-training-and-certification-programs.

Gainful Employment

DEGREE REQUIREMENTS

Required program:

AER 0006	Automotive Services Assistor I (N)	150 hours
AER 0007	Automotive Services Assistor 2 (N)	150 hours
AER 0691	Automotive Electric/Electronics System Tech I (N)	150 hours
AER 0692	Automotive Electric/Electronics System Tech II (N)	150 hours
AER 0599	Auto Brake Systems Technician (N)	150 hours
AER 0499	Automotive Suspension & Steering Technician (N)	150 hours
AER 0110	Engine Repair Technician (N)	150 hours

Electives

DIM 0004	Introduction to Diesel Mechanics (N)	150 hours

AUTOMOTIVE SERVICE TECHNOLOGY II - 50710

750 clock hours

This program provides advanced training in the automotive service industry and supplemental training for persons previously or currently employed in the automotive industry.

Any person who repairs or services a motor vehicle air conditioning (MVAC) system for consideration (payment or bartering) must be properly trained and certified under section 609 of the Clean Air Act by an EPA-approved program. All technicians servicing MVAC-like appliances must be certified.

EPA-approved technician training and certification (TT&C) programs provide education on the proper use of MVAC servicing equipment, the applicable regulatory requirements, the importance of refrigerant recovery, as well as the effects of improper handling of refrigerants on the ozone layer and climate. To be certified, technicians must be trained by an EPA-approved program and pass a test demonstrating their knowledge in these areas. For more information, please visit https://www.epa.gov/mvac/section-609-technician-training-and-certification-programs.

Gainful Employment

DEGREE REQUIREMENTS

Required program:

AER 0172	Auto Heat/Air Conditioning Tech (N)	150 hours
AER 0299	Automatic Transmission/Transaxles (N)	150 hours
AER 0399	Manual Drive Train/Axle Tech (N)	150 hours
AER 0891	Auto Engine Performance Tech I (N)	150 hours
AER 0892	Auto Engine Performance Tech II (N)	150 hours

Electives

AUXILIARY LAW ENFORCEMENT OFFICER - 50040

364 clock hours

(Selective Admission)

This program provides training to students seeking positions as auxiliary law enforcement officers within law enforcement agencies. Law enforcement auxiliary officers supplement an agency work force and provide personnel for special assignment activities and details. Per Florida State Statute 943.10(8), "Auxiliary law enforcement officer" means any person employed or appointed, with or without compensation, who aids or assists a full-time or part-time law enforcement officer and who, while under the direct supervision of a full-time or part-time law enforcement officer, has the authority to arrest and perform law enforcement functions.

There are five primary steps to becoming a certified officer in Florida:

1. Meet the minimum qualifications pursuant to s. 943.13, Florida Statutes
2. Complete the required training or be exempt pursuant to s. 943.131(2), Florida Statutes for the respective discipline.
3. Pass the State Officer Certification Examination for the respective discipline. The fee for the State Officer Certification Examination (SOCE) is $100. Please note that additional fees may be assessed by the test sites; consult the list of authorized test sites for specific fees.
4. Gain employment with a Florida criminal justice employing agency with that agency completing a full background investigation and submitting an Officer Certification Application form CJSTC-59 on the officer's behalf.
5. Have the employment file reviewed by Commission staff to ensure compliance.

For more information, please visit https://www.fdle.state.fl.us/CJSTC/Officer-Requirements/How-to-Become-an-Officer.aspx.

DEGREE REQUIREMENTS

Required program:

CJK 0023	Introduction to Law Enforcement	4

	(N)	hours
CJK 0024	Legal Concepts (N)	20 hours
CJK 0025	Patrol & Professional Communication (N)	12 hours
CJK 0026	Interactions in a Diverse Community (N)	12 hours
CJK 0027	Calls for Service (N)	24 hours
CJK 0028	Traffic Stops and Crash Investigation (N)	28 hours
CJK 0029	Crime Scene and Courtroom Procedures (N)	8 hours
CJK 0422	Dart-firing Stun Gun (N)	8 hours
CJK 0031	First Aid for Criminal Justice Officers (N)	40 hours
CJK 0040C	Criminal Justice Firearms (N)	80 hours
CJK 0051	Defensive Tactics (N)	80 hours
CJK 0020C	CMS Vehicle Operations (N)	48 hours

AVIATION APPRENTICESHIP - 50770

4000 clock hours

Selective Admissions

The Piper Aircraft Apprenticeship Program offers the chance to earn while you learn Manufacturing Career Skills. Apprentices learn all aspects of fabrication and assembly of aircraft during the two-year initiative. Additionally, they attend technical classes and receive hands-on training designed to qualify the participants as a Journeyman in Aircraft Assembly. This program is offered in partnership with State of Florida registered apprenticeship sponsors and prepares students for careers in the aviation industry. The program utilizes a cooperative method of instruction, requiring on-the-job training for which the student receives compensation, and classroom instruction. As with all Apprenticeship programs each apprentice is a paid employee of Piper Aircraft and receives a full benefits package. Students who are interested in this program should contact Piper Aircraft, Vero Beach, Florida.

DEGREE REQUIREMENTS

Required program:

AMT 0790	Apprenticeship Aviation 1	72 hours
AMT 0791	Apprenticeshp Aviation 2	72 hours
AMT 0792	Apprenticeship Aviation 3	72 hours
AMT 0793	Apprenticeship Aviation 4	72 hours
AMT 0945	Apprenticeship Aviation OJT	667 hours

AMT 0945: Apprenticeship Aviation OJT: "This course is repeated six (6) times through out the program to document on-the-job requirement for apprentices.

BARBERING - 50410

1200 clock hours

Upon successful completion, this program enables students to sit for the State Barber licensing exam.

Applicants must complete at least 1000 hours of training at a Florida barbering school and be determined competent by a school official to sit for the barbering exam OR applicants must complete a minimum of 1200 hours of training at a Florida school. For barbers who complete their education in Florida, ensure that the school official signs the portion of the application verifying a minimum of 1000 barbering hours and the completion date. The current fee for the Barber application is $173.50. If you submit the application after March 31, 2020 the fee will be $223.50. For more information, please visit https://www.myfloridalicense.com/CheckListDetail.asp?SID=&xactCode=1010&clientCode=0301&XACT_DEFN_ID=5060.

Gainful Employment

DEGREE REQUIREMENTS

Required program:

COS 0502	Barbering I: Theory of Barbering (N)	450 hours
COS 0521	Barbering II: Applied Skills and Tactics (N)	450 hours
COS 0553	Barbering III: Skillset Review (N)	300 hours

CARPENTRY - 50060

(1200 clock hours)

This is a 1200 clock hour program in Residential Carpentry. Training activities include instruction in safety, and the processes found in the trade. This hands-on program is offered in partnership with Treasure Coast Builder's Association and prepares high-quality, entry level carpenters for the building construction industry.

Gainful Employment

DEGREE REQUIREMENTS

Required program:

Elective:

CENTRAL SERVICE TECHNOLOGY - 50780

650 clock hours

Selective Admissions

This 6-month program provides the student with the technical ability, knowledge, and skills required for entry-level employment as a member of the health care team in a hospital central sterile processing or material management department. The Central Service Technology program provides the student with a strong foundation in the essentials of health care, anatomy, physiology, medical language, and microbiology. Specialty didactic, laboratory, and clinical courses in central service technology prepare the student to become an entry-level central service technician and take the national certification exam.

DEGREE REQUIREMENTS

Required program

HSC 0003	Introduction to Health Care (N)	82 - 90 hours
STS 0019C	Central Sterile Processing/Materials Mgmt (N)	150 hours
STS 0013L	Centrl Sterile Processing Clinical (N)	410 hours

Students must achieve a grade of "C" or higher in all courses. This program requires 90 hours for HSC0003.

COMMERCIAL VEHICLE DRIVING - 50110

320 clock hours

This program prepares students for employment as commercial truck drivers. In addition to classroom instruction, students receive over 1,000 miles of supervised on-the-road driver training.

All applicants for a Commercial Driver License are required to have an Operator's License, pass the vision requirements, and pass knowledge and skills tests. Applicants must be at least 18 years of age. If they are under 21, they will be restricted to intrastate operation only. For more information, please visit https://www.flhsmv.gov/driver-licenses-id-cards/commercial-motor-vehicle-drivers/commercial-driver-license/.

DEGREE REQUIREMENTS

Required program:

TRA 0081	Commercial Vehicle Driving (N)	160 hours
TRA 0083	On-the-Job Training Commercial Vehicle Driving (N)	160 hours

CORRECTIONAL OFFICER - BASIC RECRUIT TRAINING - 50120

420 clock hours

(Selective Admission)

The Corrections Basic Recruit Training prepares students as entry level Corrections Officers in the State of Florida. Practical skills and simulated activities compliment the classroom instruction. Upon successful completion, students are eligible to take the Florida Department of Law Enforcement State Certification Examination. This minimum standard class is regulated by Florida Statutes and is a highly structured and disciplined program with special rules, policies, and procedures.

DEGREE REQUIREMENTS

Required program:

CJK 0300	Introduction to Corrections (N)	32 hours
CJK 0305	Communications (N)	40 hours
CJK 0310	Officer Safety (N)	16 hours
CJK 0315	Facility and Equipment (N)	8 hours
CJK 0320	Intake and Release (N)	18 hours
CJK 0325	Supervising in a Correctional Facility (N)	40 hours
CJK 0330	Supervising Special Populations (N)	20 hours
CJK 0335	Responding to Incidents and Emergencies (N)	16 hours
CJK 0051	Defensive Tactics (N)	80 hours
CJK 0040C	Criminal Justice Firearms (N)	80 hours
CJK 0031	First Aid for Criminal Justice Officers (N)	40 hours
CJK 0340	Officer Wellness and Physical Fitness (N)	30 hours

CORRECTIONAL OFFICER CROSSOVER FROM LAW ENFORCEMENT OFFICER - 50440

198 clock hours

(Selective Admission)

This program prepares the Florida certified Law Enforcement Officer for certification as a Correctional Officer in the State of Florida as mandated by the Criminal Justice Standards and Training Commission. The training program focuses on the skills and techniques specifically related to the duties and responsibilities of the Correctional Officer. Upon successful completion, students are eligible to take the Florida Department of Law Enforcement State Certification Examination.

DEGREE REQUIREMENTS

Required program:

CJK 0300	Introduction to Corrections (N)	32 hours
CJK 0305	Communications (N)	40 hours
CJK 0310	Officer Safety (N)	16 hours
CJK 0315	Facility and Equipment (N)	8 hours
CJK 0320	Intake and Release (N)	18 hours
CJK 0325	Supervising in a Correctional Facility (N)	40 hours
CJK 0330	Supervising Special Populations (N)	20 hours
CJK 0335	Responding to Incidents and Emergencies (N)	16 hours
CJK 0393	Crossover Program Updates (N)	8 hours

COSMETOLOGY - 50140

1200 clock hours

Upon successful completion, this program enables students to sit for the State Cosmetology licensing exam.

General Requirements for Cosmetology License:

a. Applicant must be at least 16 years of age or have received a high school diploma.

b. Applicant must possess a Social Security number to apply.

c. Applicant must:

i. Complete at least 1,000 hours of training at a Florida cosmetology school and be determined competent by a school official to sit for the cosmetology exam, OR

ii. Complete a minimum of 1,200 hours of training at a Florida cosmetology school.

d. Applicant must submit a course completion certificate from a board-approved Initial HIV/AIDS course provider with their application. Applicants who completed their education at a Florida school should submit a board-approved Initial HIV/AIDS course completion certificate from their school. The board-approved Initial HIV/AIDS course must have been completed within two years prior to submitting an application, and the course must be at least 4 hours long. Refer to the list of board-approved Initial HIV/AIDS Courses.

e. Applicant must pass both portions of the cosmetology examination within a two-year period from the date of the first attempt of either portion of the examination. If both portions of the examination are not passed within a two-year period, applicant is required to pass both portions of the examination again. If applicant fails either portion of the examination on the first attempt, applicant can submit a reexamination application without any additional signatures from the cosmetology school. Remedial hours may be required with verification by the cosmetology school.

Total fee for Cosmetology initial application is $63.50. For more information, please visit https://www.myfloridalicense.com/CheckListDetail.asp?SID=&xactCode=1010&clientCode=0501&XACT_DEFN_ID=5236.

Gainful Employment

DEGREE REQUIREMENTS

Required program:

COS 0010	Cosmetology I: Theory of Cosmetology (N)	450 hours
COS 0088	Cosmetology II: Applied Skills and Tactics (N)	450 hours
COS 0008	Cosmetology III: Skillset Review (N)	300 hours

COSMETOLOGY SPECIALIST - FACIALS - 50150

260 clock hours

A Florida specialty registration is required to perform facial specialty services. Facial services are the massaging or treating of the face or scalp with oils, creams, lotions, or other preparations. Applicants must complete 260 school hours in a Florida facial specialty program. The fee for the Facial Specialist application is $75.00. For more information, please visit https://www.myfloridalicense.com/CheckListDetail.asp?SID=&xactCode=1030&clientCode=0508&XACT_DEFN_ID=5351.

DEGREE REQUIREMENTS

Required program:

CSP 0100	Esthetics (N)	260 hours

COSMETOLOGY SPECIALIST - NAILS - 50160

240 clock hours

A Florida specialty registration is required to perform manicure, pedicure and nail extension services. Applicants must complete 240 school hours in a Florida nail program. The fee for the Nail Specialist application is $75.00. For more information, please visit https://www.myfloridalicense.com/CheckListDetail.asp?SID=&xactCode=1030&clientCode=0507&XACT_DEFN_ID=5331.

DEGREE REQUIREMENTS

Required program:

CSP 0010	Manicure, Pedicure, Nail Extensions I (N)	120 hours
CSP 0011	Manicure, Pedicure, Nail Extensions II (N)	120 hours

CULINARY OPERATIONS APPRENTICESHIP - 50080

2346 clock hours

Selective Admissions

This program is an in-depth study intended to prepare the student for all aspects of food service, including cooking and baking techniques, nutrition guidelines, and sanitation principles. National culinary standards will be incorporated into on-the-job training and classroom instruction.

DEGREE REQUIREMENTS

Required Program:

HMV 0940	Apprenticeship - Culinary Arts - Sanitation (N)	48 hours
HMV 0930	Apprenticeship - C/A Introduction to Foodservice (N)	48 hours
HMV 0931	Apprenticeship - C/A Food Preparation I (N)	48 hours
HMV 0944	Apprenticeship - Culinary Arts - Nutrition Principles (N)	48 hours
HMV 0945	Apprenticeship - Culinary Arts - Food Cost Accounting (N)	48 hours
HMV 0946	Apprenticeship - Culinary Arts - Garde Manger (N)	48 hours
HMV 0948	Culinary Arts - Supervisory Management (N)	48 hours
HMV 0943	Apprenticeship - Culinary Arts On-the-Job Learning (N)	670 hours

HMV V943 Apprenticeship – Culinary Arts: *This course is repeated three (3) times throughout the program to document the on-the-job requirement for apprentices.

EARLY CHILDHOOD EDUCATION - 50190

600 clock hours

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Education and Training career cluster. The program provides technical skill proficiency, competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, occupation-specific skills, and knowledge of all aspects of the Education and Training career cluster.

The content includes but is not limited to competencies related to the following elements of the Early Childhood industry: planning, management, finance, technical and production skills; underlying principles of technology; labor, community, health, safety, and environmental issues; and developmentally appropriate practices for children birth through age eight.

Gainful Employment

DEGREE REQUIREMENTS

Required Program Option One:

HEV 0870	Child Care Worker I (N)	110-150 hours
HEV 0871	Child Care Worker II (N)	150 hours
HEV 0872	Teacher Aide (Preschool) (N)	150 hours
HEV 0873	Preschool Teacher (N)	150 hours

Required Program Option Two:

HEV 0870	Child Care Worker I (N)	110-150 hours
HEV 0871	Child Care Worker II (N)	150 hours
HEV 0872	Teacher Aide (Preschool) (N)	150 hours
HEV 0873	Preschool Teacher (N)	150 hours

and select 30 hours from:

HEV 0118	Family Day Care Worker Training (N)	3 - 30 hours
	Or	
HEV 0115	30-Hour Statewide Childcare Training (N)	30 hours
	Or	
HEV 0132	Child Growth and Development (N)	6 hours

HEV 0166	Health, Safety and Nutrition (N)	8 hours
HEV 0181	Behavioral Observation and Screening in Child Care (N)	6 hours
HEV 0199	Identifying and Reporting Child Abuse and Neglect (N)	4 hours

and select one:

HEV 0805	Rules and Regulations (N)	6 hours
HEV 0806	Family Child Care Rules and Regulations (N)	6 hours

and select one

HEV 0116	Introduction to Preschool Practices (N)	10 hours
HEV 0126	Special Needs (N)	10 hours
HEV 0171	Infant Toddler Appropriate Practices (N)	10 hours

ELECTRICAL APPRENTICESHIP - 50200

8400 clock hours

This program is delivered in partnership with State of Florida registered apprenticeship sponsors, and prepares students for advancement as residential or commercial electricians in the construction industry. The program utilizes a cooperative method of learning, requiring on-the-job training and classroom instruction, providing the student with theoretical and practical skills necessary in the electrical trades.

DEGREE REQUIREMENTS

Required program:

BCA 0350	Apprenticeship - Electrical 1 (N)	90 hours
BCA 0351	Apprenticeship - Electrical II (N)	90 hours
BCA 0352	Apprenticeship - Electrical III (N)	90 hours
BCA 0353	Apprenticeship - Electrical IV (N)	90 hours
BCA 0354	Apprenticeship - Electrical V (N)	90 hours
BCA 0355	Apprenticeship - Electrical VI (N)	90 hours
BCA 0356	Apprenticeship - Electrical VII (N)	90 hours
BCA 0357	Apprenticeship - Electrical VIII (N)	90 hours
BCA 0349	Apprenticeship - Electrical On-the-Job Training (N)	592 - 640 hours

BCA V349 Apprenticeship Electrical: This course is repeated twelve (12) times throughout the program to document the on-the-job requirement for apprentices.

FIREFIGHTING - BASIC RECRUIT TRAINING - 50220

398 clock hours

Selective Admission

Basic Fire Recruit Training is offered during the Fall, Spring, and Summer semesters. This program meets the minimum educational requirements for an individual to be a certified combat firefighter in the State of Florida. Upon successful completion of this training program, the student is eligible to take the state written and practical examination administered by the Bureau of Fire Standards and Training. Prior to admission, students must complete the Emergency Medical Technician or Paramedic training program.

A written and practical certification examination is required of all firefighters seeking the career firefighter designation. Any individual who does not obtain a passing score of 70% or more on the Firefighter Retention Examination will be permitted one opportunity to repeat the examination. The examination must be repeated within 6 months of the original examination or the opportunity is forfeited. Florida firefighters must also have training and obtain training as an emergency medical technician prior to obtaining certification as a firefighter. The certification exam requires the test-taker to pass three major areas of study: firefighter safety, training, and state standards. Applicants for certification must also be able to pass a criminal background check. For more information, please visit https://www.myfloridacfo.com/Division/SFM/BFST/Standards/default.htm.

DEGREE REQUIREMENTS

Required program:

FFP 0010	Firefighting Academy I (N)	206 hours
FFP 0020	Firefighting Academy II (N)	192 hours

LAW ENFORCEMENT - BASIC RECRUIT TRAINING - 50250

770 clock hours

(Selective Admission)

Law Enforcement Basic Recruit Training prepares students as entry level law enforcement officers in the State of Florida. Practical skills and simulated activities compliment the classroom instruction. Upon successful

completion, students are eligible to take the Florida Department of Law Enforcement State Certification Examination. This minimum standards class is regulated by Florida Statutes and is a highly structured and disciplined program with special rules, policies, and procedures.

The Florida Department of Agriculture and Consumer Services (FDACS) licenses and regulates the private security industry in accordance with Chapter 493, Florida Statutes (F.S.). Any individual who performs the services of a security officer must have a Class "D" license. To qualify for a license, the individual must submit to fingerprinting and complete 40-hour security guard training. Total fees required for a Class "D" application is $97.75. For more information, please visit https://www.fdacs.gov/Business-Services/Private-Security-Licenses.

Gainful Employment

DEGREE REQUIREMENTS

Required program:

CJK 0001	Introduction to Law Enforcement (N)	10 hours
CJK 0012	Legal (N)	62 hours
CJK 0013	Interactions in Diverse Community (N)	40 hours
CJK 0014	Interview and Report Writing (N)	56 hours
CJK 0064	Fundamentals of Patrol (N)	35 hours
CJK 0065	Calls for Service (N)	36 hours
CJK 0077	Criminal Investigations (N)	50 hours
CJK 0078	Crime Scene to Courtroom (N)	35 hours
CJK 0092	Critical Incidents (N)	44 hours
CJK 0087	Traffic Stops (N)	30 hours
CJK 0084	DUI Traffic Stops (N)	24 hours
CJK 0088	Traffic Crash Investigations (N)	32 hours
CJK 0020C	CMS Vehicle Operations (N)	48 hours
CJK 0031	First Aid for Criminal Justice Officers (N)	40 hours
CJK 0040C	Criminal Justice Firearms (N)	80 hours
CJK 0051	Defensive Tactics (N)	80 hours
CJK 0422	Dart-firing Stun Gun (N)	8 hours
CJK 0096	Criminal Justice Officer Physical Fitness Training (N)	40 - 60 hours

LAW ENFORCEMENT OFFICER CROSSOVER FROM CORRECTIONAL OFFICER - 50420

518 clock hours

(Selective Admission)

This program prepares the Florida certified Correctional Officer for certification as a Law Enforcement Officer in the State of Florida as mandated by the Criminal Justice Standards and Training Commission. The training program focuses on the skills and techniques specifically related to the duties and responsibilities of the Law Enforcement Officer. Upon successful completion, students are eligible to take the Florida Department of Law Enforcement State Certification Examination.

DEGREE REQUIREMENTS

Required program:

CJK 0001	Introduction to Law Enforcement (N)	10 hours
CJK 0012	Legal (N)	62 hours
CJK 0013	Interactions in Diverse Community (N)	40 hours
CJK 0014	Interview and Report Writing (N)	56 hours
CJK 0020C	CMS Vehicle Operations (N)	48 hours
CJK 0064	Fundamentals of Patrol (N)	35 hours
CJK 0065	Calls for Service (N)	36 hours
CJK 0077	Criminal Investigations (N)	50 hours
CJK 0078	Crime Scene to Courtroom (N)	35 hours
CJK 0084	DUI Traffic Stops (N)	24 hours
CJK 0087	Traffic Stops (N)	30 hours
CJK 0088	Traffic Crash Investigations (N)	32 hours
CJK 0092	Critical Incidents (N)	44 hours
CJK 0393	Crossover Program Updates (N)	8 hours
CJK 0422	Dart-firing Stun Gun (N)	8 hours

LEGAL ADMINISTRATIVE SPECIALIST - 50670

1050 clock hours

This program teaches a broad foundation of knowledge and skills expanding the traditional role of the Legal Secretary. The content includes the use of technology to develop communication skills, higher level thinking skills, decision making skills, legal terminology, the performance of office procedures specific to the legal environment, and the transcription of legal documents using advanced features of business software applications.

It also stresses the understanding and demonstration of the legal secretarial industry: planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues, and health, safety, and environmental issues.

Gainful Employment

DEGREE REQUIREMENTS

Required program:

OTA 0005	Office Skills Training I (N)	75 hours
OTA 0006	Office Skills Training II (N)	75 hours
OTA 0001	Office Support Technology I (N)	75 hours
OTA 0002	Office Support Technology II (N)	75 hours
OTA 0470	Legal Technology I (N)	75 hours
OTA 0472	Legal Technology II (N)	75 hours
OTA 0031	Computer Applications I (N)	75 hours
OTA 0032	Computer Applications II (N)	75 hours
OCA 0312	Office Communications I (N)	75 hours
OCA 0313	Office Communications II (N)	75 hours
OTA 0948	Business Cooperative Education I - OJT (N)	150 hours
OTA 0949	Business Cooperative Education II - OJT (N)	150 hours

MEDICAL ADMINISTRATIVE SPECIALIST - 50720

1050 clock hours

This program offers students a broad foundation of knowledge and skills necessary for a position as a Medical Secretary. The content includes the use of technology to develop communications and decision-making skills, the performance of office procedures and tasks specific to a medical office, and the production of quality work in an efficient manner using advanced features of business software applications. The program focuses on broad, transferable skills and stresses understanding and demonstration of the following requirements of the medical office: computerized patient billing, appointment scheduling, recordkeeping, medical terminology, machine transcription, and word processing. The program is offered in an open entry-open exit, self-paced individualized format and offers on- the-job training.

Gainful Employment

DEGREE REQUIREMENTS

Required program:

OTA 0005	Office Skills Training I (N)	75 hours
OTA 0006	Office Skills Training II (N)	75 hours
OTA 0001	Office Support Technology I (N)	75 hours
OTA 0002	Office Support Technology II (N)	75 hours
OTA 0612	Medical Office Technology I (N)	75 hours
OTA 0613	Medical Office Technology II (N)	75 hours
OTA 0031	Computer Applications I (N)	75 hours
OTA 0032	Computer Applications II (N)	75 hours
OCA 0312	Office Communications I (N)	75 hours
OCA 0313	Office Communications II (N)	75 hours
OTA 0948	Business Cooperative Education I - OJT (N)	150 hours
OTA 0949	Business Cooperative Education II - OJT (N)	150 hours

MEDICAL ASSISTING - 50260

1300 clock hours

(Selective Admission)

Indian River State College awards a Certificate to each student who satisfactorily completes the required course of study. The purpose of the program is to prepare the students for a specific clinical, laboratory, and administrative role as a competent entry-level medical assistant in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. Classroom theory and clinical practice prepares the student to perform a wide range of tasks ranging from

examinations room techniques, to assisting with minor surgery, administering medications, educating patients, performing diagnostic procedures including drawing blood and electrocardiography, scheduling appointments, maintaining patient files, and completing insurance forms. The program is accredited by the Committee on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Curriculum Review Board of the American Association of Medical Assistants Endowment (CRB-AAME). CAAHEP, 25400 U.S. Highway 19 North, Suite 158, Clearwater, FL 33763, (727) 210-2350. Upon successful completion of the Certification exam, the graduate will be awarded the credential CMA (AAMA), Certified Medical Assistant from the American Association of Medical Assistants.

Gainful Employment

DEGREE REQUIREMENTS

Required program:

HSC 0003	Introduction to Health Care (N)	82 - 90 hours
MEA 0500	Medical Office Receptionist (N)	75 hours
HCP 0750C	Basic Concepts of Phlebotomy (N)	75 hours
MEA 0200C	Medical Assisting Clinical Procedures I (N)	155 hours
MEA 0242	Introduction to Pharmacology (N)	90 hours
MEA 0231	Anatomy, Physiology and Medical Language (N)	90 hours
MEA 0201C	Medical Assisting Clinical Procedures II (N)	150 hours
MEA 0254C	Medical Office Laboratory (N)	75 hours
MEA 0234	Pathophysiology and Disease (N)	75 hours
MEA 0258	Diagnostic Imaging in Medical Offices (N)	30 hours
HCP 0720C	Electrocardiograph Technical Skills (N)	75 hours
MEA 0334	Medical Office Procedures (N)	75 hours
MEA 0952	Medical Assisting Seminar (N)	53 hours
MEA 0800	Medical Assisting Practicum (N)	200 hours

NURSING ASSISTANT - 50740

165 clock hours

(Selective Admission)

This program teaches skills for certification and employment as nursing assistants in long-term care facilities. Students learn to identify and meet basic patient needs for safety, comfort, and activities of daily living.

Applicants to become a Certified Nursing Assistant by Examination must successfully pass the required background screening and meet one of the following requirements:

1. Has successfully completed an approved training program and achieved a minimum score, established by rule of the board, on the nursing assistant competency examination, which consists of a written portion and skills-demonstration portion approved by the board and administered at a site and by personnel approved by the department.
2. Has achieved a minimum score, established by rule of the board, on the nursing assistant competency examination, which consists of a written portion and skills-demonstration portion, approved by the board and administered at a site and by personnel approved by the department and:
   a. Has a high school diploma, or its equivalent; or
   b. Is at least 18 years of age.
3. Has completed the curriculum developed under the Enterprise Florida Jobs and Education Partnership Grant and achieved a minimum score, established by rule of the board, on the nursing assistant competency examination, which consists of a written portion and skills-demonstration portion, approved by the board and administered at a site and by personnel approved by the department.

Note: If an applicant fails to pass the nursing assistant competency examination in three attempts, the applicant is not eligible for reexamination unless the applicant completes an approved training program. For more information, please visit https://floridasnursing.gov/licensing/certified-nursing-assistant-examination/.

DEGREE REQUIREMENTS

Required program:

HCP 0410C	Nursing Assistant (N)	165 hours
	Or	
HCP 0120	Nursing Assistant - Clinical (N)	40 hours
HCP 0122	Nursing Assistant - Classroom and Lab (N)	125 hours

PHARMACY TECHNICIAN - 50490

1050 clock hours

(Selective Admission)

Indian River State College awards a Certificate of Completion for the Pharmacy Technician program to each student who satisfactorily completes the required course of study. The purpose of the 1050 hour program is to provide students with the knowledge and clinical experiences to learn the technical tasks that take place in a pharmacy and work under the supervision of a Pharmacist. The IRSC Pharmacy Technician curriculum is consistent with the standards of the Florida Department of Education and Pharmacy Technician Certification Board. Upon successful completion of the program, graduates are eligible to apply for the national pharmacy technician certification examination. Pharmacy technicians who successfully pass the exam are eligible to use the title *Certified Pharmacy Technician (CPhT)*.

Gainful Employment

DEGREE REQUIREMENTS

Required program:

HSC 0003	Introduction to Health Care (N)	82 - 90 hours
HSC 0530C	Concepts of Medical Language (N)	35 hours
HSC 0540	Body Structure and Function (N)	60 hours
PTN 0000	Pharmacy Technician Orientation (N)	60 hours
PTN 0032L	Pharmacy Operations I (N)	80 hours
PTN 0033L	Pharmacy Operations II (N)	80 hours
PTN 0015	Pharmaceutical Calculations (N)	75 hours
PTN 0023	General Pharmacology (N)	90 hours
PTN 0030	Introduction to Community Pharmacy (N)	210 hours
PTN 0031	Introduction to Institutional Pharmacy (N)	210 hours
PTN 0093	Pharmacy Technician Review Course (N)	68 hours

PHARMACY TECHNICIAN APPRENTICESHIP - 50790

2369 hours

(Selective Admissions)

DEGREE REQUIREMENTS

Required protram

PTN 0050	On-the-Job Learning for the Pharmacy Technician Apprentice 1 (N)	320 hours
PTN 0051	On-the-Job Learning for the Pharmacy Technician Apprentice 2 (N)	840 hours
PTN 0091	Pharmacy Technician Apprenticeship (N)	204 hours
PTN 0092	Clinical Experience for the Phamacy Technician Aprentice (N)	165 hours

Note:

PTN 0051 is taken twice in the program.

PHLEBOTOMY - 50630

165 clock hours

(Selective Admission)

This program teaches phlebotomy in a clinical setting, including classroom and patient care experiences in laboratory and health care facilities. Upon provisional acceptance, a complete health screen, drug screen and Florida Department of Law Enforcement check is required.

DEGREE REQUIREMENTS

Required Program:

HCP 0750C	Basic Concepts of Phlebotomy (N)	75 hours
HCP 0940	Phlebotomy Practicum (N)	90 hours

PLUMBING APPRENTICESHIP - 50310

8400 clock hours

This apprenticeship is delivered in partnership with State of Florida registered apprenticeship sponsors, and prepares students for advancement as residential or commercial plumbers in the construction industry. The program utilizes a cooperative method of instruction, requiring on-the-job training for which the student receives compensation, and classroom instruction.

DEGREE REQUIREMENTS

Required program:

BCA 0441	Plumbing On-the-Job Training (N)	640 hours
BCA 0450	Introduction to Pipe Trades I (N)	90 hours
BCA 0451	Introduction to Pipe Trades 2 (N)	90 hours
BCA 0452	Introduction to Pipe Trades 3 (N)	90

		hours
BCA 0453	Plumbing Technology 4 (N)	90 hours
BCA 0454	Plumbing Technology 5 (N)	90 hours
BCA 0455	Plumbing Technology 6 (N)	90 hours
BCA 0456	Plumbing Technology 7 (N)	90 hours
BCA 0457	Plumbing Technology 8 (N)	90 hours

BCA V441 Plumbing On-the-Job Training: This course is repeated twelve (12) times throughout the program to document the on-the-job requirement for apprentices.

PRACTICAL NURSING - 50320

1350 clock hours

(Selective Admission)

This program prepares the student for a career as a Licensed Practical Nurse. Advanced Placement is an option for Florida Certified Nursing Assistants. The Florida Board of Nursing requires criminal checks on all applicants for licensure and any nursing licensure applicant who has an arrest record to present those records. The Florida Board of Nursing is the state agency authorized to issue nursing licenses.

The requirements for licensure by examination can be found in Section 464.008, F.S., and include:

- Graduation from a Florida approved or accredited nursing education program as defined in Section 464.003, F.S.
- Graduation from an Accreditation Commission for Education in Nursing (ACEN) or Commission on Collegiate Nursing Education (CCNE) accredited nursing program that has been issued an NCLEX code by NCSBN.
- Graduation from a nursing education program that is approved or recognized by the jurisdiction in which it is based and that has been issued an NCLEX code by the National Council of State Boards of Nursing (NCSBN).
- Graduation from a military nursing education program that has been issued an NCLEX code by NCSBN.

Successful completion of courses in a registered nursing education program that are equivalent to a practical nursing education program – Practical Nurse examination based on practical nursing equivalency (PNEQ). A criminal background search of Florida and national criminal history records is a necessary part of the application process. After three failures of the same level of examination (RN, LPN), regardless of jurisdiction, the applicant must successfully complete a Florida Board of Nursing approved remedial training program. The program includes classroom and clinical components and proof of completion must be submitted at the time of application for the fourth attempt. For more information, please visit https://floridasnursing.gov/licensing/licensed-practical-nurse-registered-nurse-by-examination/.

Gainful Employment

DEGREE REQUIREMENTS

Required program:

PRN 0004C	Practical Nursing Fundamentals (N)	500 hours
PRN 0373C	Practical Nursing Medical Surgical I (N)	350 hours
PRN 0374C	Practical Nursing Medical Surgical II (N)	350 hours
PRN 0933C	Transition to Graduate Practical Nurse (N)	150 hours

PRIVATE SECURITY OFFICER - 50350

68 clock hours

This program offers a sequence of two courses that provide coherent and rigorous content aligned with relevant technical knowledge and skills needed to prepare for careers in the Security Industry. Upon successful completion of the CJK V132, the student may apply for Class "D" certification as a Private Security Officer in accordance with Florida Statute 493. Upon successful completion of the CJK V134, the student may apply for Class "G" certification as an Armed Private Security Officer in accordance with Florida Statute 493.

The Florida Department of Agriculture and Consumer Services (FDACS) licenses and regulates the private security industry in accordance with Chapter 493, Florida Statutes (F.S.). Any individual who performs the services of a security officer must have a Class “D” license. To qualify for a license, the individual must submit to fingerprinting and complete 40-hour security guard training. Total fees required for a Class “D” application is $97.75. For more information, please visit https://www.fdacs.gov/Business-Services/Private-Security-Licenses.

DEGREE REQUIREMENTS

Required program:

CJK 0132	Private Security Officer (N)	40 hours

SPECIALIZED CAREER EDUCATION, BASIC - 50750 (SELECTIVE ADMISSIONS)

450 clock hours

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the instructional Support Services career cluster; provides technical skills proficiency, and includes competency-abase applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the relate career cluster.

DEGREE REQUIREMENTS

Requirements List

SLS 0460	Specialized Career Education, Basic 1 (N)	150 hours
SLS 0461	Specialized Career Education, Basic 2 (N)	150 hours
SLS 0462	Specialized Career Education, Basic 3 (N)	150 hours

SPECIALIZED CAREER EDUCATION, ADVANCED - 50760 (SELECTIVE ADMISSIONS)

450 clock hours

The purpose of this individualized job preparatory program is to provide specialized career education for students with significant cognitive/learning disabilities who, in addition to instructional accommodations, require modifications to the CTE program in order to meet individual interest, abilities, and learning needs.The goal is integrated competitive employment in the student's chosen occupation.

DEGREE REQUIREMENTS

Requirements List

SLS 0463	Specialized Career Education, Advanced 1 (N)	150 hours
SLS 0464	Specialized Career Education, Advanced 2 (N)	150 hours
SLS 0944	Specialized Career Education, Internship (N)	150 hours

SURGICAL TECHNOLOGY - 50400

1330 clock hours

(Selective Admission)

This 12-month program provides the student with the technical ability, knowledge, and skills required for entry-level employment as a member of the health care team in a hospital operating room or outpatient surgical center. The Surgical Technology program provides the student with a strong foundation in the essentials of health care, anatomy, physiology, medical language, and pharmacology. Specialty didactic, laboratory and clinical courses in surgical technology prepare the student to become an entry-level surgical technologist and take the national certification exam.

Gainful Employment

DEGREE REQUIREMENTS

Required program:

STS 0003	Introduction to Surgical Technology (N)	144 hours
STS 0008	Pharmacology for the Surgical Technologist (N)	130 hours
STS 0155C	Surgical Techniques and Procedures (N)	144 hours
STS 0040	Human Anatomy and Physiology (N)	94 hours
STS 0120	Surgical Specialties I (N)	204 hours
STS 0255L	Surgical Specialties Clinical I (N)	256 hours
STS 0050	Pathophysiology for the Surgical Technologist (N)	52 hours
STS 0121	Surgical Specialties II (N)	114 hours
STS 0256L	Surgical Specialties Clinical II (N)	192 hours

This program also offers an Accelerated Alternate Delivery (AAD) track for on-the- job trained surgical technologists currently working in the field, and who qualify for admission. The graduate is eligible to sit for the national exam.

Students must achieve a grade of "C" or higher in all courses.

WELDING APPRENTICESHIP - 50800

6570 hours

DEGREE REQUIREMENTS

Required Courses

PMT 0108	Introduction to Welding (N)	150 hours
PMT 0121	Shielded Metal Arc Welding Principles (N)	150 hours
PMT 0101	Welding Symbols & Blueprints (N)	90 hours
PMT 0104	Fundamentals of Metallurgy (N)	60 hours
PMT 0122L	Shielded Metal Arc Welding - Advanced (N)	120 hours

PMT 0870	Apprenticeship - Welding OJT (N)	667 hours

WELDING TECHNOLOGY – 50570

1050 clock hours

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the manufacturing career cluster. The program will also provide technical skills proficiency, including competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills. This program offers a broad foundation of knowledge and skills to prepare students for employment in applied welding positions.

DEGREE REQUIREMENTS

Required program:

PMT 0108	Introduction to Welding (N)	150 hours
PMT 0121	Shielded Metal Arc Welding Principles (N)	150 hours
PMT 0101	Welding Symbols & Blueprints (N)	90 hours
PMT 0104	Fundamentals of Metallurgy (N)	60 hours
PMT 0122L	Shielded Metal Arc Welding - Advanced (N)	120 hours
PMT 0131	Gas Tungsten Arc Welding Principles (N)	140 hours
PMT 0138L	Gas Tungsten Arc Welding Advanced (N)	120 hours
PMT 0134	Gas Metal Arc Welding (N)	120 hours
PMT 0164	Welding Fabrication Fundamentals (N)	70 hours
PMT 0168	Welding Certification Prep (N)	30 hours

Electives:

PMT 0105	Intro to Blueprint Reading (N)	15 hours
PMT 0930	Special Topics in Welding (N)	30-150 hours

ADULT EDUCATION

IRSC offers GED Preparation to students interested in studying for the GED exam through individualized and classroom support. The GED exam is administered on the computer and students needs to have strong academic skills and knowledge in the areas of writing, math, reading, social studies, science and computer technology in order to pass the exam.

Part of the nationally recognized Adult Education Career Pathway model, the program's mission is to assist all students with transition services to place them into a postsecondary program, achieving a college credential and the knowledge and skill sets necessary to succeed in the 21st Century.

English as a Second Language

The English as a Second Language (ESL) Program offers English language and literacy courses to a variety of immigrant groups at many locations throughout the four-county area.

Two literacy levels provide basic literacy skills in the student's native language and in English, respectively, while six (6) ESL levels, ranging from Beginning to Advanced, address a broad spectrum of workforce competencies as well as English language skills.

Students may also study Citizenship to prepare to take the Immigration and Naturalization Service U.S. Citizenship examination.

Adult Basic Education

The Adult Basic Education (ABE) Program exists for students who have less than a high school education or who need to review the basics before continuing with their education. The courses in this program will start the student on a path to the GED® high school equivalency exam and diploma.

GED® is a registered trademark of the American Council on Education (ACE) and administered exclusively by GED Testing Service LLC under license. This material is not endorsed or approved by ACE or GED Testing Service.

General Education Development

IRSC provides a General Education Development (GED®) Prep program where students can prepare to learn the skills necessary to succeed on the high school equivalency exam to earn a high school diploma awarded by the State of Florida.

Part of the nationally recognized Adult Education Career Pathway model, the program's mission is to assist all students with transition to services to place them into a post-secondary program, achieving a college credential and the knowledge and skill sets necessary to succeed in the 21st Century.

GED® is a registered trademark of the American Council on Education (ACE) and administered exclusively by GED Testing Service LLC under license. This material is not endorsed or approved by ACE or GED Testing Service.

CAREER DEVELOPMENT PROGRAM

Since 1979, women and men throughout the Treasure Coast have participated in the services provided through the Career Development Program. The program was established to assist people in obtaining the skills and confidence necessary when entering the workforce or returning to school.

The Career Development Program includes the Professional Career Program and the Equity for Non-Traditional Careers Program. The aim of the program is to assist individuals by providing information on alternatives available to them at the College and in the community so that they can achieve their potential. Some of the services offered are

- referrals
- career counseling
- financial aid information
- 24 credit-hour Professional Career Program in Business Management.

The Equity for Non-Traditional Career Program provides assistance to individuals who are seeking the necessary education to pursue high-wage, non-traditional occupations. Women and men seeking non-traditional occupation degree programs or vocational certificate programs may benefit from this program. The Equity program specialist creates an informal partnership with the students as an advocate and mentor to promote success in reaching education and career goals.

Professional Career Program

The three-semester Professional Career Program is designed to enhance the job skills and education of women and men in order to improve their potential for job satisfaction and promotion.

Program participants completing the 24 credit-hour curriculum are awarded a Technical Certificate in Business Management, which may transfer towards the Associate in Science (A.S.) Degree in Business Administration and provide a foundation for the Bachelor of Applied Science (B.A.S.) Degree in Organizational Management.

To accommodate the working student, classes are held one night a week and on Saturdays.

The program is a joint effort of the Career Development Program and the Business Management Department.

Farmworkers Career Development Program

The Farmworkers Career Development Program at Indian River State College began in 1973. It is funded through the Florida Department of Education by a grant from the U.S. Department of Labor.

For unemployed or underemployed farmworkers and their dependents who qualify, the program provides training and necessary supportive services so that they may obtain a full-time, year-round unsubsidized job at minimum wage or above. A planned program of vocational and on-the-job training, work experience, job placement assistance, and basic and/or remedial education – including GED®, English as a Second Language (ESL) – is provided to each participant as needed.

Eligibility for participation in the program is limited to migrant and seasonal farmworkers and/or their dependents who meet the following criteria:

1. Have been identified as a member of a family that receives public assistance or whose annual family income does not exceed either 70% of the lower-living standard income level, or the poverty level.
2. During any consecutive 12 month period within the 24 month period preceding their application for enrollment:
    a. received at least 50% of their total earned income or have been employed at least 50% of their total work time in farm work; been employed at least 25 days in farm work or earned at least $800 a year in farm work. Farm work must be on a seasonal basis, that is, without a constant year-round salary;
    b. be a citizen of the United States, Permanent Resident Alien, or other Alien who has been permitted to accept permanent employment in the United States by the Immigration and Naturalization Service.

The Farmworkers Career Development Program can also provide tuition funds to participants who qualify.

GED® is a registered trademark of the American Council on Education (ACE) and administered exclusively by GED Testing Service LLC under license. This material is not endorsed or approved by ACE or GED Testing Service.

ACCELERATED OPPORTUNITIES FOR ADVANCEMENT

Credit may be awarded for students who participate in national testing programs. Florida Statutes, 240.4015, requires the Florida Articulation Coordinating Committee to establish passing scores and course and credit equivalents for College-Level Examination Program (CLEP), Advanced Placement (AP), Cambridge Advanced Certificate of Education (AICE), and International Baccalaureate (IB). Public community colleges, state colleges and universities in Florida are required to award credit for these exams as approved and published by the Articulation Coordinating Committee. These standards can be located at www.flvc.org or a student can consult with an advisor for information.

Credit for DANTES/DSST, or Excelsior (formerly Regents or PEP) will be considered on an individual basis and must be appropriately related to the student's current educational goals.

Credit awarded may not duplicate other credit and a student may not receive more than 45 semester hours credit through all examination programs.

Dual Enrollment

Dual Enrollment is defined as a student simultaneously earning high school credit toward a high school diploma, along with college credit toward an Associate Degree or credit toward a vocational certificate for an eligible course.

For more information refer to the Admissions/Dual Enrollment (p. 23)section of this catalog.

College Level Examination Program (CLEP)

Since many state college students are adults without an opportunity to enter an Advanced Placement Program, but with broad and varied backgrounds, Indian River State College will consider results of the CLEP for credit by examination.

CLEP was developed to provide a national program of examinations that can be used to evaluate non-traditional college level education, specifically including independent study and correspondence work. Information regarding CLEP Exams is available at www.collegeboard.com.

To assist members of the community in taking advantage of this opportunity, IRSC functions as an area test center. Application to take the examination can be made with the College Board by following these directions: http://www.irsc.edu/admissions/assessmentservices/assessmentservices.aspx?id=389#clep.

Official scores must be presented to IRSC to have the credit applied to the student's academic record.

Award Of Credit for Technical Competencies

IRSC may award credit for technical competencies when validated by IRSC faculty members for students who are enrolled in specific programs.

Procedures for award of credit for technical competencies are as follows:

1. Student makes a request in writing for specific course validation to the appropriate Department Chair. Support documents should be provided.
2. The Department Chair will arrange for validation of technical competencies by challenge exam or other methods.
3. The Department Chair will recommend to the appropriate Instructional Dean the courses corresponding to the competencies validated.
4. The Instructional Dean will then transmit recommendations to the Vice President of Applied Science and Technology for approval.
5. Once approved by the Vice President, the request will be forwarded to the Associate Dean of Enrollment and Student Services who will notify the student regarding the service fee and arrange to have credit placed on the student transcript. Student must pay a clerical service fee of $5.00 per credit hour or per 30 clock-hours.

Evaluation and award of credit for programs with licensure or certification requirements may prohibit award of credit. In those cases, the student would be required to enroll in the appropriate coursework.

Review of all prior training for Veteran students will be completed prior to their certification for any Veterans benefits.

Award of Articulated Credit

IRSC may award articulated credit when validated by IRSC faculty members for student who are enrolled in a corresponding program. In some disciplines, credit may be articulated from college credit to clock hour credit or from clock hour credit to college credit.

Procedures for the award of articulated credit are as follows:

1. Student submits a request for articulation of either credit to clock hour or clock to credit hour to the appropriate Department Chair.
2. The Department Chair reviews the credits to determine if the articulation of credit is appropriate.
3. After review and if approved, the Department Chair makes the recommendation to the Instructional Dean that the credit be articulated and provides a course-to-course articulated equivalency, based on equivalency of learning outcomes.
4. If the Instructional Dean approves the request for articulation of credit, the approved request is forwarded to the Associate Dean of Enrollment and Student Services who ensures that the articulated credits are appropriately noted, via the College Records Center, to the student's academic record. There is no service charge for the posting of articulated credits.

Certain programs with specialized licensure or certification requirements may not allow for the award of articulated credit. In those cases, the student would be required to enroll in and complete the appropriate coursework in order to receive credit.

Review of all prior training for Veteran students will be completed prior to their certification for Veterans benefits.

Advanced Placement (AP)

Advanced Placement exams are taken after students complete the corresponding Advanced Placement course in high school. Advanced Placement courses are extremely challenging and are designed to parallel typical lower-level undergraduate courses.

More information about the Advanced Placement Program, including descriptions or courses and sample examination questions, is available at: www.collegeboard.com/ap.

Cambridge Advanced Certificate (AICE)

The Cambridge Advanced Certificate of Education (AICE) program offers challenging curricula at high schools around the world and is designed to prepare students for exams leading to the award of college level coursework.

Information about the Cambridge AICE program is available at www/cie.org.uk/usa/.

International Baccalaureate Diploma

The International Baccalaureate (IB) Diploma program offers challenging curricula at high schools around the world and is designed to prepare students for exams leading to the award of college level coursework.

Information about the IB program is available at www.ibo.org.

FLORIDA'S STATEWIDE COURSE NUMBERING SYSTEM

Courses in this catalog are identified by prefixes and numbers that were assigned by Florida's Statewide Course Numbering System (SCNS). This numbering system is used by all public postsecondary institutions in Florida and participating nonpublic institutions. The major purpose of this system is to facilitate the transfer of courses between participating institutions. Students and administrators can use the online SCNS to obtain course descriptions and specific information about course transfer between participating Florida institutions at http://scns.fldoe.org.

Each participating institution controls the title, credit, and content of its own courses and recommends the first digit of the course number to indicate the level at which students normally take the course. Course prefixes and the last three digits of the course numbers are assigned by members of faculty discipline committees appointed for that purpose by the Florida Department of Education in Tallahassee. Individuals nominated to serve on these committees are selected to maintain a representative balance as to type of institution and discipline field or specialization.

The course prefix and each digit in the course number have a meaning in the SCNS. The listing of prefixes and associated courses is referred to as the "SCNS taxonomy." Descriptions of the content of courses are referred to as "statewide course profiles."

Example of Course Identifier

Prefix	Level Code (first digit)	Century Digit (second digit)	Decade Digit (third digit)	Unit Digit (fourth digit)	Lab Code
ENC	1	1	0	1	
English Composition	Lower (Freshman) Level at this institution	Freshman Composition	Freshman Composition Skills	Freshman Composition Skills I	No laboratory component in this course

General Rule for Course Equivalencies

Equivalent courses at different institutions are identified by the same prefixes and same last three digits of the course number and are guaranteed to be transferable between participating institutions that offer the course, with a few exceptions, as listed below in *Exceptions to the General Rule for Equivalency*.

For example, a freshman composition skills course is offered by 84 different public and nonpublic postsecondary institutions. Each institution uses "ENC_101" to identify its freshman composition skills course. The level code is the first digit and represents the year in which students normally take the course at a specific institution. In the SCNS taxonomy, "ENC" means "English Composition," the century digit "1" represents "Freshman Composition," the decade digit "0" represents "Freshman Composition Skills," and the unit digit "1" represents "Freshman Composition Skills I."

In the sciences and certain other areas, a "C" or "L" after the course number is known as a lab indicator. The "C" represents a combined lecture and laboratory course that meets in the same place at the same time. The "L" represents a laboratory course or the laboratory part of a course that has the same prefix and course number but meets at a different time or place.

Transfer of any successfully completed course from one participating institution to another is guaranteed in cases where the course to be transferred is equivalent to one offered by the receiving institution. Equivalencies are established by the same prefix and last three digits and comparable faculty credentials at both institutions. For example, ENC 1101 is offered at a community college. The same course is offered at a state university as ENC 2101. A student who has successfully completed ENC 1101 at a Florida College System institution is guaranteed to receive transfer credit for ENC 2101 at the state university if the student transfers. The student cannot be required to take ENC 2101 again since ENC 1101 is equivalent to ENC 2101.

Transfer credit must be awarded for successfully completed equivalent courses and used by the receiving institution to determine satisfaction of requirements by transfer students on the same basis as credit awarded to the native students. It is the prerogative of the receiving institution, however, to offer transfer credit for courses successfully completed that have not been designated as equivalent.

NOTE: Credit generated at institutions on the quarter-term system may not transfer the equivalent number of credits to institutions on semester-term systems. For example, 4.0 quarter hours often transfers as 2.67 semester hours.

The Course Prefix

The course prefix is a three-letter designator for a major division of an academic discipline, subject matter area, or subcategory of knowledge. The prefix is not intended to identify the department in which a course is offered.

Rather, the content of a course determines the assigned prefix to identify the course.

Authority for Acceptance of Equivalent Courses

Section 1007.24(7), Florida Statutes, states:

Any student who transfers among postsecondary institutions that are fully accredited by a regional or national accrediting agency recognized by the United States Department of Education and that participate in the statewide course numbering system shall be awarded credit by the receiving institution for courses satisfactorily completed by the student at the previous institutions.

Credit shall be awarded if the courses are judged by the appropriate statewide course numbering system faculty committees representing school districts, public postsecondary educational institutions, and participating nonpublic postsecondary educational institutions to be academically equivalent to courses offered at the receiving institution, including equivalency of faculty credentials, regardless of the public or nonpublic control of the previous institution.

The Department of Education shall ensure that credits to be accepted by a receiving institution are generated in courses for which the faculty possess credentials that are comparable to those required by the accrediting association of the receiving institution. The award of credit may be limited to courses that are entered in the statewide course numbering system.

Credits awarded pursuant to this subsection shall satisfy institutional requirements on the same basis as credits awarded to native students.

Exceptions to the General Rule For Equivalency

Since the initial implementation of the SCNS, specific disciplines or types of courses have been excepted from the guarantee of transfer for equivalent courses. These include courses that must be evaluated individually or courses in which the student must be evaluated for mastery of skill and technique.

The following courses are exceptions to the general rule for course equivalencies and may not transfer. Transferability is at the discretion of the receiving institution.

1. Courses not offered by the receiving institution.
2. For courses at non-regionally accredited institutions, courses offered prior to the established transfer date of the course in question.
3. Courses in the _900-999 series are not automatically transferable, and must be evaluated individually. These include such courses as special topics, internships, apprenticeships, practica, study abroad, theses, and dissertations.
4. Applied academics for adult education courses.
5. Graduate courses.
6. Internships, apprenticeships, practica, clinical experiences, and study abroad courses with numbers other than those ranging from 900-999.
7. Applied courses in the Performing Arts (art, dance, interior design, music, and theater) and skills courses in Criminal Justice (academy certificate courses) are not guaranteed as transferable. These courses need evidence of achievement (e.g., portfolio, audition, interview, etc.).

Courses at Non-Regionally Accredited Institutions

The SCNS makes available on its home page (http://scns.fldoe.org) a report entitled "Courses at Non-Regionally Accredited Institutions" that contains a comprehensive listing of all non-public institution courses in the SCNS inventory, as well as each course's transfer level and transfer effective date. This report is updated monthly.

Questions about the SCNS and appeals regarding course credit transfer decisions should be directed to:

Ann Sampson
Curriculum Support Services
Indian River State College
3209 Virginia Avenue
Fort Pierce, Florida 34981-5596

or to

Florida Department of Education
Office of Articulation
1401 Turlington Building
Tallahassee, Florida 32399-0400.

Special reports and technical information may be requested by calling the SCNS office at (850) 245-0427, or at http://scns.fldoe.org.

COURSES

The Enrollment and Student Services Division assists each student to determine specific needs and the appropriate required and elective courses for individual degree-seeking purposes.

In the interest of student success, all individuals taking classes at Indian River State College are expected to dedicate a minimum of two hours of out-of-class time for every one hour of direct instruction. Student engagement in out-of-class activities such as studying, research, completing assignments, and improving skills serves to complement and reinforce the learning that takes place in the classroom.

Unless otherwise designated, college credit courses listed in this catalog may be accepted as transfer courses by senior colleges or universities. A designation of (N) indicates that the course is not intended for transfer. Consult an Enrollment and Student Services advisor/counselor or the transfer institution of your choice.

Many of the following courses are available as Internet-based courses that provide students the opportunity to enroll in stimulating courses and earn college credit in the convenience of their own homes. For further information contact the Enrollment and Student Services Division (p. 22) or www.irsc.edu.

AAE - APPLIED ACADEMICS for ADULT EDUCATION

AAE 0530 - Diversified Occupational Training (N) (225 hours)

This course teaches how to use technology, tools, equipment and supplies needed to complete a specific job task safely and correctly. Content teaches how to identify, locate, use, clean, maintain and store tools and equipment.

ACG - ACCOUNTING

ACG 2001 - Financial Accounting I (3 credits)

This course presents fundamental principles and procedures of recording, classifying, and summarizing financial data and includes accruals and deferrals, depreciation, inventory, payroll, cash control, and notes payable.

ACG 2011 - Financial Accounting II (3 credits)

This is the study of special systems for internal control, long-term asset analysis, the equity structure of partnerships, corporations, and cost and statement analysis.

Prerequisite: ACG 2001 with a grade of "C" or higher. .

ACG 2071 - Managerial Accounting (3 credits)

This course prepares the student for practical analysis and usage of accounting data by management in the areas of financial statements, budgeting, responsibility accounting, and cost and profit analysis.

Prerequisite: ACG 2011 with a grade of "C" or higher. .

ACG 2100 - Intermediate Accounting (3 credits)

This course is a continuation of accounting principles with emphasis on theory and concepts involving a deeper inspection of balance sheet and income statement topics. Discussions include decisions by management, creditors, and stockholders. Offered Spring Semester only.

Prerequisite: ACG 2011.

ACG 3131 - Accounting Theory I (3 credits)

This course evaluates the underlying concepts and ethical, regulatory, and business environment of financial reporting with emphasis on measurement, analysis, and interpretation of income, cash flows, and financial position. The study of inventory valuation, plant asset depreciation, and time value of money concepts are included.

Prerequisite: ACG 2071 with a grade of C or higher.

ACG 3141 - Accounting Theory II (3 credits)

This course evaluates the underlying concepts and ethical, regulatory, and business environment of financial reporting with emphasis on measurement, analysis, and interpretation of financial position. The study of lease accounting, pension accounting, and the treatment of accounting errors are included.

Prerequisite: ACG 3131 with a grade of C or higher.

ACG 3173 - Accounting for Decision Makers (3 credits)

This course shows how to analyze financial statements to determine the financial condition of a business enterprise. Students learn how managers use financial and non-financial information to improve an organization's operational effectiveness. Capital budgets, operational budgets, and investment decisions are reviewed.

Prerequisite: ACG 2071 with a grade of C or higher.

ACG 3341 - Cost Accounting (3 credits)

This course examines the theory and practice of using accounting information for managerial planning and pricing decisions. Costing techniques in management decision making scenarios are presented in this course.

Prerequisite: ACG 2071 with a grade of C or higher.

ACG 3401 - Accounting Information Systems (3 credits)

This course examines the concepts and terminology of accounting information systems and the use of information technology for decision making in accounting and auditing.

Prerequisite: ACG 2071, and CGS 1100 or CGS 1060 with a grade of C or higher.

ACG 4501 - Governmental and Nonprofit Accounting (3 credits)

This course demonstrates the methods to apply financial accounting and auditing principles and theory to governmental and nonprofit organizations.

Prerequisite: ACG 3131 with a grade of C or higher.

ACG 4651 - Auditing (3 credits)

This course examines the theory and practice of public auditing, common ethical situations, and the legal responsibilities of an auditor. Internal controls, audit evidence, audit procedures, and sampling techniques are reviewed.

Prerequisite: ACG 3131 with a grade of C or higher.

ACG - BUSINESS ADMINISTRATION AND MANAGEMENT

ACG 3173 - Accounting for Decision Makers (3 credits)

This course shows how to analyze financial statements to determine the financial condition of a business enterprise. Students learn how managers use financial and non-financial information to improve an organization's operational effectiveness. Capital budgets, operational budgets, and investment decisions are reviewed.

Prerequisite: ACG 2071 with a grade of C or higher.

ACG - ORGANIZATIONAL MANAGEMENT

ACG 3024 - Accounting for Non-Financial Majors (3 credits)

This course addresses the use of accounting information by non-financial managers. Emphasis is placed on the interpretation of accounting information and the language of financial accounting to effectively participate in activities such as planning, investment, control, and managerial decision-making. Attainment of junior year status or permission of the department chair is required.

ACR - AIR CONDITIONING, REFRIGERATION, AND HEATING SYSTEMS TECHNOLOGY

ACR 0100 - HVAC/R2 (N) (150 hours)

This course introduces electricity, covering atomic theory, sources, measuring devices, Ohm's Law, calculating power, circuits, symbols, load devices, controls, conductors, insulators, power distribution, voltage systems, motors, and safety. Employment skills and the value of computer and communication skills are integrated throughout.

Prerequisite: ACR V523.

ACR 0431 - HVAC/R9 (N) (150 hours)

This course provides the advanced technical skills to install, maintain, and repair heating, air conditioning, and refrigeration systems. Topics include identifying and measuring indoor air quality and understanding new technologies in heating, air conditioning and refrigeration installations.

Prerequisite: ACR 0578.

ACR 0523 - HVAC/R1 (N) (150 hours)

This course introduces refrigeration and includes the history, tools of the trade, refrigeration cycle, installation and service procedures, safety and service management.

ACR 0525 - HVAC/R3 (N) (150 hours)

This course covers the skills required to properly assist in the installation of a residential heating and air conditioning system, and troubleshoot electrical control systems. Other topics covered include mechanical systems and start up and check out procedures.

Prerequisite: ACR 0100.

ACR 0548 - HVAC/R4 (N) (150 hours)

This course introduces advanced skills in installation of a residential heating and air conditioning system and the related start up procedures. Other topics include electrical wiring diagrams, troubleshooting electrical components, circuits, and systems, and refrigerant cycles.

Prerequisite: ACR 0525.

ACR 0571 - HVAC/R7 (N) (150 hours)

This course builds mastery in commercial heating and air conditioning components. Topics include selecting commercial compressors, testing and adjusting commercial evaporative condensers, maintaining and troubleshooting commercial evaporators, and commercial heating and air conditioning accessories.

Prerequisite: ACR 0701.

ACR 0578 - HVAC/R8 (N) (150 hours)

This course builds mastery in servicing and troubleshooting commercial heating and air conditioning components. Topics include maintaining, troubleshooting, and repairing commercial heating systems, as well as maintaining and repairing thermal storage systems.

Prerequisite: ACR 0571.

ACR 0607 - HVAC/R5 (N) (150 hours)

This course introduces the use of combustion-type heating servicing and testing equipment and troubleshooting techniques used for gas valves and regulators.

Prerequisite: ACR 0548.

ACR 0701 - HVAC/R6 (N) (150 hours)

This course encompasses solid state electronics as used in heating, air conditioning and refrigeration, indoor air quality standards, mastery of installation, and maintenance and repair of heating, air conditioning, and refrigeration systems.

Prerequisite: Pre/corequisite: ACR 0607.

ACR 0930 - Special Topics in HVAC (N) (15 - 150 hours)

This course teaches current topics related to air conditioning, heating, ventilation and refrigeration. Topics may include OSHA training, refrigerants, special certifications, specialized equipment or repair and maintenance techniques.

ACR 0940 - Apprenticeship HVAC 1 (N) (90 hours)

This is the initial course for students attending as first year apprentices in the air conditioning industry. It introduces theoretical concepts regarding safe working conditions and practices, history of the trade, tool and accessory identification, and proper care and usage of tools of the trade.

Prerequisite: Permission of instructor. Corequisite: ACR 0946.

ACR 0941 - Apprenticeship HVAC 2 (N) (90 hours)

For students attending as first year apprentices in the air conditioning industry, this course teaches scientific and math concepts related to the air conditioning industry, and skills including fabrication and service for piping, tubing and fittings used in the industry.

Prerequisite: ACR 0940 and permission of instructor. Corequisite: ACR 0946.

ACR 0942 - Apprenticeship HVAC 3 (N) (90 hours)

This course develops the second year air conditioning apprentice's knowledge of heating, air-conditioning and refrigeration system components and accessories. Communication and industry related computer skills, along with discussions concerning entrepreneurship is an additional focus.

Prerequisite: ACR 0941 and permission of instructor. Corequisite: ACR 0946.

ACR 0943 - Apprenticeship HVAC 4 (N) (90 hours)

This course develops the second year air conditioning apprentice's practical knowledge of basic electricity and the electrical components related to the industry. Troubleshooting electrical control systems and their components, and wiring electrical motors and their components is covered.

Prerequisite: ACR 0042 and permission of instructor. Corequisite: ACR 0946.

ACR 0944 - Apprenticeship HVAC 5 (N) (90 hours)

This course introduces the third year air conditioning apprentice to installation techniques, start up and check out procedures, and sizing of heating, air conditioning, and refrigeration piping.

Prerequisite: ACR 0943 and permission of instructor. Corequisite: ACR 0946.

ACR 0945 - Apprenticeship HVAC 6 (N) (90 hours)

This course teaches techniques and skills required of third year air conditioning apprentices in solid state electronics as used in the industry. Students learn how to operate mechanical refrigeration and testing equipment and combustion type heating servicing and testing equipment.

Prerequisite: ACR 0944 and permission of instructor. Corequisite: ACR 0946.

ACR 0946 - Apprenticeship HVAC On-the-Job Training (N) (640 hours)

This course helps students implement the theoretical concepts introduced in the classroom components of the air-conditioning apprenticeship program through on-the-job training.

Prerequisite: Permission of instructor.

ACR 0947 - Apprenticeship HVAC 7 (N) (90 hours)

This course teaches advanced training in the industry as a fourth year air conditioning apprentice and includes concentration in gas valves, regulators, properties of air, and pressure enthalpy charts for diagramming refrigerant cycles.

Prerequisite: ACR 0945. Corequisite: ACR 0946.

ACR 0948 - Apprenticeship HVAC 8 (N) (90 hours)

This course teaches advanced training in the industry as a fourth year air conditioning apprentice and includes concentration in the standards for, and ways to measure

indoor air quality, and installation, maintenance and repair of heating, air-conditioning, and refrigeration systems.

Prerequisite: ACR 0947. Corequisite: ACR 0946.

ACR 1008 - Principles of A/C and Refrigeration (N) (3 credits)

This course introduces refrigeration history, refrigeration cycle, tools of the trade, tubing skills, charging techniques, safety, and principles of service management.

ACR 1101 - Applied Electricity I (Air Conditioning) (N) (3 credits)

This course reviews test equipment, circuit protection, practical circuits and power, energy, motors, controls, and service management.

Prerequisite: ACR 1008, ACR 1112.

ACR 1103 - HVAC Control Systems (N) (3 credits)

This course covers the three basic types of electrical devices, electric motors, relays, solenoids, heat strips, capacitors, thermostats, solid state controls, and service management.

Prerequisite: ACR 1008, ACR 1112.

ACR 1112 - Basic Electricity for A/C and Refrigeration (N) (3 credits)

This course introduces electricity covering sources, measure devices, Ohm's law, circuits, and service management.

ACR 1113 - Applied Electricity II (Air Conditioning) (N) (3 credits)

This course provides an advanced history of electrical motors, transformers, control devices, circuit reading, and service management.

Prerequisite: ACR 1008, ACR 1112.

ACR 1208 - Refrigerant Recovery and Reclaim (N) (1 credit)

This course covers the EPA requirements for refrigerant recovery, reclaim, transporting, and disposal of CFC refrigerants.

ACR 1611 - Heat (N) (3 credits)

This course introduces electrical, gas, and oil heating systems, and service management.

Prerequisite: ACR 1008, ACR 1112.

ACR 1612 - Heat Pump Systems (N) (3 credits)

This course presents principles of heat pumps and their applications. Topics include installation, service, and maintenance skills on heat pumps.

Prerequisite: ACR 1008, ACR 1101, ACR 1112.

ACR 1730 - R-410A Certification (N) (1 credit)

This course teaches training and practical knowledge to safely perform service on systems containing R-410A. The R-410A safety certification test is given.

ACR 1731 - Green Mechanical Awareness Certification (N) (1 credit)

This course teaches the basic skills of Green mechanical technology and Green alternatives relating to air conditioning and heating systems. Students are prepared to complete a Green Awareness Certification exam.

ACR 1740 - Components of Refrigeration (N) (3 credits)

This course introduces compressors, condensers, evaporators, metering devices, service procedures, and service management.

Prerequisite: ACR 1008, ACR 1112.

ACR 1760 - Alternative Energy Applied to HVAC (N) (4 credits)

This course presents principles of alternative energy for HVAC, including solar power, geothermal, maximum SEER rated units, and general energy-saving practices. This course prepares the student to take the Mechanical Green Awareness Certification exam. HVAC I and HVAC II toolkit is available at The River Shop (bookstore) or see the instructor for a list of tools needed.

Prerequisite: ACR 1008, ACR 1101, ACR 1103, ACR 1112, ACR 1113, ACR 1612.

ACR 1761 - Geothermal Energy for the Home Certification (N) (1 credit)

This course provides a basic overview of the fundamental issues and concerns involved in the decision whether or not to purchase and install geothermal heat pumps (GHP).

ACR 1946 - Refrigeration and A/C Cooperative Work Experience I (N) (4 credits)

This course provides for a cooperative agreement between the student, the employer, and IRSC. The student is provided with a training plan that covers his course of study during the semester to help meet his career objectives. The employer, coordinator, and instructor work together to guide the student's learning experiences on the job and in school. Special emphasis is placed on instructional areas found necessary for continued advancement in the place of employment. This is the first in a series of three courses.

ACR 1947 - Refrigeration and A/C Cooperative Work Experience II (N) (4 credits)

This is the second in a series of three courses. Emphasis is placed on skills to enhance job advancement.

Prerequisite: ACR 1946.

ACR 1948 - Refrigeration and A/C Cooperative Work Experience III (N) (4 credits)

This is the last in a series designed to provide a cooperative agreement between the student, the employer, and IRSC. Advancement in employment is one of the primary objectives of this course.

Prerequisite: ACR 1947.

ACR 2067 - Heating and Cooling Load Calculations (N) (3 credits)

This course teaches the calculating of heating and cooling loads and service management.

ACR 2071 - Air Conditioning and Heating Service Management (N) (3 credits)

This class presents the principles and theories of business, as well as customer, employer, and employee relations.

ACR 2421 - Duct Systems (Air Conditioning and Heating) (N) (3 credits)

This course studies the construction layout, balancing to a duct system, and service management.

ACR 2745 - Light Commercial Refrigeration and A/C (N) (3 credits)

This course provides an overview of commercial refrigeration systems. This covers supermarket refrigeration systems, applications, components, defrost systems, accessories, refrigerant, reclaim, troubleshooting, and service.

Prerequisite: ACR 1740, ACR 1113 or permission of instructor .

ADV - BUSINESS ADMINISTRATION AND MANAGEMENT

ADV 2000 - Advertising and Sales Promotion (3 credits)

This course presents basic advertising terminology and strategy. It focuses on target analysis, media analysis, ad development, scheduling, and budgets; resulting in the individual development of an advertising campaign.

AER - AUTOMOTIVE SERVICE TECHNOLOGY

AER 0006 - Automotive Services Assistor I (N) (150 hours)

This course teaches shop equipment, tool safety, routine maintenance, and consumer services related to the automotive industry.

AER 0007 - Automotive Services Assistor 2 (N) (150 hours)

This course teaches shop equipment, tool safety, routine maintenance, and consumer services related to the automotive industry. Topics and shop exercises include the fundamental under the hood services and identifying appropriate maintenance. Upon successful completion of this course, a student is prepared to enter the workforce as an Automotive Services Assistor.

Prerequisite: AER V006.

AER 0110 - Engine Repair Technician (N) (150 hours)

This course teaches skills to overhaul or rebuild internal combustion engines and perform engine related services.

Prerequisite: Recommended AER 0006, AER 0007.

AER 0172 - Auto Heat/Air Conditioning Tech (N) (150 hours)

This course provides the skills needed to diagnose and repair rear defoggers, cruise controls, and passenger restraint systems. Students also learn to diagnose and repair air conditioning compressor clutch controls, and replace evaporators, driers, and condensers.

Prerequisite: Recommended AER 0006, AER 0007.

AER 0299 - Automatic Transmission/Transaxles (N) (150 hours)

This course teaches the skills to diagnose, repair, and rebuild automatic transmissions and transaxles.

Prerequisite: AER 0006, AER 0007, AER 0691, AER 0692.

AER 0399 - Manual Drive Train/Axle Tech (N) (150 hours)

This course teaches the skills to diagnose, repair, and rebuild manual transmissions and transaxles, diagnose and repair driveline and related components including clutches, drive axles, differentials, and four wheel drive transfer case repair. Students diagnose and repair four wheel and all wheel drive vehicles and their related components.

Prerequisite: Recommended AER 0006, AER 0007.

AER 0499 - Automotive Suspension & Steering Technician (N) (150 hours)

This course teaches skills to diagnose and repair steering and suspension problems. The students also learn to diagnose and repair supplemental restraint and ride control systems.

Prerequisite: Recommended AER 0006, AER 0007.

AER 0599 - Auto Brake Systems Technician (N) (150 hours)

This course teaches the skills to diagnose and repair automotive braking systems with conventional or anti-lock brake characteristics. Topics include operating and servicing of automotive brake systems, drum brakes, disc brakes, power assist units, and miscellaneous (wheel bearings, parking brakes, electrical, etc.) diagnosis and repair.

Prerequisite: Recommended AER 0006, AER 0007.

AER 0691 - Automotive Electric/Electronics System Tech I (N) (150 hours)

This course teaches the skills needed to diagnose and repair electrical problems found in the battery, starting system, charging system, and their related electronic circuitry. Students learn to diagnose fuel system problems and perform cylinder head and valve services.

Prerequisite: Recommended AER 0006, AER 0007.

AER 0692 - Automotive Electric/Electronics System Tech II (N) (150 hours)

This course teaches advanced skills to diagnose and repair electrical problems related to lighting systems, gauges, warning devices, driver information systems, horns, and windshield wiper/washer controls.

Prerequisite: AER 0691, Recommended AER 0006, AER 0007.

AER 0891 - Auto Engine Performance Tech I (N) (150 hours)

This course teaches the skills to diagnose and repair problems related to both automatic and semi-automatic temperature controls. Students also learn to diagnose engine performance problems through the use of computerized information systems and four gas analyzers.

Prerequisite: AER 0006, AER 0007, AER 0691, AER 0692.

AER 0892 - Auto Engine Performance Tech II (N) (150 hours)

This course provides the skills needed to diagnose and repair engine performance problems related to the fuel, air induction, exhaust, and catalytic converter systems. The students also learn to diagnose drivability problems related to emission controls and computerized sensor malfunctions.

Prerequisite: AER 0006, AER 0007, AER 0691, AER 0692, AER 0891.

AER 1070 - Automotive Service Management (N) (2 credits)

This course provides an overview of the management, policies, and procedures related to the operations of an automotive repair facility's service and parts departments.

AER 1081C - Introduction to Automotive Technology (N) (3 credits)

This course presents a short overview of modern automotive systems, outlines important safety practices, and describes the uses of common shop tools and diagnostic equipment.

AER 1198 - Engine Overhaul, Repair and Testing (N) (4 credits)

This course provides instruction on the testing and repair of engine mechanical problems.

AER 1498 - Suspension, Steering, and Alignment (N) (4 credits)

This course presents diagnosis, repair, overhaul, and adjustment of suspension and steering systems as used in modern automobiles. Tire balancing, steering component rebuilding, shock absorbers, suspension systems, wheel bearings, two and four-wheel alignment are covered.

AER 1598 - Automotive Brake Systems (N) (4 credits)

This course presents the fundamental principles, operation, diagnosis, repair, and rebuilding of modern automotive manual and power brake systems. Brake service training includes troubleshooting, minor repair through rebuilding, drum and disk resurfacing.

AER 1694C - Introduction to Automotive Electrical Systems (N) (3 credits)

This course is an introduction to the theory and application of electricity and electronics as applied to the modern automobile electrical systems.

AER 1810 - Automotive Work Experience (N) (1 - 4 credits)

This course provides the student with an automotive technology training plan that matches career objectives and industry requirements. Supervision, classroom instruction, and employer consultations are used to achieve the objectives. Student must have prior automotive training or experience and be enrolled in the Automotive Technology program.

Prerequisite: Permission of instructor.

AER 1937 - Special Topics in Automotive (N) (.5 - 4 credits)

This course teaches current topics related to the diagnosis and repair of automotive systems and their related components.

AER 2298 - Automatic Transmissions and Transaxles (N) (4 credits)

This course teaches the theory, operation, maintenance, diagnosis, and repair of automatic transmissions/transaxles, and their hydraulic, mechanical, and electronic components.

AER 2398 - Manual Drive Train and Axles (N) (4 credits)

This course teaches the diagnosis, repair and rebuilding of automotive power trains and components, including: drivelines, ujoints, clutches, linkages, axles and bearings, differentials, and manual transmissions/transaxles.

AER 2695C - Advanced Automotive Electrical Systems (N) (4 credits)

This course enables the student to diagnose and repair automotive electrical and electronic systems and their components including batteries, charging systems, starting systems, lighting circuits, driver information systems, and electrical accessories.

Prerequisite: AER 1694C or permission of instructor.

AER 2758 - Automotive Air Conditioning and Heating (N) (4 credits)

This course enables the student to diagnose and repair automotive air conditioning and heating systems, performance test air conditioning, heating, vacuum, electrical control systems and components, and to operate and service air conditioning reclaiming machines.

AER 2895C - Advanced Engine Performance (N) (4 credits)

This course teaches the theory, operation, diagnostic, and repair procedures for computer-controlled engine performance-related systems, such as the emission controls, fuel systems, ignition systems and the advanced engine controls.

Prerequisite: AER 2898C or permission of instructor.

AER 2898C - Engine Performance (N) (4 credits)

This course teaches the service, diagnosis, and repair of engine performance related systems. Topics covered include fuel, ignition, and emission control systems in addition to other engine performance related problems.

AGR - LANDSCAPE TECHNOLOGY

AGR 1540C - Fundamental Principles of Arboriculture (3 credits)

This course teaches the fundamental principles of arboriculture (tree care). Topics include tree biology, tree identification, tree selection, pruning, nutrition and fertilization.

AMH - HISTORY

AMH 2010 - American History: Discovery through Reconstruction (3 credits)

This course examines the political, economic, social, cultural, and intellectual development of the United States from the discovery of the Americas through Reconstruction.

Prerequisite: Student must score into college-level English and reading on placement test.

AMH 2020 - American History: Reconstruction to the Present (3 credits)

This course examines the political, economic, social, cultural, and intellectual development of the United States from Reconstruction to the present. It fulfills the civic literacy requirement for Florida college students.

Prerequisite: Student must score into college-level English and reading on placement test.

AML - ENGLISH

AML 2010 - American Literature to 1865 (3 credits)

This course provides an introduction to American literature based upon selected verse and prose masterpieces from colonial times to 1865. Students demonstrate college-level writing skills through multiple assignments. Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

Prerequisite: ENC 1101 with a grade of "C" or higher, or permission of instructor and student must score into college-level reading on placement test.

AML 2020 - American Literature after 1865 (3 credits)

This course provides an introduction to American literature based upon selected verse and prose masterpieces from 1865 to the present. Students demonstrate college-level writing skills through multiple assignments. Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

Prerequisite: ENC 1101 with a grade of "C" or higher, or permission of instructor and student must score into college-level reading on placement test.

AMT - AVIATION APPRENTICESHIP

AMT 0790 - Apprenticeship Aviation 1 (72 hours)

The course focuses on the appropriate safety/OSHA rules and regulations along with the use and maintenance of tools used in the industry of Aviation Maintenance.

Prerequisite: AMT 0945.

AMT 0791 - Apprenticeshp Aviation 2 (72 hours)

The course focuses on math and communication skills used in Aviation Maintenance jobs.

Prerequisite: AMT 0945.

AMT 0792 - Apprenticeship Aviation 3 (72 hours)

This course focuses on a fundamental understanding of AC/DC electrical and electrical control, and the ability to read and accurately interpret blueprints and schematics from the aviation field.

Prerequisite: AMT 0945.

AMT 0793 - Apprenticeship Aviation 4 (72 hours)

The course focuses on materials science and the ability to fabricate component parts relevant to the Aviation field.

Prerequisite: AMT 0945.

AMT 0945 - Apprenticeship Aviation OJT (667 hours)

This course helps students implement the theoretical concepts introduced in the classroom components of the air-conditioning apprenticeship program through on-the-job training.

ANT - ANTHROPOLOGY

ANT 1000 - Introduction to Anthropology (3 credits)

This course introduces students to the field of anthropology, which studies the entirety of human diversity through time and space. Anthropology takes a global and holistic view of the human species, spanning topics from human origins to language, marriage, gender, politics, race, health and disease, religion, and art. Through this course, student gain an appreciation of cultural diversity and develop an understanding of how the anthropological approach can be used to better understand the human condition.

Prerequisite: Student must score into college-level placement in English and reading.

ANT 2140 - Anthropology and Human Origins (3 credits)

This course provides an introduction to the anthropological subfields of biological anthropology and archaeology. Topics include the principles of biological evolution, the evolution and origins of the human species, the evolution of culture, the peopling of the New World, and the origins of civilization.

Prerequisite: Student must score into college-level English and reading on placement test.

ANT 2149 - Archaeology in Popular Culture (3 credits)

Mysteries including the lost continent of Atlantis, ancient astronauts, Piltdown man, psychic archaeology, Noah's ark, and the Shroud of Turin are examined, while emphasizing skills in critical thinking that have much wider practical application.

Student must score into college-level placement in English and reading.

ANT 2410 - Cultural Anthropology (3 credits)

This course provides an introduction to the anthropological subfield of cultural anthropology and explores what it means to be human in the 21st century. A global perspective is taken on a range of topics including race and ethnicity, sex and gender, globalization, colonialism, and health and disease.

Prerequisite: Student must score into college-level English and reading on placement test.

APA - ACCOUNTING TECHNOLOGY

APA 1111 - Introduction to Accounting (3 credits)

This course presents the application of the collating of figures for reports. It includes analyzing, journalizing, posting, adjusting and closing entries, straightline depreciation, and payroll. Knowledge of business mathematics proceedings is essential.

APA 1152 - Orientation to QuickBooks (1 credit)

This course teaches the computer applications packet Quickbooks, which includes A/R, A/P, inventory, invoicing, payments, payroll, graphs, and reports.

ARC - ARCHITECTURE

ARC 1301C - Architectural Design I (4 credits)

This course teaches the introductory design of space defined as the analysis, formation, and articulation of habitable volumes. This course emphasizes the basic concepts of space, its inhabitation and the process of its design. A sequence of analytical and generative exercises develops space cognition.

ARC 1302C - Architectural Design II (4 credits)

This course teaches the development of spatial language, analytical abilities, communications skills, and synthetic design process. This course emphasizes all areas of spatial design, landscape, building, and interior. Materials for refining and developing conventions of architectural representations and communication are introduced. A sequence of analytical and design exercises will develop spatial design.

Prerequisite: ARC 1301C.

ARC 1701 - Architectural History I (3 credits)

This course is an introduction of the early evolution of architectural structure and cities through the cultural,

social, economic and technological forces that influenced architecture from the nomadic beginnings to the French Mannerist Period.

ARC 1702 - Architectural History II (3 credits)

This course teaches the history of architecture including cultural, social, economic, and technological forces influencing art and architecture through various periods of civilization, from the Renaissance to the present, including the integration of art, and structural and ornamental forms used in various cultures during these times.

Prerequisite: ARC 1701.

ARC 2180 - Introduction to Digital Architecture (3 credits)

This course is an introduction to computer-aided design programs currently utilized by professional practices. These programs include but are not limited to Google Sketchup, and Adobe Photoshop, Illustrator and InDesign. Students are able to model basic architectural space and form to produce design images in Google Sketchup to be further rendered in Photoshop, apply notation and graphic emphasis in Illustrator and presentation layout composition in InDesign.

ARC 2201 - Architectural Theory (3 credits)

This course teaches individual and group philosophies of architecture throughout history as reflective of concurrent ideas in science, law, religion, economics, and other topics. It also studies the processes which influence the form and image of architecture and the relationships between space and architectural systems.

ARC 2303 - Architectural Design III (4 credits)

This course teaches the continuing development of spatial language, analytical abilities, and generative processes applied to spatial precedents started in ARC 1302C (p. 171). Architectural space as it is defined in history and landscape is the primary focus of this course.

Prerequisite: ARC 1302C.

ARC 2304 - Architectural Design IV (4 credits)

This course teaches the continuing development of spatial language, analytical abilities, and generative processes applied to spatial precedents begun in ARC 2303 (p. 172). This studio course begins the integration and utilization of contemporary cultural influences in the design process.

Prerequisite: ARC 2303.

ARC 2461 - Architectural Materials and Methods (3 credits)

This course teaches the nature of materials used in architecture and the methods of construction. Physical and chemical properties of materials, their manufacture and performance under loads are also examined. Criteria for evaluation and selection related to design decision-making is covered.

Prerequisite: ARC 1301C.

ARH - HUMANITIES

ARH 1000 - Art Appreciation (3 credits)

This course teaches art appreciation whether in painting, sculpture, and/or architecture. The course focuses on the relationship of art to respective historical periods and an understanding of the role of art in our every day lives. Students demonstrate college-level writing skills through multiple assignments. Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

Prerequisite: Student must score into college-level English and reading on placement test.

ARH 2050 - History of Art (Prehistoric - Gothic) (3 credits)

This course teaches a detailed, indepth study of art as it relates to cultures, individual artists, and comparative relationships through painting, sculpture, and architecture. A writing and research component is required with activities including a visit to an art gallery. Students demonstrate college-level writing skills through multiple assignments. Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

Prerequisite: Student must score into college-level English and reading on placement test.

ARH 2051 - History of Art (Renaissance through Modern) (3 credits)

This course teaches a detailed study of painting, sculpture, and architecture of historical periods from the Renaissance through the Modern periods. Academic research in the arts provides an opportunity for a broader knowledge of man's contribution in this field of knowledge and addresses visual ideas from the past and how they relate to the future. Students demonstrate college-level writing skills through multiple assignments. Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

Prerequisite: Student must score into college-level English and reading on placement test.

ART - ART

ART 1200C - Three Dimensional Design (3D Art Studio) (1 - 3 credits)

This course teaches the expressive manipulation of 3D form through an investigation of surface and color using clay bodies and glaze types, wire, glass, paper, plaster, or other special media.

ART 1201C - Color and Design I (3 credits)

This course teaches the fundamentals of design (visual composition) with emphasis on art elements, principles, media, and creativity. This course provides an analytical approach to problem-solving using materials and methods in mostly two-dimensional work.

ART 1203C - Color and Design II (3 credits)

This course is a continuation of ART 1201C (p. 173) with emphasis on independent design projects in the third dimension.

Prerequisite: ART 1201C.

ART 1300C - Drawing I (3 credits)

This course teaches the basic techniques used in drawing, including contour, gesture, modeling, and perspective. The emphasis is on seeing form and texture and utilizing various media.

ART 1301C - Drawing II (3 credits)

This course continues the development of the basic drawing techniques taught in ART 1300C (p. 173) with emphasis on the drawing of the human figure and on portraiture. Creativity is stressed using various media.

Prerequisite: ART 1300C or permission of instructor.

ART 1701C - Introduction to Sculpture (3 credits)

This course teaches materials and techniques of three-dimensional sculpture using additive, subtractive, and assemblage methods. Exhibition of finished work is required.

ART 1750C - Ceramics (3 credits)

This course teaches introduction to ceramics hand-building, simple forming and glazing processes.

ART 2330C - Figure and Form (3 credits)

This course teaches the anatomy of the human from an artistic viewpoint. It incorporates visual tapes on the structure of the human body and a textbook, "Drawing Lessons from the Great Masters." Students learn about drawing styles and techniques from master artist drawings and from drawing actual human figures in a dance class.

Prerequisite: ART 1201C, ART 1300C, ART 1301C.

ART 2500C - Painting I (3 credits)

This course teaches basic painting techniques in acrylic, watercolor and oil with instruction in composition, technique, and exhibition included.

ART 2501C - Painting II (3 credits)

This course emphasizes personal creativity and the development of individual styles. Exhibition required, and creativity is stressed.

ART 2540C - Watercolor Painting (3 credits)

This course teaches basic watercolor painting techniques and processes with an emphasis on composition and creativity.

ART - DIGITAL MEDIA

ART 3252 - 3D Media Art and Illustration (3 credits)

This course teaches the principles and elements of 2D and 3D design and illustration as applied to various media such as digital, paper, wire, clay, etc. Students develop projects that start as scaled drawings and illustrations culminating in large scale final projects. Emphasis is placed on the artistic value, the digital media implications, and the overcoming of creative problems.

Prerequisite: DIG 1115, GRA 1129, pre/corequisite: DIG 1000.

ASL - SIGN LANGUAGE

ASL 1140 - American Sign Language I (4 credits)

This course teaches conversational ability in American Sign Language and develops an awareness and appreciation of deaf people. It focuses on the basic grammatical features of ASL and strengthens the student's receptive and expressive skills through various activities. This course can be used toward the foreign language requirements for university admission.

Prerequisite: Student must score into college-level English and reading on placement test.

ASL 1150 - American Sign Language II (4 credits)

This course teaches the intermediate level of grammatical features in American Sign Language and conversational skills with an expanded vocabulary. This course can be used toward the foreign language requirements for university admission.

Prerequisite: ASL 1140.

AST - PHYSICAL SCIENCES

AST 1002 - General Astronomy (3 credits)

This course teaches the methods and instruments used by astronomers; provides an understanding of the earth as an astronomical body; and investigates the structure and contents of the solar system, the galaxy, and the universe.

AST 1002L - General Astronomy Laboratory (1 credit)

This course teaches practical lessons and exercises in astronomy and scientific observations of astronomical phenomena related to the General Astronomy curriculum.

Corequisite: AST 1002.

AST 1042 - History of Astronomical Concepts (3 credits)

This course covers history and literature as well as the actual exploration of natural, historical, or modern astronomy sites in order to better understand select topics in the history of astronomy. Lectures, discussions, research, and physical examination of astronomical techniques as used in ancient, historical, or modern observatories helps students to gain knowledge concerning the role of astronomy in civilization and emphasis on astronomers' gradual recognition of the physical nature of the sun, planets, stars, galaxies, and other celestial objects.

AST 1930 - Exploring Stars and Planets (1 credit)

This course introduces students to the contents of the universe with special emphasis on practical astronomy, telescope operation, constellation recognition, ephemeral sky events such as eclipses, comets and meteor showers, and basic observing techniques for viewing stars and planets.

AST 1931 - Planetarium Technical Lab (1 credit)

This course is offered as an independent student program for students interested in learning how to operate a planetarium. Major topics for investigation include: planetarium maintenance, creation of education programming multi-media production techniques, K-12 education curricula, logistics of field trip experiences, public programming, and presentations.

Prerequisite: AST 1002 and student must test into college-level English, mathematics, and reading on placement test.

ATF - BUSINESS ADMINISTRATION AND MANAGEMENT

ATF 1941 - Professional Development in Aviation II (2 - 9 credits)

This course is for the student that has completed a private pilot flight training, instrument flight training, and commercial pilot flight training programs. Competency credits are awarded for proof of passing the appropriate FAA flight program(s).

Prerequisite: Documented passage of an FAA approved private pilot flight training, instrument flight training, and commercial pilot flight training program(s). .

ATT - BUSINESS ADMINISTRATION AND MANAGEMENT

ATT 1941 - Professional Development in Aviation I (3 - 6 credits)

This course is for the student that has completed a private pilot ground school and/or instrument ground school and has passed an FAA licensing exam. Competency credits are awarded for proof of passing the appropriate FAA written examination.

BCA - BUILDING CONSTRUCTION APPRENTICESHIP

BCA 0349 - Apprenticeship - Electrical On-the-Job Training (N) (592 - 640 hours)

This course is taught in conjunction with Apprenticeship-Electrical to enable the student to implement and practice the essential competencies in the electrical industry work environment. The course uses authentic learning strategies through on-the-job training, helping students implement the theoretical concepts introduced in the classroom.

Prerequisite: Permission of instructor.

BCA 0350 - Apprenticeship - Electrical 1 (N) (90 hours)

This course develops the essential competencies for working in the construction electrical industry. These competencies include safety practices, direct-current electrical-circuit skills, appropriate communication and math skills, basic electricity and electrical codes, and employability skills.

Prerequisite: Permission of instructor. Corequisite: BCA 0349.

BCA 0351 - Apprenticeship - Electrical II (N) (90 hours)

This course is a continuation of BCA 0350 (p. 169) and is taught in conjunction with the work activities of BCA 0349 (p. 174). This course enhances the competencies related to safety practices, the direct-current electrical circuit, communication, math applications, electric codes and employability skills.

Prerequisite: Permission of instructor. Corequisite: BCA 0349.

BCA 0352 - Apprenticeship - Electrical III (N) (90 hours)

This course is a continuation of BCA 0351 and is taught in conjunction with the work activities of BCA 0349 . This course provides students with electrical math instruction and alternating-current circuit skills.

Prerequisite: BCA 0351 and permission of instructor. Corequisite: BCA 0349.

BCA 0353 - Apprenticeship - Electrical IV (N) (90 hours)

This course is a continuation of BCA 0352 and is taught in conjunction with the work activities of BCA 0349. This course develops the competencies needed for employment in the residential electrical industry including electrical

math, alternating-current circuit, and troubleshooting residential electric circuits.

Prerequisite: BCA 0352 and permission of instructor. Corequisite: BCA 0349.

BCA 0354 - Apprenticeship - Electrical V (N) (90 hours)

This course is a continuation of BCA 0353 and is taught in conjunction with the work activities of BCA 0349 This course develops the competencies in the installation of residential wiring.

Prerequisite: BCA 0353 and permission of instructor. Corequisite: BCA 0349.

BCA 0355 - Apprenticeship - Electrical VI (N) (90 hours)

This course is a continuation of BCA 0354 (p. 175) and is taught in conjunction with the work activities of the BCA 0349 (p. 174). This course teaches an in-depth knowledge of the installation of residential wiring.

Prerequisite: BCA 0354 and permission of instructor. Corequisite: BCA 0349.

BCA 0356 - Apprenticeship - Electrical VII (N) (90 hours)

This course is a continuation of BCA 0355 (p. 175) and is taught in conjunction with the work activities of BCA 0349 (p. 174). This course develops competencies for commercial wiring installation.

Prerequisite: BCA 0355 and permission of instructor. Corequisite: BCA 0349.

BCA 0357 - Apprenticeship - Electrical VIII (N) (90 hours)

This course is a continuation of BCA 0356 (p. 175) and is taught in conjunction with the work activities of BCA 0349 (p. 174). This course develops competencies for commercial wiring installation.

Prerequisite: BCA 0356 and permission of instructor. Corequisite: BCA 0349.

BCA 0441 - Plumbing On-the-Job Training (N) (640 hours)

The course uses authentic learning strategies through on-the-job training, helping students implement the theoretical concepts introduced in the classroom.

Prerequisite: Permission of instructor required.

BCA 0450 - Introduction to Pipe Trades I (N) (90 hours)

This course develops the competencies essential to pipe trades. These competencies relate to career and training opportunities, the use and care of tools, safety precautions, basic math applications, standards and codes, and human relations. This is the first course in a series of twelve courses designed for the Plumbing Apprentice.

BCA 0451 - Introduction to Pipe Trades 2 (N) (90 hours)

This course develops the competencies essential to pipe trades. These competencies include safety, pipe trade related math applications, basic science, standards and codes, employability skills, and communication. This is the second course in a series of twelve courses designed for the Plumbing Apprentice.

Prerequisite: BCA 0450.

BCA 0452 - Introduction to Pipe Trades 3 (N) (90 hours)

This course provides competencies relating to blueprint and job specifications, building codes in the pipe trades, employability skills, and entrepreneurship. This is the fourth course in a series of twelve designed for the Plumbing Apprentice.

Prerequisite: BCA 0451.

BCA 0453 - Plumbing Technology 4 (N) (90 hours)

This course provides basic plumbing and pipe-cutting and joining skills. This is the fifth course in a series of twelve courses designed for the Plumbing Apprentice.

Prerequisite: BCA 0452.

BCA 0454 - Plumbing Technology 5 (N) (90 hours)

This course provides competencies relating to plumbing codes, blueprints and specifications, job layout and coordination, and first rough installation. This course is the seventh in a series of twelve designed for the Plumbing Apprentice.

Prerequisite: BCA 0453.

BCA 0455 - Plumbing Technology 6 (N) (90 hours)

This course provides competencies in job layout and coordination, and first and second rough installation. This course is the eighth in a series of twelve designed for the Plumbing Apprentice.

Prerequisite: BCA 0454.

BCA 0456 - Plumbing Technology 7 (N) (90 hours)

This course provides more in-depth study of trimming out plumbing, competencies in the installation of hot-water-heating and circulating systems, the principles of backflow and cross-connection control, and developing positive customer relations skills. This course is the tenth in a series of twelve designed for the Plumbing Apprentice.

Prerequisite: BCA 0455.

BCA 0457 - Plumbing Technology 8 (N) (90 hours)

This course provides competencies in the installation of interceptors and separators, and competencies necessary to install a storm drainage system. This course is the eleventh in a series of twelve courses designed for the Plumbing Apprentice.

Prerequisite: BCA 0456.

BCH - BIOLOGY

BCH 4053 - Biochemistry I (3 credits)

This course examines the structure and function of proteins, membranes and cellular constituents, enzyme catalysts, and carbohydrate metabolism.

Prerequisite: BSC 2011, BSC 2011L, CHM 2211, CHM 2211L, PCB 3063, PCB 3063L with a grade of "C" or higher. Corequisite: BCH 4053L.

BCH 4053L - Biochemistry I Laboratory (1 credit)

This course is the laboratory component for BCH 4053 (p. 176) and examines the structure and function of proteins and enzyme catalysts.

Prerequisite: BSC 2011, BSC 2011L, CHM 2211, CHM 2211L, PCB 3063, PCB 3063L, all with a grade of "C" or higher. Corequisite: BCH 4053.

BCH 4054 - Biochemistry II (3 credits)

This course is a continuation of BCH 4053 (p. 176) and describes the chemistry of living systems and the biological phenomena that results from the interaction among systems.

Prerequisite: BCH 4053, BCH 4053L , CHM 2211, CHM 2211L, all with a grade of "C" or higher.

BCN - BUILDING CONSTRUCTION TECHNOLOGY

BCN 1214 - Materials and Methods of Construction - Basic Structure (3 credits)

This course teaches how various materials and construction methods associated with site construction; concrete, masonry, metals, and wood and plastics (MasterFormat sections 1-6); affect the construction cost, total life, and maintenance cost of a building. The merits of new materials and methods are introduced and compared to existing products and methods. The major focus is from a builder's perspective emphasizing proper installation procedures and processes.

BCN 1215 - Materials & Methods of Construction - Finishes & Systems (3 credits)

This course teaches and examines how various materials and construction methods associated with thermal and moisture protection; doors and windows, interior finishes, specialties and equipment, electrical, mechanical (MasterFormat section 7-16); affect the construction cost, total life, and maintenance cost of a building. The merits of new materials and methods are introduced and compared to existing products and methods. The major focus is from a builder's perspective emphasizing proper installation procedures and processes.

BCN 1250 - Architectural Drafting Principles (3 credits)

This course teaches basic drafting skills, such as line technique, lettering, scaling, dimensioning and symbols, leading to the development and submittal of a set of architectural drawings. Using drafting equipment, students draw site plans, foundations, wall sections, floor plans, roof design, stairs, elevations, sections, and construction details. Students make a presentation on an architectural topic.

BCN 1272 - Plans Interpretation - Residential (3 credits)

This course presents the processes, terms, symbols, and conventions used by the residential construction industry. In addition to the fundamental principles used in reading residential plans, the student performs builder's math calculations relating to plans interpretation.

BCN 1721 - Construction Accounting and Cost Control (3 credits)

The student plots job progress, draw schedules; studies cash flow, billing, financing, job ledgers, inventory, collection methods, payroll, overhead, financial statements, balance sheets, income statements, net worth, equipment and property purchases, credit and borrowing principles, term interest, points and closing cost, depreciation, and financial ratios. The student studies the effects on pricing of variation in delivery time, quantities, payment terms, purchase orders, subcontracting, inventory and other aspects of cost control.

BCN 1765 - Codes and Regulations (3 credits)

This course focuses on OSHA regulations and on the Standard Building Code. Emphasis is placed on the standards that have the widest application to our local residential and commercial building. Students develop procedures for following the Standard Building Code and perform sample checks on code compliance.

BCN 1779 - Construction Process and Procurement (1 credit)

This course examines the basic elements of the design-bid-build process. The relationship between information, risk, and procurement are discussed. Focus is placed on the role, timing, and thinking of suppliers, subcontractors, general contractors, and construction managers.

BCN 2040 - Zero Energy Building Design and Construction (3 credits)

This course teaches emerging green building concepts, energy systems, and cost benefit analysis. Topics include net zero design, green building, alternative energies, energy conservation, microgeneration technologies, dual use of energy, passive cooling, occupant behavior, retrofitting, and related considerations.

BCN 2275 - Plans Interpretation - Commercial (3 credits)

Students read and interpret symbols found on commercial and light industrial blueprints. Building materials, structural concepts, handicap requirements, types of drawings, foundation systems, symbols, and conventions are investigated. Students examine differences between steel-frame and reinforced-concrete buildings as well as mechanical, electrical, and plumbing features.

BCN 2440 - Concrete Construction Methods (3 credits)

Students study concrete formwork for residential, light commercial, and heavy construction, using ACI recommended practices and OSHA shoring recommendations. Topics include panel systems, prefabrication, reinforcing steel, form ties, openings, residential foundations, flatwork, precast concrete, concrete mix, and placement.

BCN 2592 - Residential Energy Fundamentals (3 credits)

This course examines the relationship between energy use and the many components of the building sell for residential structures. Principles of energy systems, energy calculations, and alternative energy methods are explained. The use of the various energy rating systems and codes are emphasized.

BCN 2598 - Sustainable Building Systems (3 credits)

This course teaches the integration, interaction, and interdependence of HVAC, plumbing, and lighting systems to reduce energy consumption. Factors including site selection, intelligent building controls, and other systems are analyzed for performance. Focus is placed on enhancement of indoor air quality and the use of sustainable/green building materials.

BCN 2599 - Green Building and Energy Efficiency (3 credits)

This course examines fundamental concepts and guidelines related to green building construction. This class prepares students for the Leadership in Energy and Environmental Design (LEED) Green Associate certification and other industry credentials. Acquisition, installation, and management of green building materials, resources, and systems are analyzed. Strategies to achieve LEED credits are highlighted in the description of building project systems and the impact of energy resources.

BCT - BUILDING CONSTRUCTION TECHNOLOGY

BCT 1562 - Plumbing and Electrical Systems (3 credits)

This course examines residential, commercial, and industrial wiring and plumbing practice. It provides concentrated instruction and lab activities associated with how to wire and plumb a residential home. Practical application is combined with theory to analyze and compare the function of common plumbing and electrical components and materials.

BCT 1700 - Construction Office Practices (3 credits)

This course presents the systems and operations found in construction offices. This includes code restrictions, standards, specifications, legal documents, CPM schedules, project scheduling, planning, and other aspects of running a construction office. The student studies the general laws pertaining to contracts, warranties, guarantees, setting up a business, bonds, business licenses, joint ventures, qualifying agents, partnerships, corporations, expressed and implied warranties, Federal and State Tax Laws, Federal and State Labor Laws, and laws regulating certification of contractors.

BCT 1760 - Building Codes and Specifications (3 credits)

Students learn how to locate information in building codes. Basic definitions, fire zones, construction types, construction regulations, and selected specialized subjects are applied to local building. Topics include National Electrical Code, Standard for Hurricane Resistant Residential Construction, local codes, and the Standard Building Code.

BCT 1931 - Special Topics in the Construction Industry (.5 - 3 credits)

This course teaches basic home repair including, but not limited to, repair of shingles, sheathing, roofs, gutters, siding, fascia and soffits. Insulation and drywall repair and removal and painting textured walls and stucco are also covered.

BCT 1940 - Professional Practice (3 credits)

This course provides a practical application of the skills and knowledge acquired in the classroom. Students report and present information about office and field tasks accomplished. A final report about time and material covered, and an analysis of the academic and real world experiences is required at the end of this course.

BCT 2705 - Construction Supervision (3 credits)

This course teaches student critical path methods, job cost accounting, OSHA requirements, draw schedules, percentage of completion, record keeping, inventory control, scheduling, organization, and management theory. The student also studies elements of leadership and human relations.

BCT 2770 - Construction Estimating - Foundation to Basic Structure (3 credits)

This course teaches the bid-contract system used by the construction industry and provides the skills necessary to estimate residential and commercial work in the following areas: excavations and fill; foundations and formwork; reinforcing steel; concrete; block; wood and steel framing; and basic structure. Students perform labor and material takeoffs, cost calculations, and make adjustments for general conditions, bonds, insurance, alternates, work conditions, overhead, and profit.

BCT 2772 - Construction Estimating - Finishes and Systems (3 credits)

This course teaches the bid-contract system used by the construction industry and provides the skills necessary to estimate residential and commercial work in the following areas: thermal and moisture protection; windows and doors; exterior insulation and finish systems; gypsum wallboard; flooring; painting; acoustical treatments, finish carpentry and trim. Students perform labor and material takeoffs, cost calculation, and make adjustments for general conditions, bonds, insurance, alternates, work conditions, overhead, and profit.

BCV - BUILDING CONSTRUCTION TECHNOLOGY

P000

BCV P002 - Green Building Trade Basics (N) (90 hours)

This course teaches the basic use of hand tools, power tools, and safety procedures for the construction industry with emphasis on the influence and impact of green/sustainable building practices.

BCV P830 - Energy Efficient Construction Skills (N) (120 hours)

This course teaches the basic principles of green construction practices, including certification and verification methodologies as well as testing procedures. The development of a site waste management program and strategies for using green products in construction are part of the objectives of this course.

Prerequisite: BCV P002.

BCV P831 - Applied Green Building Trades (N) (90 hours)

This course teaches the hands-on use of construction tools and methods in the creations of walls, floors, roofs, and trim using the principles of green construction practices.

Prerequisite: BCV P830.

BOT - BIOLOGY

BOT 3015 - Plant Biology (3 credits)

This course teaches the evolutionary relationships, life histories, structural and functional relationships of structures, and ecological adaptations of plants, fungi, selected Protista and prokaryotes. This course is specifically for the Bachelor of Science Education.

Prerequisite: BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, all with C or higher.

BSC - BIOLOGY

BSC 1005 - Life Science (3 credits)

This introductory level course is designed for nonscience majors. It illustrates the applications of the scientific method of problem solving within the field of life science. Topics of the investigation include properties of life, chemistry of life, structure and function of cells, cell reproduction, plant structure and function, and representative human systems.

Prerequisite: Student must score into college-level reading on placement test.

BSC 1005L - Life Science Lab (1 credit)

This lab course is designed for nonscience majors. Students gain laboratory experiences in the areas of properties of life, chemistry of life, structure and function of cells, cell reproduction, plant structure and function, and representative human systems.

Prerequisite: Student must score into college-level reading on placement test. . Corequisite: BSC 1005.

BSC 1020 - Biology for Health Sciences (3 credits)

This course is designed for students entering into the health sciences. Topics include properties of life, chemistry and macromolecules, cell structure, metabolism, genetics and basic evolutionary concepts.

Corequisite: BSC 1020L.

BSC 1020L - Biology for Health Sciences Lab (1 credit)

This course is the laboratory component for BSC 1020, Human Biology. Lab experiences include microscope technique, basic chemistry, cell structure, genetics and body systems terminology.

Corequisite: BSC 1020.

BSC 1084 - Survey of the Human Body (4 credits)

This is a one-semester course designed to cover basic information necessary for a general understanding of the structure and function of the human body. The course emphasizes how systems work together to achieve homeostasis.

Prerequisite: Student must score into college-level reading on placement test.

BSC 2010 - General Biology I (3 credits)

This course is designed for science majors. It covers cell structure and function, the chemical basis for life, cell metabolism, cell reproduction and inheritance, and evolution. It is recommended that students taking this course continue in BSC 2011 (p. 179).

Prerequisite: Student must score into college-level mathematics and reading on placement test. Corequisite: BSC 2010L.

BSC 2010L - General Biology I Lab (1 credit)

This is the lab component for BSC-2010 (p. 179). Lab experiences include cell structure and function, the chemical basis for life, cell metabolism, cell reproduction and inheritance, and evolution.

Prerequisite: Student must score into college-level mathematics and reading on placement test. Corequisite: BSC 2010.

BSC 2011 - General Biology II (3 credits)

This is a continuation of BSC 2010 (p. 179). Topics include an introduction to bacteria, viruses, fungi, and Protista and a survey of the plant and animal kingdoms.

Prerequisite: BSC 2010, BSC 2010L. Corequisite: BSC 2011L.

BSC 2011L - General Biology II Lab (1 credit)

This is the lab component for BSC 2011 (p. 179). Lab experiences include protists, fungi, and a survey of the plant and animal kingdoms, comparative physiology of vertebrate systems, plant and animal development.

Prerequisite: BSC 2010, BSC 2010L . Corequisite: BSC 2011.

BSC 2093 - Anatomy and Physiology I (3 credits)

As the first semester of a two-semester sequence, this course studies regional and systemic anatomy and physiology of the human body. Emphasis is placed on histology and the integumentary, skeletal, muscular, and nervous systems.

Prerequisite: BSC 1020 and BSC 1020L or BSC 2010 and BSC 2010L and student must score into college-level mathematics and reading on placement test. Corequisite: BSC 2093L.

BSC 2093L - Anatomy and Physiology I Lab (1 credit)

This is the lab component for BSC 2093 (p. 179). Lab experiences include the histology and the integumentary, skeletal, muscular, and nervous systems.

Prerequisite: BSC 1020 and BSC 1020L or BSC 2010 and BSC 2010L and student must score into college-level mathematics and reading on placement test. . Corequisite: BSC 2093.

BSC 2094 - Anatomy and Physiology II (3 credits)

This is a continuation of BSC 2093 (p. 179), studying the anatomy and physiology of human systems. Topics covered are the circulatory, digestive, respiratory, excretory, endocrine, and reproductive systems.

Prerequisite: BSC 2093, BSC 2093L. Corequisite: BSC 2094L.

BSC 2094L - Anatomy and Physiology II Lab (1 credit)

This is the lab component for BSC 2094 (p. 179). Lab experiences include the circulatory, digestive, respiratory, excretory, endocrine, and reproductive systems.

Prerequisite: BSC 2093, BSC 2093L. Corequisite: BSC 2094.

BSC 3464 - Biotechnology I (3 credits)

This course examines gene and genetics, molecular biotechnology, theories and applications of biotechnology research, genome analysis and bioinformatics. Also discussed are biotechnology of microbial systems used in diagnosis, therapeutics, and vaccines.

Prerequisite: BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, CHM 1046, CHM 1046L, PCB 3063, PCB 3063L, all with grade of "C" or higher. Corequisite: BSC 3464L.

BSC 3464L - Biotechnology I Laboratory (1 credit)

Students examine techniques and applications of biotechnology, recombinant DNA technology, with applications in plant and animal systems, and the impacts of biotechnology on society in a laboratory setting.

Prerequisite: BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, CHM 1046, CHM 1046L, PCB 3063, PCB 3063L, all with grade of "C" or higher. Corequisite: BSC 3464.

BSC 3465 - Biotechnology II (3 credits)

This course is a continuation of the study of the use of molecular biotechnology in the synthesis of commercial products, bioremediation, biomass utilization, and large scale production of proteins from recumbent microorganisms. Molecular biotechnology of eukaryotic systems for transgenic plants and animals are examined.

Regulation and social aspects of molecular biotechnology are included.

Prerequisite: BSC 2011, BSC 2011L, BSC 3464, BSC 3464L, PCB 3063, PCB 3063L, all with a grade of "C" or higher. Corequisite: BSC 3465L.

BSC 3465L - Biotechnology II Laboratory (1 credit)

This course is a continuation of BSC 3464L (p. 179) and is the laboratory component of BSC 3465 (p. 179).

Prerequisite: BSC 3464, BSC 3464L with a grade of "C" or higher. Corequisite: BSC 3465 .

BSC 3931 - Junior Seminar I (1 credit)

This course is the first part of a two semester sequence for junior biology majors. Students read and discuss selected examples of the scientific literature in biology.

Prerequisite: BSC 2011, BSC 2011L, CHM 1046, CHM 1046L with a grade of 'C' or higher and pre/corequisite: CHM 2210, CHM 2210L with grade of 'C' or higher.

BSC 3932 - Junior Seminar II (1 credit)

This course is the second part of a two semester sequence. Students read and discuss selected examples of the scientific literature in biology and write a scientifically valid proposal in preparation for their senior research project. Permission required to register.

Prerequisite: BSC 3931, CHM 2210, CHM 2210L, with a grade of "C" or higher. Pre/Corequisite: BSC 3464, PCB 3063, PCB 3063L, CHM 2211, CHM 2211L, with a grade of "C" or higher.

BSC 4422 - Applications in Biotechnology (3 credits)

This course provides a survey of the biological, biomedical, ecological, and ethical applications of biotechnology in industry, agriculture, and medicine.

Prerequisite: BSC 3464, BSC 3464L, BSC 3465, BSC 3465L, PCB 3063, PCB 3063L, with a grade of "C" or higher.

BSC 4434 - Introduction to Bioinformatics (3 credits)

This course teaches the computational techniques for biological sequence analysis. Special topics include data file formats, accessing public databases for retrieval and submission, analysis using common scientific and computer tools, and scripting.

Prerequisite: STA 2023, BSC 3464, BSC 3464L, PCB 3063, PCB 3063L, all with a grade of "C" or higher.

BSC 4910 - Senior Project I (1 credit)

This course is for students conducting research projects or writing a review or analysis paper under the supervision of an instructor and/or researcher. It is intended to help students acquire skills in literature search, applying research principles, interpreting data, and reporting scientific information. Permission required to register.

Prerequisite: BSC 3931, BSC 3932 with a grade of "C" or higher.

BSC 4911 - Senior Project II (1 credit)

This course is for students conducting research projects or writing a review or analysis paper under the supervision of an instructor and/or researcher. Students critically analyze and interpret research data, and communicate their findings in a professional manner, including written or oral presentations. Permission required to register.

Prerequisite: BSC 4910 with a grade of "C" or higher.

BUL - BUSINESS ADMINISTRATION AND MANAGEMENT

BUL 2241 - Business Law I (3 credits)

This course presents American Law, Contract Law and Article II of the Uniform Commercial Code, which deals with the sale of goods. Through study of content and cases, the course teaches the fundamentals of preventive law, tort law, criminal law, the court system, and legal terminology.

BUL 3130 - Legal and Social Aspects of Business (3 credits)

This course explores the nature of legal, ethical, and societal environments of business and the Uniform Commercial Code (UCC). Emphasis is placed on business's social, legal, political, and ethical responsibilities to both external and internal groups in business. Topics include corporate social responsibility, legal, political and ethical aspects of business, state and federal laws, contracts, intellectual property, employment law, product liability, safety issues, and environmental regulation.

BUL 4310 - The Legal Environment of Business (3 credits)

This course introduces the legal environment of business and organizations and the Uniform Commercial Code (UCC). It emphasizes public and regulatory law and the social, political, and ethical aspects of legal issues in business. Subjects include the nature of law and the legal process, administrative law, business and the constitution, statutory and common law, contracts and torts, business organizations and securities, antitrust, consumer protection and employment law.

CAP - DIGITAL MEDIA

CAP 3052 - Game Design I (3 credits)

This course teaches advanced principles and theories of video game production, including project planning,

scripting, 3D modeling and texturing, level design, and audio. This course immerses students in the initial stages of an eight-week game development project with heavy emphasis on teamwork as well as project planning and documentation. Students are introduced to Agile Production Methodologies and Best Practices of Game Production. Student assignments include creation and maintenance of technical design documentation, implementation of game technology, and project planning details designed to provide a strong foundation for delivering milestones in subsequent courses.

Prerequisite: DIG 3713.

CAP 3054 - Casual Game Development (3 credits)

This course teaches students how to design and implement casual video games using professional tools and interactive design techniques. Casual games are created in a short amount of time and are designed to appeal to the casual gamer playing games online for short periods of time. Students develop games using Adobe Flash or a similar technology.

Prerequisite: CAP 3052.

CAP 4056 - Game Design II (3 credits)

This course teaches advanced principles and theories of video game design, including software, content, interaction, and game play design. This course communicates the important techniques used by game programmers and designers during a typical production cycle. Student assignments may include implementation of reusable game technology, algorithm analysis, usage of game industry tools and platforms, and game projects.

Prerequisite: CAP 3052.

CAP 4057 - Game Networking (3 credits)

This course teaches the techniques and technologies required to create network-enabled games. Students learn basic networking principles, network protocols, game-specific networking techniques, and various APIs and encapsulation techniques. In addition to connection-oriented and connectionless communications methods, students also learn various network architectures and their effect on the gaming experience.

Prerequisite: CAP 4056.

CAP 4304 - Text Mining (3 credits)

This course introduces students to the knowledge discovery process and its direct application using data mining methodologies. Concepts addressed include the extraction of information from data sets and its transformation into a useable structure. The use of text mining, topic mining, and clustering models is also introduced.

Prerequisite: CTS 3470, ISM 4117.

CAP 4744 - Data Visualization and Reporting (3 credits)

This course enables students to utilize the tools and techniques required to present complex data in visually meaningful representations. Students learn how to prepare, analyze, and effectively display data to draw compelling conclusions.

Prerequisite: CTS 3470.

CAP 4784 - Big Data (3 credits)

The course presents students with the skills and tools to manage and analyze large-scale data. Fundamental platforms with big data storage will be utilized. Stream and batch processing are also introduced.

Prerequisite: CTS 3470, CGS 1540.

CAP 4793 - Advanced Data Analytics (3 credits)

This course addresses advanced data analytic methodologies and techniques, such as neural networks, unsupervised learning, and emerging modes of data acquisition and aggregation. Students will develop the skillset to manage complex data analytics applications.

Prerequisite: CTS 3470.

CCJ - CRIMINAL JUSTICE TECHNOLOGY

CCJ 1600 - Deviant Behavior (3 credits)

This course teaches the basic sociological perspectives and theories of deviance. Emphasis is placed on understanding basic behavior patterns that are not a part of traditional and conventional society.

CCJ 2020 - Introduction to Criminal Justice (3 credits)

This course teaches the historical and philosophical background of criminal justice and agencies involved in the administration of criminal justice. Development and objectives of criminal systems together with organization, administration, and technical problems of local, state, and federal agencies are emphasized. The student is oriented to the purposes, requirements, and opportunities of the criminal justice career field.

CCJ 2022 - Contemporary Issues in Criminal Justice (1-3 credits)

This course examines current issues and problems of interest and concerns in the criminal justice system.

CCJ 3612 - Criminal and Delinquent Behavior (3 credits)

This course examines patterns of criminal and delinquent behaviors through theoretical concepts and their influence on public policies. Students explore the development of

evidence-based approaches for preventing and mitigating crime and delinquency. An analysis of recidivism focusing on age, gender and socioeconomic strata is covered.

Prerequisite: CCJ 1600.

CCJ 3641 - Organized Crime (3 credits)

This course examines the world of organized crime, by analyzing it from a social perspective. International and domestic criminal groups are examined including relevant legislation, multi-agency task forces, international cooperation and threat analysis. The student analyzes the history, current role and future of organized crime; and develops a frame work for understanding the importance of how the world economy expands and is shadowed by a criminal economy.

Prerequisite: CCJ 2020, CJC 2000, CJL 2500, CJL 2062, CJL 2100, CCJ 1600.

CCJ 4054 - Criminal Justice Ethics and Liability (3 credits)

This course provides a critical examination of conduct and ethics of criminal justice supervisors, managers, and leaders that may give rise to civil liability. The course also provides a critical examination of decision-making and human relations within criminal justice agencies.

Prerequisite: CCJ 2020.

CCJ 4450 - Criminal Justice Administration and Management (3 credits)

This course analyzes leadership styles, techniques in supervision, theories, practices, and skills associated with managing personnel. Addressed are budgeting, organizational behavior, civil service, unions, manpower distribution, policy development and execution as applied in both small and large law enforcement agencies.

Prerequisite: CCJ 1600, CCJ 2020, CCJ 4054, CJC 2000, CJC 3011, CJE 3065, CJL 2062, CJL 2100, CJL 2500, CJL 3010.

CCJ 4651 - Drugs and Crime (3 credits)

This course examines historical and modern impacts of illegal and prescription drug use and drug trafficking on the criminal justice system. It explores domestic and international drug production, distribution, and financial impact on society and the criminal justice system. Focus is on efforts to control and combat drug distribution and the debate over the decriminalization of drugs.

Prerequisite: CCJ 2020, CCJ 1600, CJL 2062, CJC 2000, CJL 2100, CJL 2500.

CCJ 4666 - Victimology (3 credits)

This course provides an overview of the legal, psychological, and social consequences and impacts of victimology. Students explore victimization in the context of the criminal justice system. Types of victims, theories and victimization, and treatment of victims are discussed. Additional topics include family violence, domestic violence, special populations, and sexual abuse.

Prerequisite: CCJ 2020, CJC 2000, CJL 2500, CJL 2062, CJL 2100, CCJ 1600.

CCJ 4678 - Race, Gender, Ethnicity and Crime (3 credits)

This course examines race, gender and ethnicity and their relationship to crime throughout the history of the United States. Topics include the effect of changes in the legal and social climate including the passage of the 13th and 14th Amendments, the civil rights movement, the women's movement, gender orientation and immigration.

Prerequisite: CCJ 2020, CJC 2000, CJL 2500, CJL 2062, CJL 2100, CCJ 1600.

CCJ 4700 - Methods of Research in Criminal Justice (3 credits)

This course emphasizes the relevance of research design, research instrument construction, data analysis, and the reporting of results. The course furnishes students with an understanding of the role of research and enhances their ability to critically think how relevant evidence based practice can apply to the criminal justice system. This course is taken during the final semester. Permission to register required.

Prerequisite: Permission of dean or department chair required.

CET - ELECTRONIC ENGINEERING TECHNOLOGY

CET 1112C - Logic Circuits I (3 credits)

This course introduces the logic circuitry used in digital electronic systems. Topics covered are number systems, logic gates, Boolean algebra, Karnaugh maps, DeMorgan's Theorems, IC specifications, interfacing, encoders, decoders, and flip-flops.

Prerequisite: EET 1215C.

CET 1113C - Logic Circuits II (3 credits)

This course is a continuation of Logic Circuits I. Topics covered are counters, registers, arithmetic circuits, memories, digital systems, digital to analog conversion, and analog to digital conversion.

Prerequisite: Pre/corequisite: CET 1112C.

CET 1178 - A+ Certification Hardware (3 credits)

This course prepares the student for a career in the personal computer industry. It also helps prepare the student for the A+ Certification examination, which measures the

competencies required by a service technician with six months of on-the-job experience. Students learn how to install, configure, upgrade, troubleshoot, and repair microcomputer hardware.

Prerequisite: Student must score into college-level reading in placement test.

CET 1179C - A+ Certification Software (3 credits)

This course is a continuation of CET 1178 (p. 182).

CET 1588 - Network + Certification (3 credits)

This course teaches a wide range of vendor-neutral networking technologies and skills such as configuring, installing, troubleshooting and maintaining network interface cards, hubs, routers, switches, servers, RAID technologies and clustering technologies. The course focuses on necessary management skills including managing a support/help desk center, supporting end users, and working in conjunction with management and other technicians. Additional topics include developing a documentation system and Standard Operating Procedures (SOP). This course prepares the student for the CompTIA Network + Industry Certification Exam.

Prerequisite: CET 1178.

CET 1854 - Introduction to Wireless Technology (3 credits)

This course teaches key wireless networking topics, including wireless technology and architecture, network design, types of wireless networks, and applications. Special focus is on technical matters, wireless communication products, wireless networking products, and wireless LANs products. It is recommended that all students have at least a basic knowledge of networking, including Protocol, the OSI module, and TCIP/IP.

CET 2891 - Wireless Network Security Certification (3 credits)

This course prepares students to secure wireless networks and protect valuable data from intruders. The following subjects are covered: intrusion tools and techniques, detection systems, WPA/WPA2/802.11i security, enterprise wireless gateways, encryption gateways, secure wireless bridging, and wireless VPN routers. This course prepares student for the CompTIA wireless certification exam.

CGS - COMPUTER SCIENCE

CGS 1060 - College Computing (3 credits)

This course concentrates on how to use a computer for academic purposes. Topics covered include an operating system (Microsoft Windows), a word processor (Microsoft Word), an electronic spreadsheet (Microsoft Excel), presentation software (Microsoft PowerPoint), and search techniques using a database application (Microsoft Access). Computer concepts and use of the Internet are also covered.

CGS 1100 - Introduction to Computer Applications for Business (3 credits)

This course introduces students to microcomputer applications for business. Major topics include Windows operating systems, word processing, financial spreadsheets, database applications, e-mail, local area networks, and the Internet.

CGS 1500 - Microsoft Word (3 credits)

This course teaches Microsoft Word software through hands-on instruction. Using an exercise-oriented approach, students become proficient in the application of Microsoft Word. Keyboarding skills are recommended.

CGS 1522 - Microsoft PowerPoint (3 credits)

This course teaches how to design and develop PowerPoint presentations and to prepare students to take the specialist-level examination for Microsoft Office PowerPoint. Prior to taking this class, students need to know how to open, edit and save word processing documents, open and navigate an Internet browser, and perform basic disk and file management operations.

CGS 1540 - Database Fundamentals (3 credits)

This course teaches relational database design and how to create powerful applications using the Microsoft Access software package. Topics include designing, creating, and modifying tables, queries, forms, and reports with emphasis on business application.

CGS 1700 - Introduction to Operating Systems (3 credits)

This course covers the hardware, software, and operating system concepts used with computer systems. It focuses on popular operating systems such as Windows, DOS, and UNIX. Emphasis is on utility commands, kernel software, shell programs, and connectivity.

CGS 1821 - Website Development (3 credits)

This course teaches how to create, publish and manage Websites with visual HTML tools and graphic editing software (Adobe Dreamweaver and related software). Students create dynamic Websites, incorporating custom designed graphics, text, Flash animations, DHTML, Java Applets, cascading style sheets, templates, libraries, tables, forms and user interactivity.

CGS 1843 - Introduction to E-Commerce (3 credits)

This course teaches the technological issues associated with setting up and monitoring an electronic commerce

Website. Students study management issues, software and hardware selection, and third party vendor options.

Prerequisite: Recommended CGS 1821.

CGS 1876 - Web Animation (3 credits)

This course teaches how to create and publish interactive, multimedia animations and web sites with macromedia Flash.

Prerequisite: Recommended: CGS 1821.

CGS - DIGITAL MEDIA

CGS 4828 - Advanced Web Design (3 credits)

This course presents advanced concepts in Web design, including interactivity and animation. It is for students who have mastered the skills of building a basic Web site and want to advance to more sophisticated interface design and techniques. Students are challenged to solve advanced communication problems while addressing technical issues related to Web design and user experience. An emphasis is placed on Web standards, advanced HTML and CSS, usability and aesthetics. Students work with industry standard tools to produce or simulate real world projects.

Prerequisite: GRA 3758.

CHD - CHILD DEVELOPMENT AND EDUCATION

CHD 1220 - Introduction to Child Development (3 credits)

This course is a study of approaches to understanding and guiding the young child. Principles of growth and development are applied to the child in various settings. Emphasis of instruction is for potential employees in a child care situation.

CHD 1332 - Creative Experiences for Children (3 credits)

This course is an in-depth study of the creative activities enjoyed by preschool children in language arts, math, science, social studies, art, and music. P.E. techniques the teacher can use to stimulate creativity are identified.

CHD 2334 - Early Childhood Language Arts and Reading (3 credits)

This course studies language development, reading readiness, and primary reading skills for young children. Emphasis is on planning language arts and reading activities.

CHD 2800 - Administering a Child Care Center (3 credits)

This course teaches the development and administration of a Child Care Center at the foundational level. Included are the principles and practices of assessing community need, licensing and certifying, budgeting, developing and equipping a center facility, staffing, managing on site and evaluating program and staff.

CHM - CHEMISTRY

CHM 1020 - Introduction to Chemistry (3 credits)

This course teaches introductory chemical principles and applications for the non-science major. Topics include the scientific method of problem solving, classification of matter, the periodic table, chemical reactions, energy, chemical bonds, and acid-base chemistry.

Prerequisite: Student must score into college-level English, mathematics and reading on placement test.

CHM 1032 - Biochemistry for Health Professionals (1 credit)

This course covers the essentials of chemistry and biochemistry for students in health-related fields. Emphasis is placed on chemical and biochemical applications to the health-related fields, and on understanding the structure and function of lipids, carbohydrates, and proteins.

Prerequisite: Student must score into college-level English, mathematics and reading on placement test.

CHM 1045 - General Chemistry I (3 credits)

This course is a study of the principles of chemistry, atomic and molecular structure, chemical bonding, properties of gases, stoichiometry, liquids, and solids.

Prerequisite: MAT 1033 or higher, and student must score into college-level reading on placement test. Corequisite: CHM 1045L.

CHM 1045L - General Chemistry I Lab (1 credit)

This course is the laboratory for CHM 1045 (p. 184). Lab experiments include the topics of principles of chemistry, atomic and molecular structure, chemical bonding, properties of gases, stoichiometry, liquids, and solids.

Prerequisite: Student must score into college-level mathematics and reading on placement test. Corequisite: Pre/corequisite: CHM 1045.

CHM 1046 - General Chemistry II (3 credits)

This course is a continuation of CHM 1045 (p. 184) including equilibrium, kinetics, electrochemistry, and descriptive chemistry of some elements.

Prerequisite: CHM 1045, CHM 1045L. Corequisite: CHM 1046L.

CHM 1046L - General Chemistry II Lab (1 credit)

This course is the laboratory for CHM 1046 (p. 184). Lab experiments include the topics of equilibrium, kinetics,

electrochemistry, and descriptive chemistry of some elements.

Prerequisite: CHM 1045, CHM 1045L. Corequisite: CHM 1046.

CHM 2210 - Organic Chemistry I (3 credits)

This course teaches the nomenclature, preparation, reactions, mechanisms, and the electronic and structural features of carbon-containing compounds. The relationships between molecular shape, chemical reactivity, and product formation are covered. Classes of compounds studied include alkanes, alkenes, alkynes, alkyl halides, alcohols and ethers.

Prerequisite: CHM 1046, CHM 1046L. Corequisite: CHM 2210L.

CHM 2210L - Organic Chemistry I Lab (1 credit)

This course teaches the preparation of organic compounds. Students perform distillation, extraction, recrystallization and chromatography experiments. Alcohols, alkenes, esters and alkyl halides are prepared.

Prerequisite: CHM 1046, CHM 1046L. Corequisite: CHM 2210.

CHM 2211 - Organic Chemistry II (3 credits)

This course teaches the nomenclature, preparations, reactions, mechanisms, and the electronic and structural features of carbon-containing compounds. Classes of compounds studied include aromatics, aldehydes, ketones, carboxylic acids, amines and phenols. Chemical structure is determined using infrared spectra and nuclear magnetic resonance spectra.

Prerequisite: CHM 2210, CHM 2210L. Corequisite: CHM 2211L.

CHM 2211L - Organic Chemistry II Lab (1 credit)

This course teaches the preparation, purification, and identification of organic compounds. Gas chromatography and infrared, spectra are obtained and used to determine chemical purity and structure. Esters, amides, carboxylic acids, aldehydes and aromatic compounds are prepared.

Prerequisite: CHM 2210, CHM 2210L. Corequisite: CHM 2211.

CIS - COMPUTER SCIENCE

CIS 1000 - Introduction to Information Technology (3 credits)

This course establishes an understanding of the fundamentals required for further study in the field through a general survey of the methods and techniques of processing data. Emphasis is on the general purpose computer and its use in business and industry.

CIS 2381 - Network Forensics (3 credits)

This course teaches forensic concepts and techniques related to information security. Topics include computer system data recovery with a particular emphasis on computer evidence handling and computer crime detection. Students are required to recover data from computers that may have been involved in computer crimes. The students use and develop computer software tools to reboot suspect computers, detect evidence of computer crime, and preserve that evidence for later use.

Prerequisite: Recommended: CET 1178.

CIS 4200 - Security Penetration Testing (3 credits)

The course presents penetration testing and related software tools. Cyber-attacks such as distributed denial of service, man-in-the-middle, and brute force attacks are covered. Prevention and mitigation strategies are also explored.

Prerequisite: CTS 2106.

CJC - CRIMINAL JUSTICE TECHNOLOGY

CJC 2000 - Introduction to Corrections (3 credits)

This course teaches an overview of the historical events and social issues that have shaped the corrections (person/jail) system in the U.S., to include an examination of contemporary corrections in terms of structure, clients, management, staff programs, and prisoners' rights.

CJC 2162 - Probation and Parole (3 credits)

This course teaches an overview of the history and philosophical foundations of probation and parole in the United States. It examines the organization and operations of probation and parole agencies as particular segments of the criminal justice system; probation as a part of the judicial process and parole as part of the prison/corrections system.

CJC 3011 - Corrections and Penology (3 credits)

This course provides a critical examination of the philosophies, practices, and procedures employed in corrections in the United States. Topics and issues include correctional philosophies and ideologies, the history of punishment and corrections, and models of incarceration. This course also examines the characteristics of prisoners and the subculture of prison along with the death penalty and the future of corrections.

Prerequisite: CJC 2000.

CJD - CRIMINAL JUSTICE TECHNOLOGY

CJD 0747 - Corrections Equivalency Training (N) (60 hours)

This course teaches the topics needed to prepare for the Correctional Officer State Certification Examination. In order to enter this selective admissions course, the student must have previously been a Correctional Officer in another state or have served in this capacity while in the armed forces.

Prerequisite: Certified out-of-state or Military Correctional Officer. Employed at least one year as a Correctional Officer.

CJD 0939 - Law Enforcement Basic Recruit Review (N) (30 hours)

This course reviews course content in the Law Enforcement Basic Recruit Training and assists the student to prepare for the State Certification Exam for Law Enforcement Officers.

Prerequisite: Basic Law Enforcement Recruit Training.

CJD 1940 - Internship in Criminal Justice (3 - 4 credits)

This course provides on-the-job experience wherein students are given the opportunity to strengthen and further develop expertise in a practical setting within the Criminal Justice field. The student and instructor develop a training plan, with the instructor evaluating the student's performance by communication with the student's supervisor.

P000

CJD P945 - Criminal Justice Weapons Review (N) (16 hours)

This course teaches remedial instruction in the use of law enforcement and corrections officer firearms, including handguns. Additional practical hands-on experience is provided.

Prerequisite: CJK V040C.

CJE - CRIMINAL JUSTICE TECHNOLOGY

CJE 1000 - Introduction to Law Enforcement (3 credits)

This course teaches an overview of the history, development, administration, operation and functions of law enforcement. Students examine innovative practices that have been developed as well as accountability issues that have surfaced in recent years.

CJE 1002 - Police Procedures (3 credits)

This course teaches key issues facing law enforcement in performing their policing duties. It emphasizes what the police responsibility is, the constitutional and statutory constraints under which police function and how the tasks to be performed can be accomplished responsibly and humanely within these constraints.

Prerequisite: Permission of Criminal Justice Department Chair.

CJE 1325 - Foundation of Law Enforcement Leadership I (3 credits)

This course teaches leadership skills that are the foundation of the law enforcement community. Exposure to the para-military organization with a focus on the history of law enforcement, the duty to society, and the honor, duty and integrity of the law enforcement officer are highlights of the student experiences.

Prerequisite: Permission of Criminal Justice Department Chair.

CJE 2300 - Police Organization and Administration (3 credits)

This course teaches an overview perspective of police administration. The course examines the fundamentals of administration and management while giving the student a framework for understanding the role of the police administrator in relation to the responsibility to deliver quality police services.

CJE 2580 - Investigative Interviews (3 credits)

This course teaches the knowledge, skills and attitudes that are essential for an interviewer to conduct effective interviews.

CJE 2600 - Criminal Investigation (3 credits)

This course teaches the fundamentals of criminal investigation to include the role of the investigator in combating crime. Students examine the process which continues to evolve due to scientific, legal, and social developments, as well as changes in the behavior of criminals.

CJE 3065 - Police and Society (3 credits)

This course examines the function of police in a democracy. It focuses on the changing role of law enforcement throughout history and the impetus for these changes including key legislation, court rulings, and shifts in the societal fabric. The need for law enforcement to respond and adapt to changes as well as current and emerging issues are addressed.

Prerequisite: CCJ 2020.

CJJ - CRIMINAL JUSTICE TECHNOLOGY

CJJ 2002 - The Juvenile and the Law (3 credits)

The course examines the juvenile justice system. It explores how juvenile offenders are defined and classified to include the various stages of juvenile processing.

CJJ 3015 - Juvenile Justice System (3 credits)

This course covers the juvenile justice system and the disparity of goals and practices. It examines contemporary approaches to the juvenile justice system including law enforcement, courts, and penology for delinquency.

Prerequisite: CCJ 2020.

CJK - CRIMINAL JUSTICE TECHNOLOGY

CJK 0001 - Introduction to Law Enforcement (N) (10 hours)

This course reviews graduation requirements and recruit expectations during Academy attendance. It teaches components of the Criminal Justice System, and the proper use of the chain of command in an organization, and provides a definition of what constitutes sexual harassment, and an understanding of the Police Code of Ethics.

CJK 0012 - Legal (N) (62 hours)

This course provides a solid legal foundation from which students may function as law enforcement officers. Students learn federal, state, and local laws.

CJK 0013 - Interactions in Diverse Community (N) (40 hours)

This course teaches the common communication traits of individuals based upon their cultures, experiences, physical and psychological conditions, and how specific situations can challenge a law enforcement officer's effort to perform his or her duties.

CJK 0014 - Interview and Report Writing (N) (56 hours)

This course teaches note taking, interviewing and report writing principles for law enforcement officers.

CJK 0020C - CMS Vehicle Operations (N) (48 hours)

This course teaches the fundamentals of law enforcement emergency vehicle operations.

Prerequisite: Acceptance into the Law Enforcement Basic Recruit Training Program.

CJK 0023 - Introduction to Law Enforcement (N) (4 hours)

This course teaches an understanding of the importance of values, ethics, and professionalism when making ethical decisions in the role as a law enforcement auxiliary officer.

CJK 0024 - Legal Concepts (N) (20 hours)

This course explains the foundation of the United States legal system and the various sources of laws, the difference between a criminal and a non-criminal act, the levels of legal justification and the corresponding legal action to take in the situation, the constitutional requirements for a valid search and seizure, the authority to make an arrest and the circumstances for making an arrest with our without a warrant, the legal basis for using force in specific situations, the ability to identify the role of each person involved in an incident and the significance of intent in determining whether an act is criminal, and the statutory elements of common crimes.

CJK 0025 - Patrol & Professional Communication (N) (12 hours)

This course teaches the elements of effective communication, the role of observation, factors that affect observation, and the importance of continuous training, mental preparedness, and physical fitness. It also covers presenting a positive self-image when interacting with the public to assist in solving community-based problems, the importance of patrolling assigned areas and maintaining equipment, understanding non-criminal calls for service, and the uses of mobile electronic devices. The use of the radio and the importance of BOLOs, uses and restrictions of criminal justice information systems, taking thorough, factual and complete field notes, when Miranda warnings are required, how to prepare, conduct and document an interview, and write effective reports.

CJK 0026 - Interactions in a Diverse Community (N) (12 hours)

This course teaches students how to recognize and respond to the signs and symptoms of many disabilities and to provide the most appropriate intervention. The course covers potential issues and available resources for veterans in crisis, people with signs of mental illness, how to use the Baker Act, dealing with a person threatening suicide and provide services to stabilize the situation, the challenges of interacting with juveniles and calls involving a juvenile, substance abuse and the use of the Marchman Act, age-related conditions and referral intervention for the elderly, the prevalence of homelessness, and identify related crimes by the against these people, respond and intervene safely and professionally during a crisis, and understand the options available to provide the most appropriate intervention.

CJK 0027 - Calls for Service (N) (24 hours)

In this course, students learn to respond to a call, set up a perimeter, conduct a building or grounds search, respond to calls for service including well-being and security checks, building alarms, environmental hazards, animal complaints and special event security, disturbances, disorderly people, court orders, including arrests and civil processes, and assist with the execution of search and arrest warrants. Students also learn to approach a suspect and make an arrest, transport a prisoner and process the prisoner at a detention facility, and complete and pass Introduction to the Incident Command System and National Incident Management (NIMS), An Introduction.

CJK 0028 - Traffic Stops and Crash Investigation (N) (28 hours)

In this course, students learn to identify Florida driver's licenses, understand common terms for vehicles and roadways, enforce parking violations, impound a vehicle, direct vehicle and pedestrian traffic, safely pull over a vehicle, identify and articulate the stop or violation, obtain necessary information from the driver, safely complete the stop, complete the required documentation for a traffic stop, identify the signs of alcohol or drug impairment, assist in conducting a DUI traffic stop, respond to a crash scene safely, secure a safe work environment at a crash scene, return a crash scene to normal as quickly as possible, complete driver exchange of information properly, and document a crash correctly in appropriate crash report form.

CJK 0029 - Crime Scene and Courtroom Procedures (N) (8 hours)

This course teaches how to secure and protect a crime scene, be able to discuss the rules and concepts of evidence, recognize different types of evidence and the need to preserve evidence, recognize possible responses the defense may raise in a criminal case, identify the different types of court proceedings, and prepare and give testimony.

CJK 0031 - First Aid for Criminal Justice Officers (N) (40 hours)

This course teaches prospective officers to apply all applicable first responder knowledge and techniques to emergency situations.

Prerequisite: Acceptance into the Law Enforcement Basic Recruit Training program.

CJK 0040C - Criminal Justice Firearms (N) (80 hours)

This course teaches the basic skills and knowledge needed to safely utilize a firearm.

Prerequisite: Acceptance into the Law Enforcement Basic Recruit Training program.

CJK 0051 - Defensive Tactics (N) (80 hours)

This course teaches prospective officers to control subjects and defend themselves using appropriate defensive tactics in accordance with the Recommended Response to Resistance Matrix.

Prerequisite: Acceptance into the Law Enforcement/Corrections Basic Recruit program.

CJK 0064 - Fundamentals of Patrol (N) (35 hours)

This course provides an overview of the law enforcement techniques and tactics that officers use while on patrol. The course focuses on the use of communications equipment, community oriented policing, officer safety, and basic instruction on responding to calls and making arrests.

CJK 0065 - Calls for Service (N) (36 hours)

This course is a component of the Law Enforcement Florida CMS Basic Recruit Academy. It is designed to enable students to respond to calls for service, disturbances, people in distress, and court orders.

CJK 0077 - Criminal Investigations (N) (50 hours)

This course teaches students to conduct an initial investigation of crimes against persons, society, property, and economic crimes.

CJK 0078 - Crime Scene to Courtroom (N) (35 hours)

This course teaches students appropriate procedures for processing a crime scene, handling a criminal investigation and preparing the case for court.

CJK 0084 - DUI Traffic Stops (N) (24 hours)

This course teaches identification and general strategies for deterring and solving the problem of impaired driving.

CJK 0087 - Traffic Stops (N) (30 hours)

This course teaches the basic rules for conducting safe, effective traffic stops.

CJK 0088 - Traffic Crash Investigations (N) (32 hours)

This course teaches traffic crash investigations, laws pertaining to traffic crashes, and procedures for responding to a traffic crash.

CJK 0092 - Critical Incidents (N) (44 hours)

This course enables students to identify the crowd control procedures to safely and effectively disperse or control a large group of people, understand local emergency response plans, respond to a bomb threat, assess the scene, search and evacuate a building or suspected bomb sight, identify weapons of mass destruction (WMD), and properly respond to a WMD incident.

CJK 0096 - Criminal Justice Officer Physical Fitness Training (N) (40 - 60 hours)

This course prepares students physically to perform the duties of a criminal justice officer and mentally with wellness and nutritional coursework structured to improve overall health condition.

Prerequisite: Enrollment in the CMS Basic Recruit Law Enforcement Academy, Academy Track program, or permission of the Department Chair.

CJK 0107 - Law Enforcement Equivalency Training (N) (80 hours)

This course gives the student the necessary training and information required by the Florida Department of Law Enforcement for the student to qualify to take the Law Enforcement State Certification Examination. The course includes high liability training: firearms, medical first responder, vehicle operations and defensive tactics. Other blocks of instruction include legal and other law enforcement related topics.

Prerequisite: Must be certified out-of-state or military police officer, and have been employed at least one year with an out-of-state law enforcement agency. .

CJK 0109 - Review for Basic Corrections (N) (16 - 24 hours)

This course reviews course content in the Corrections Basic Recruit Training in order to assist the student in successfully obtaining a passing score on the State Certification Exam for corrections officers.

Prerequisite: Basic Corrections Recruit Training.

CJK 0132 - Private Security Officer (N) (40 hours)

This course prepares students for the unarmed Private Security Officer, Class "D" license, and occupations that require security licensing by the State of Florida. The material provides students with academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability, and occupation-specific skills.

CJK 0300 - Introduction to Corrections (N) (32 hours)

This course provides an introductory overview and legal foundation for the correctional profession. This course is part of the Corrections Basic Recruit Academy.

Prerequisite: Acceptance into the Correctional Basic Recruit program.

CJK 0305 - Communications (N) (40 hours)

This course teaches effective verbal, non-verbal, and written communication between officers and inmates, fellow officers, supervisors, and/or the public in a correctional setting. This course is part of the Corrections Basic Recruit Academy.

Prerequisite: Acceptance into the Correctional Basic Recruit program.

CJK 0310 - Officer Safety (N) (16 hours)

This course teaches effective officer safety and security in a correctional setting. This course is part of the Correctional Academy.

Prerequisite: Acceptance into the Correctional Basic Recruit program.

CJK 0315 - Facility and Equipment (N) (8 hours)

This course familiarizes correctional officers with equipment, hazardous materials, sanitation, and health issues in a correctional facility. This course is part of the Correctional Academy.

Prerequisite: Acceptance into the Correctional Basic Recruit program.

CJK 0320 - Intake and Release (N) (18 hours)

This course teaches practical and legal issues for the intake and release of inmates of a correctional facility. This course is part of the Corrections Basic Recruit Academy.

Prerequisite: Acceptance into the Correctional Basic Recruit Academy program.

CJK 0325 - Supervising in a Correctional Facility (N) (40 hours)

This course teaches effective supervision of inmates in a correctional setting. This course is part of the Correction Academy.

Prerequisite: Acceptance into the Correctional Basic Recruit Academy program.

CJK 0330 - Supervising Special Populations (N) (20 hours)

This course teaches effective supervision of inmates in a special population setting. This course is part of the Correctional Academy.

Prerequisite: Acceptance into the Correctional Basic Recruit Academy program.

CJK 0335 - Responding to Incidents and Emergencies (N) (16 hours)

This course teaches students to effectively recognize and respond to incidents and emergency situations in a correctional facility. This course is part of the Correctional Academy.

Prerequisite: Acceptance into the Correctional Basic Recruit Academy program.

CJK 0340 - Officer Wellness and Physical Fitness (N) (30 hours)

This course prepares students physically to perform the duties of a correctional officer and mentally with wellness and nutritional coursework structured to improve overall health condition.

Prerequisite: Acceptance into the Corrections Basic Recruit Academy program.

CJK 0393 - Crossover Program Updates (N) (8 hours)

This course provides expanded or updated instruction required by changes made by the Criminal Justice Standards & Training Commission during an ongoing course. This course covers multiple changes to CJSTC programs.

Prerequisite: Acceptance to Crossover for C.O. to L.E. or L.E. to C.O. programs.

CJK 0422 - Dart-firing Stun Gun (N) (8 hours)

This course teaches the basics of both the stun gun as well as the dart-firing stun gun and provides some fundamental knowledge on this emerging tool in Criminal Justice.

Prerequisite: Acceptance into the Law Enforcement Basic Recruit Training program.

CJK 0461 - Basic Recruit Wellness Program (N) (40 hours)

This course develops the physical fitness necessary to fulfill the role of a Police Officer through enhancing the cardiovascular conditioning of the Basic Recruit.

Prerequisite: Enrollment in the CMS Basic Recruit Law Enforcement Academy, Academy Track program, or permission of the Department Chair.

CJK 0701C - Law Enforcement Practical Applications (N) (40 hours)

This course teaches hands-on practical application in the areas of report writing, high liability, patrol procedures and employment interviewing.

Prerequisite: Completion of the CMS portion of the Basic Law Enforcement Academy program.

CJL - CRIMINAL JUSTICE TECHNOLOGY

CJL 1000 - Fundamentals of Law (3 credits)

This course provides a basic introduction to law and the legal system designed to provide a broad understanding of Civil, Criminal, and Constitution Laws and their application to factual situations. The students are exposed to an overview of how the judicial system works, the principle of precedent, statutory interpretation, and appellate procedure.

CJL 2062 - Constitutional Law (3 credits)

This course examines the Constitution of the United States, which serves as the cornerstone of the legal system.

CJL 2100 - Criminal Law (3 credits)

This course teaches the principles involved in criminal law and the key elements of major crimes. Students examine the tools necessary to apply the general principles to the varied and changing definitions of specific crimes.

CJL 2130 - Rules of Evidence (3 credits)

This course provides the student with a basic understanding of the rules of evidence and the reasoning of courts and legislative bodies in establishing rules regarding the admissibility of evidence.

CJL 2403 - Criminal Procedure (3 credits)

This course teaches the basic procedural aspects of the criminal justice system within the context of a state's procedural laws. Students examine basic topics relevant to law enforcement, from court systems to constitutional rights.

CJL 2500 - Introduction to the Courts (3 credits)

This course introduces the student to the organization of the federal and state courts, discussing the structure of court system and how they are administered.

CJL 3010 - Legal Aspects of Policing (3 credits)

This course analyzes the legal dimensions of police decision-making, practices, policies, and procedures. It examines stops, frisks, consensual encounters; searches and seizures; wiretapping; interviews and interrogations; and trends in accountability and preventive practices in policing.

Prerequisite: CCJ 2020, CJE 3065.

CJL 3510 - The American Court System (3 credits)

This course examines the American Court system focusing on understanding judicial and prosecutorial discretion on the context of the legal, organizational and practical processes of decision-making. It also analyzes the role of appellate courts in the criminal justice process; the rules of evidence; and sociopolitical influences on the judicial process.

Prerequisite: CJL 2500.

CJL 4415 - Law and Social Control (3 credits)

This course focuses on the study of criminal law as a formal and informal means of social control. It includes an examination of the philosophical, legal, and scientific methods of inquiry central to the enactment and enforcement of criminal law.

Prerequisite: CCJ 2020, CJE 3065.

CLP - HUMAN SERVICES

CLP 2140 - Abnormal Psychology (3 credits)

This course provides a comprehensive overview of psychological disturbances. Symptoms, causes, and treatment of various emotional disorders are explored.

CNT - COMPUTER INFORMATION TECHNOLOGY

CNT 4406 - Network Security and Cryptography (3 credits)

This course addresses the use of various cryptographic techniques for securing data from unauthorized access. The algorithms used for symmetric ciphers, asymmetric ciphers, and cryptographic data integrity are discussed. The students learn the practical use of algorithms for the encryption of data including a public key infrastructure for issuing certificates; transport level security implementation for securing both web and remote access; and virtual private networks implementation for securing data in transit across unsecured networks.

Prerequisite: CTS 1650, ISM 3321, CTS 1334.

COM - COMMUNICATIONS

COM 1460 - Intercultural Communication (3 credits)

This course focuses on intercultural interactions within the United States and examines communication from a variety of perspectives. The course utilizes the current intercultural communication theories to better understand how these various cultural identities influence everyday interactions with others.

Prerequisite: Student must score into college-level English and reading.

COP - COMPUTER SCIENCE

COP 1332 - Visual Basic Programming (3 credits)

This course teaches Microsoft Visual Basic.NET for Windows at an introductory level. Students learn to create applications which operate in a Microsoft Windows environment using Visual Basic.NET. Topics include, but are not limited to, creating a Windows application, designing and creating forms, using menus, common dialog boxes, procedures, functions, arrays, decision statements and loops.

Prerequisite: COP 2000 or permission of instructor.

COP 2000 - Introduction to Computer Programming I (3 credits)

This course covers basic concepts of structured programming including: variables, data types, flow control structures, functions, arrays and pointers. Although it is an introductory course to the C++ programming language it is intended for those with no programming background. Since computer programming involves computational modes of thinking, students should have some mathematical and logical aptitudes to fully understand the course content. The course emphasizes the C++ concepts and syntax to write well-structured and well documented programs, problem analysis, and algorithm design.

Prerequisite: Recommended: MAT 1033.

COP 2001 - Computer Programming II (3 credits)

This course teaches the design and analysis of simple algorithms and data structures as a continuation of COP-2000 (p. 191). Topics include arrays, stack, queries, linked lists, tree structures, sorting, and searching. Assignments are given in a modern procedural programming language.

Prerequisite: COP 2000.

COP 2030 - Introduction to Python (3 credits)

This course teaches intermediate level computer programming skills. Students build upon their programming knowledge by using appropriate tools to plan, code, and debug computer programs. Course topics include string operations and manipulations; dictionaries; sets, classes and objects; inheritances; recursion; and graphical user interface (GUI) programming using the Python language.

Prerequisite: COP 2000.

COP 2360 - C# Programming (3 credits)

This course teaches how to program using the Microsoft C# programming language. Students learn how to work with a set of classes known as the Common Language Runtime (CLR) and they also gain an in-depth understanding of the Microsoft .NET framework, its architecture, main components and supported technologies.

Prerequisite: Recommended: COP 2001.

COP 2661 - Mobile Application Development (3 credits)

This is an entry level programming course designed to teach students how to create mobile apps using Android application development as the context. No prior programming experience is needed. Students gain experience with basic control and data structures, object-oriented programming, eXtensible Markup Language (XML), Graphical User Interface (GUIS), and event driven programming through interesting real-life uses of the Android Application Interface (API). Emphasis is on software architecture, software processes, usability, and deployment. Students also use the Android Software Development Kit (SDK) which provides the tools and the

API necessary to develop applications on the Android platform using the Java programming language.

Prerequisite: COP 2800, COP 2830.

COP 2700 - Database Programming (3 credits)

This course teaches the fundamentals of using a relational database and the programming language available with the database software.

Prerequisite: CGS 1540, COP 2000.

COP 2800 - Java Programming (3 credits)

This course teaches Java Programming at an introductory level. Topics include the basic elements of Java including objects, classes, control structures, GUI (graphic user interfaces), methods, arrays and an introduction to applets.

Prerequisite: COP 2000.

COP 2842 - Developing Websites Using Python/MySQL (3 credits)

This course teaches how to create database-driven web sites using service-side scripting languages. Topics include introduction to PHP (Hypertext Preprocessor) [HTML-embedded scripting language], working with data types and operators, building functions and control structures, manipulating strings, accessing files and directories, manipulating data in arrays and strings, working with databases and mySQL, manipulating mySQL databases with PHP, and debugging and error handling. Prior web design experience is recommended.

Prerequisite: COP 2700, COP 2830.

COP 2830 - Web Programming (3 credits)

This course teaches the fundamentals of programming concepts with programs that yield visible or audible results in Web pages and Web-based applications. Topics include Web page design, server and client side scripting, ActiveX controls, and the essentials of electronic commerce. Additional topics may include HTML, Dynamic HTML, and XML and scripting languages such as JavaScript and VBScript.

Prerequisite: COP 2030.

COS - BARBERING

COS 0070C - Job Prep, Florida Law & State Board Review (N) (150 hours)

This course provides instruction in Florida law, rules, and regulations related to the practice of barbering and salon ownership. Students become familiar with employability skills and study State Board of Barbering requirements.

Prerequisite: COS 0500C.

COS 0350C - Shaving (N) (150 hours)

This course teaches competencies in shaving.

Prerequisite: COS 0500C.

COS 0351C - Haircutting, Mustache and Beard Design (N) (150 hours)

This course provides instruction in hair shaping and mustache and beard design. Students also study the selection of proper haircutting implements and style selection.

Prerequisite: COS 0500C, COS 0510C.

COS 0500C - Introduction to Barbering (N) (150 hours)

This course teaches safety rules and procedures, school, classroom/laboratory procedures. It provides competencies in hair shampooing and conditioning, trimming and shaping hair using clippers, shears and razors.

COS 0502 - Barbering I: Theory of Barbering (N) (450 hours)

This course provides students with beginning theoretical and practical procedures of barbering. The basic topics and tasks include history of barbering; sterilization and sanitation; tools and implements; and men's hair cutting and shaving. The students utilize the classroom and clinic to develop the basic barbering skills and techniques that prepare them for the clinic.

COS 0510C - Barber Styling (N) (150 hours)

This course teaches competencies in hair styling.

Prerequisite: COS 0500C.

COS 0521 - Barbering II: Applied Skills and Tactics (N) (450 hours)

This course provides students with a continuation of proper barbering techniques as assigned in a supervised clinic. All services are demonstrated and monitored with instruction and approval by the barber instructor. In addition, the students demonstrate their understanding of chemical processes as applied on live patrons in a salon setting. Customer service and professional image are also reiterated and demonstrated in this course.

Prerequisite: COS 0502.

COS 0530C - Chemical Processes of Hair (N) (150 hours)

This course teaches skills in permanent wave, reconstruction curl, and chemical relaxing.

Prerequisite: COS 0500C.

COS 0553 - Barbering III: Skillset Review (N) (300 hours)

This final course is a review and compilation of all the theory and practical skills the students have obtained throughout the program. Students continue to master their practical skills under direct supervision and return to the classroom for theory review in preparation for their state board exam. Student also obtain instruction and coaching that assist them with job placement.

Prerequisite: COS 0502, COS 0521.

COS 0700C - Chemistry of Haircoloring for Barbers (N) (150 hours)

This course provides instruction in all types of hair coloring and bleaching. Instruction includes analysis of hair and scalp and the selection of correct supplies, products and equipment.

Prerequisite: COS 0500C.

COS - COSMETOLOGY

COS 0008 - Cosmetology III: Skillset Review (N) (300 hours)

This final course is a review and compilation of all the theory and practical skills the students have obtained thus far. They continue to master their practical skills under direct supervision and return to the classroom for theory review in preparation for their state board exam. Students also obtain instruction and coaching that assists them with job placement.

Prerequisite: COS 0010, COS 0088.

COS 0010 - Cosmetology I: Theory of Cosmetology (N) (450 hours)

This course provides students with beginning theoretical and practical procedures of cosmetology. The basic topics and tasks include infection control; nail diseases and disorders; principles of hair design and chemical texture services; and hair coloring. The student utilize the classroom and clinic to develop the basic cosmetology skills and techniques that prepare them for the clinic.

COS 0080 - Introduction to Cosmetology (N) (150 hours)

This course provides instruction in safety related to cosmetology processes, procedures, and equipment, including decontamination and infection control. Students also study shampooing and scalp treatments and receive instruction in career opportunities in the cosmetology field.

COS 0081 - Hairstyling (N) (150 hours)

This course provides instruction in techniques of hairstyling and the care and use of wigs. Students study the proper set up, use and care of equipment used in hairstyling.

Prerequisite: COS 0080.

COS 0082 - Facials, Manicuring and Pedicuring (N) (150 hours)

This course provides competencies in performing facials, manicures and pedicures. Students study the products, procedures, and sanitation required as well as receive hands-on experience in performing facials, manicures and pedicures.

Prerequisite: COS 0080.

COS 0083 - Haircutting (N) (150 hours)

This course provides instruction in hair shaping, in the selection of proper haircutting implements, and proper style selection.

Prerequisite: COS 0080.

COS 0084 - Anatomy & Physiology for Cosmetology (N) (150 hours)

This course provides instruction in the anatomy, histology, and physiology of the hair, head, and skin related to cosmetology.

Prerequisite: COS 0080.

COS 0085 - Chemistry of Haircoloring (N) (150 hours)

This course provides instruction in all types of hair coloring and bleaching. Instruction includes analysis of hair and scalp and the selection of correct supplies, products and equipment.

Corequisite: Pre/corequisite: COS 0080.

COS 0086 - Chemistry of Chemical Processes of Hair (N) (150 hours)

This course provides instruction in permanent waving, reconstruction curl, chemical relaxing. Students study analysis of hair and the selection of appropriate solutions and implements.

Corequisite: Pre/corequisite: COS 0080.

COS 0087 - Job Prep, Florida Law and State Board Review (N) (150 hours)

This course provides instruction in Florida Law, rules and regulations related to the practice of cosmetology and salon ownership. Students become familiar with employability skills and study State Board of Cosmetology requirements.

Corequisite: Pre/corequisite: COS 0080.

COS 0088 - Cosmetology II: Applied Skills and Tactics (N) (450 hours)

This course provides students with a continuation of proper cosmetology techniques as assigned in a supervised clinic. All services demonstrated and monitored with instruction and approval by the cosmetology instructor. In addition, students demonstrate their understanding of chemical processes as applied on live patrons in a salon setting. Customer service and professional image are also reiterated and demonstrated in this sequence.

Prerequisite: COS 0010.

COS 0926 - Practical/Theory Review (N) (Variable hours)

This course provides students with an overall review of the theory portion of the cosmetology program. The focus is geared to the individual needs of each student.

CRW - ENGLISH

CRW 2001 - Creative Writing I (3 credits)

This course teaches creative writing skills under workshop/lab conditions of group analysis and discussion. Specific techniques in both prose and poetry are discussed.

Prerequisite: ENC 1101 or permission of instructor, and student must score into college-level English and reading on placement test.

CRW 2002 - Creative Writing II (3 credits)

This course is a continuation of CRW-2001 (p. 194). A significant writing project/class presentation is required as well as at least two additional written works of high quality.

Prerequisite: CRW 2001 or permission of instructor.

CRW 2003 - Creative Writing III (3 credits)

This course is a continuation of CRW-2002 (p. 194). A significant writing project/class presentation is required as well as at least two additional written works of high quality.

Prerequisite: CRW 2002.

CRW 2004 - Creative Writing IV (3 credits)

In this advanced writing course students produce a major piece of original writing of high quality, such as a collection of 2-3 short stories, a collection of 5-6 poems, or a full 3-act play.

Prerequisite: CRW 2003.

CSP - BARBERING

CSP 0240C - Anatomy & Physiology for Barbers (N) (150 hours)

This course provides instruction in the anatomy, histology, and physiology of the hair, head, and skin related to barbering.

Prerequisite: COS 0500C.

CSP - COSMETOLOGY

CSP 0010 - Manicure, Pedicure, Nail Extensions I (N) (120 hours)

This course develops competencies in manicuring, pedicuring and sculptured nails including selection of supplies and equipment; sanitation procedures; performing designated procedures; safety rules and procedures; competencies in State Board of Cosmetology requirements; cosmetology law, rules and regulations; and employability skills in the cosmetology industry.

CSP 0011 - Manicure, Pedicure, Nail Extensions II (N) (120 hours)

This course is a continuation of CSP-0010 (p. 194). It focuses on advanced nail techniques, Florida law, and employability.

Prerequisite: CSP 0010.

CSP 0100 - Esthetics (N) (260 hours)

This course prepares the student to obtain employment as a Florida Licensed Esthetician.

CTS - COMPUTER SCIENCE

CTS 1104 - Windows OS Fundamentals (3 credits)

This course teaches how to work in the Microsoft Windows Professional environment. It covers such topics as installation, configuration, and administration of the Microsoft Windows Professional operating system in a networked environment.

Prerequisite: CIS 1000.

CTS 1155 - Introduction to Help Desk Concepts (3 credits)

This course, designed for Computer Information Technology majors, covers the business, technical, and interpersonal skills needed to succeed in a Help Desk setting. It addresses all major aspects of Help Desk operations including customer support, processing and resolving incidents, and knowledge management.

Prerequisite: Recommended experience with computer hardware and operating systems.

CTS 1205 - Excel I (3 credits)

This course teaches beginning-level skills in electronic spreadsheets and examines the functional capabilities and applications for spreadsheet software through hands-on usage of the Excel package. The course focuses on electronic spreadsheets, data base management, computer generated charts and graphs.

CTS 1330 - Implementing and Supporting MS-Exchange (3 credits)

This course teaches installation, configuration, and administration of Microsoft Windows Exchange server. This course also addresses the issues related to integration of the Exchange e-mail server with Microsoft Windows Server operating system.

Prerequisite: Recommended: CTS 1334.

CTS 1334 - Windows Server (3 credits)

This course teaches Microsoft Windows Server. Topics include installation, configuration, and administration of the Microsoft Windows Server operating system in a networked environment.

Prerequisite: CTS 1104.

CTS 1347C - Server 2008 Network Infrastructure Configuration (3 credits)

This course teaches how to configure Microsoft's Windows Server 2008 Network Infrastructure. Topics covered are routing and remote access, network access protection (NAP), network authentication, Internet protocol version (IPv4 and IPv6) addressing, dynamic host control protocol (DHCP), domain name system (DNS) replication, distributed file system (DFS), Internet protocol security (IPSEC), storage technologies and server security compliance. Course content prepares the student for the Microsoft 70-642 exam.

CTS 1650 - CCNA1: Introduction to Networks (3 credits)

The purpose of this course is to prepare a student to learn and apply the basics of computer networking using common network devices. The course covers the OSI model and industry standards, network topologies, IP addressing including subnet masks, and basic network design. This is the first of a series of courses designed to prepare students for industry certification exams leading to the Cisco Certified Networking Associate or the Microsoft Certified Professional Systems Engineer.

CTS 2106 - Linux Fundamentals (3 credits)

This course teaches how to install and use fundamental commands and utilities of UNIX/Linux based operating systems. It focuses on system administration, hardware configuration, user management, and TCP/IP networking protocols. The course involves extensive hands-on activities and practical exercises.

Prerequisite: CTS 1104.

CTS 2120 - Security Fundamentals (Security+) (3 credits)

This course provides the student with a broad-based knowledge of network security and prepares him/her for further study in specialized security field. This course also prepares the student for appropriate standard industry certification exams.

Prerequisite: CTS 2106.

CTS 2342C - Windows Server Identity Services (3 credits)

This course focuses on the identity functionality in Windows Server. It covers the installation and configuration of Active Directory Domain Services (AD DS) in addition to Group Policy implementation for non-Nano Server environments. It also covers functionality such as Active Directory Certificate Services (AD CS), Active Directory Federations Services (AD FS), and Web Application proxy implementations.

Prerequisite: CTS 1334.

CTS 2343C - Server 2008 Application Infrastructure Configuration (3 credits)

This course teaches the skills necessary to deploy, configure and manage the applications that come with Windows Server 2008. This includes Windows deployment services, Hyper-V and virtual machines, terminal services, web services, file transfer protocol services, simple mail transfer protocol services, certification services and Sharepoint services. This course prepares the student for the Microsoft 70-643 pro level exam. Recommended: basic knowledge of Microsoft networking and active directory services.

CTS 2423 - .NET Application Development (3 credits)

This course introduces students to the Microsoft .NET framework. Students develop the knowledge and skills to build desktop and web applications using Visual Basic (VB) and C Sharp (C#), the Microsoft .NET core languages. The course reviews object-oriented programming concepts in VB and C#, then introduces students to Windows Forms for desktop application development and ASP .NET Web Forms and MVC for web application development. ADO .NET technologies and the Entity Framework are introduced for implementing the data access layer.

Prerequisite: COP 2700, COP 2800, COP 2830 .

CTS 2651 - CCNA2: Routing & Switching Essentials (3 credits)

This course teaches the basics of networking hardware covering beginning router configurations, routed and routing protocols, and introduction to LAN switching. This is the second of a four-part series to prepare students for the Cisco Certified Networking Associate examination.

Prerequisite: CTS 1650.

CTS 2652 - CCNA3: Scaling Networks (3 credits)

This course teaches the principles and applications of networking hardware covering advanced router configurations, LAN switching, network management, and advanced network design. This is the third of a four-part series to prepare for the Cisco Certified Networking Associate examination.

Prerequisite: CTS 2651.

CTS 2653 - CCNA4: Connecting Networks (3 credits)

This course covers principles, applications, and implementation of networking hardware including advanced network design projects and advanced network management projects. This is the fourth of a four-part series to prepare students for the Cisco Networking Associate examination.

Prerequisite: CTS 2652.

CTS 3470 - Foundations in Data Analytics (3 credits)

This course introduces students to foundation level training in data analytics. Students are exposed to the data analytic lifecycle process, experimental design, and fundamental analytic methods. Students utilize a modern statistical toolkit to apply fundamental methodologies and address real-world applications.

Prerequisite: COP 2030, CTS 2106, STA 2023.

CTS 4425 - Web Application Development (3 credits)

This course shows how to use asp.net to process data from web pages. Students create n-tier asp.net web applications. Structured Query Language server databases are accessed and manipulated using ado.net. Students implement code that provides persistence of data between user requests.

Prerequisite: ISM 3212, CGS 1540, COP 2800.

DAA - THEATRE

DAA 1100 - Modern Dance I (3 credits)

This course teaches basic principles of modern dance using the techniques of Jose Limon and Martha Graham.

DAA 1101 - Modern Dance II (3 credits)

This course teaches beginner principles of modern dance technique. History of modern dance and critical analysis of movement styles is introduced.

Prerequisite: DAA 1100.

DAA 1102 - Intermediate Modern Dance I (3 credits)

This course teaches intermediate level technique in modern dance. The history of modern dance is continued with emphasis on contemporary choreographers and analysis of their styles and contributions to the art form.

Prerequisite: DAA 1101.

DAA 1103 - Intermediate Modern Dance II (3 credits)

This course teaches advanced intermediate level technique in modern dance. The history of modern dance is continued with emphasis on contemporary choreographers and analysis of their styles and contributions to the art form Improvisation techniques are developed.

Prerequisite: DAA 1102.

DAA 1200 - Ballet I (3 credits)

This course teaches the basic movements and exercises of classical ballet, center floor and jumps are taught with emphasis on body alignment and positions of the feet and arms.

DAA 1201 - Ballet II (3 credits)

This course teaches the beginning technique of classical ballet. Work at the barre, center floor and jumps are taught with emphasis on body alignment and positions of the feet and arms. More advanced terminology is introduced, as well as differentiation between the Russian and French traditions in ballet. Beginning pointe work is introduced with emphasis on ankle strength and balance.

Prerequisite: DAA 1200.

DAA 1202 - Intermediate Ballet I (3 credits)

This course teaches the beginning intermediate technique of classical ballet. Work at the barre, center floor and jumps are taught with emphasis on body alignment and position of the feet and arms. The introduction of human anatomy is studied to aid the student in the principles of human movement. Pointe work is continued, and partnering techniques are introduced.

Prerequisite: DAA 1201.

DAA 1203 - Intermediate Ballet II (3 credits)

This course teaches the advanced intermediate technique of classical ballet. Work at the barre, center floor and jumps are taught with emphasis on body alignment and positions of the feet and arms. The continued study of human

anatomy applies the knowledge to practical applications. Pointe work with partnering is continued.

Prerequisite: DAA 1202.

DAA 1500 - Jazz Dance (2 credits)

This course teaches the fundamental skills, techniques, steps, and terminology in jazz dance.

DAA 1610 - Dance Composition I (2 credits)

This course teaches basic dance improvisation, choreography, and composition using basic rhythmic and spatial movement elements.

Prerequisite: DAA 1101.

DAA 1680 - Dance Performance (1 credit)

This course provides for the practical application of dance performance skills, techniques, and conditioning through the production of studio and Main Stage dance productions.

DAN - THEATRE

DAN 1740 - Dance Conditioning (1 credit)

This course teaches basic strengthening, toning, stretching exercises and techniques for dance.

DAN 1741 - Dance Conditioning II (1 credit)

This course teaches basic skills of strength training. The course includes work in cardiovascular fitness, muscle toning, resistance training and stretching. Students learn the proper techniques for lifting free weights, using resistance bands, and executing sit-ups.

DAN 1742 - Dance Conditioning III (1 credit)

This course teaches basic skills of strength training. The course includes work in cardiovascular fitness, muscle toning, resistance training and stretching. Students learn the proper techniques for lifting free weights, using resistance bands, and executing sit-ups.

Prerequisite: DAN 1740, DAN 1741.

DAN 2100 - Dance Appreciation (3 credits)

Dance Appreciation is a survey class that examines dance as a primary mode of human expression and communication. This course introduces dance as an art form and enhances knowledge of the historical, cultural and aesthetic aspects of dance through readings, discussions, media presentation and movement laboratories. No prior dance experience is required.

Prerequisite: Must test into college-level Engligh .

DEA - DENTAL ASSISTING

DEA 1028 - Pre-Clinical Orientation (6 credits)

This course teaches the essential concepts of psychology and communication microbiology, dental hand instruments, dental handpieces and accessories, dealing with the medically and physically compromised patients, oral diagnosis and treatment planning, anesthesia and pain control, restorative dentistry, matrix systems for restorative dentistry, fixed prosthodontics, and removable prosthodontics.

DEA 1028L - Pre-Clinical Orientation Lab (2 credits)

This course teaches clinical content necessary to work with a dentist. The student actively participates in practice procedures on mannequins as well as scheduled dental procedures with patients and dentists. Communicating with dental patients, microbiology and disease transmission, dental instruments, dental handpieces and accessories, medically and physically compromised patients, oral diagnosis and treatment planning, anesthesia and pain control, restorative dentistry, matrix systems for restorative dentistry, fixed prosthodontics, and removable prosthodontis are included.

DEA 1136 - Related Dental Theory (4 credits)

This course teaches scientific areas related to the field of dentistry, including nutrition, pharmacology, pathology, human anatomy and physiology, and embryology/histology.

DEA 1805 - Clinical Practice I (2 credits)

This course teaches the skills necessary to assist a dentist with endodontic procedures, oral and maxillofacial surgery procedures, dental implants procedures, periodontal procedures, and pediatric dentistry.

Prerequisite: DEA 1028.

DEA 1805L - Clinical Practice I Lab (4 credits)

This is a combination of Pre-clinical Orientation Lab through an internship program in a private dental practice and college dental facility. Students have additional responsibilities in the area of restorative and cosmetic dentistry, fixed and removable prosthodontics, radiography requirements, infection control, team leadership, receptionist responsibilities, patient management, and expanded functions. Additional topics include endodontics, oral and maxillofacial surgery, dental implants, periodontics, and pediatric dentistry.

Prerequisite: DEA 1028L.

DEA 1855 - Clinical Practice II (1 credit)

This course teaches the skills necessary to demonstrate independence and judgment learned in previous clinical

instruction to provide patient services. Proficiency in all areas of dental assisting is stressed.

Prerequisite: DEA 1805.

DEA 1855L - Clinical Practice II Lab (4 credits)

This course teaches skills necessary to comprehensively prepare competent individuals as Dental Assistants through an internship program in a private dental practice.

Prerequisite: DEA 1805.

DEA 1931 - Orthodontics Expanded Functions (1 credit)

This course teaches the theory and skills necessary to perform orthodontic expanded functions permitted by the Florida State Board of Dentistry.

DEH - DENTAL HYGIENE

DEH 1003 - Pre-Clinical Dental Hygiene (1 credit)

This course is an introduction to the dental hygiene profession, professional conduct, and the theory and practice necessary for instrumentation. Lecture sessions focus on the use of dental hygiene instruments and performance of an extra and intraoral examination. Emphasis is placed on beginning instrumentation skills.

Corequisite: DEH 1003L.

DEH 1003L - Pre-Clinical Dental Hygiene Lab (2 credits)

This course introduces the theory and practical skills necessary for instrumentation. Clinical sessions are included to demonstrate competency in the use of dental hygiene instruments, and performing an extra and intraoral examination. Emphasis is placed on beginning instrumentation skills.

Corequisite: DEH 1003.

DEH 1130 - Oral Embryology and Histology (2 credits)

This course studies the early embryonic development of the face and oral cavity and the process of tooth development. Included is a study of the microscopic structure and morphology of the tissues of the teeth and supporting structures.

DEH 1300 - Pharmacology (2 credits)

This course studies the usage, administration, indications, contraindications, adverse reactions, and precautions of pharmaceutical preparations. Special consideration is given to the therapeutic agents used in the treatment of dental disease.

Prerequisite: BSC 2093, BSC 2093L . Corequisite: pre/corequisite: BSC 2094 , BSC 2094L.

DEH 1800 - Clinical Dental Hygiene I (2 credits)

This is the first of four clinical dental hygiene courses. Students begin patient care on relatively non-complex patients in a closely monitored clinical environment. Students apply clinic policies, safety practices, assessment procedures, practice management, radiographic techniques, instrumentation, stain removal, and the application of fluorides learned in pre-clinical courses to create individualized care plans. Instrument sharpening, root planing and biofilm control procedures are included.

Prerequisite: DES 1800, DES 1800L, DEH 1003, DEH 1003L . Corequisite: DEH 1800L.

DEH 1800L - Clinical Dental Hygiene I Lab (3 credits)

This is the first of four clinical dental hygiene courses. Students begin patient care on relatively non-complex patients in a closely monitored clinical environment. Students apply clinic policies, safety practices, assessment procedures, practice management, radiographic techniques, instrumentation, stain removal and the application of fluorides learned in pre-clinical courses to create individualized care plans. Instrument sharpening, root planing and biofilm control procedures are included.

Prerequisite: DEH 1800, DEH 1003, DEH 1003L .

DEH 1802 - Clinical Dental Hygiene II (2 credits)

This course prepares the student for developing and administering alterations in the treatment of the medically, physically and/or mentally compromised patients, or those who have special needs. The student researches and learns a variety of complex medical conditions and the relationship to dental hygiene therapeutic care. The process of development, treatment planning and implementation of care on clinical patients is reinforced with emphasis on medically and periodontally involved patients.

Prerequisite: DEH 1800, DEH 1800L, DEH 2602.
Corequisite: DEH 1802L, DEH 2602L.

DEH 1802L - Clinical Dental Hygiene II Lab (2 credits)

This course is a continuation of clinical dental hygiene skills. A continued development and competency of clinical skills enables the student to provide increasingly comprehensive services to patients including assessment, recare, motivation, and patient education. Care for the special needs patient is also included. Students are introduced to adjunctive techniques utilizing ultrasonic scaling devices and air polishers.

Prerequisite: DEH 1800, DEH 1800L, DEH 2602 .
Corequisite: DEH 1802, DEH 2602L .

DEH 2400 - General and Oral Pathology (2 credits)

This course studies the principles of general pathology with consideration of the more common diseases affecting

the human body. Major emphasis is given to the study of pathological conditions of the teeth, soft tissues, and supporting structures of the oral cavity.

Prerequisite: BSC 2094, BSC 2094L, MCB 2010, MCB 2010L, DEH 1130.

DEH 2602 - Periodontology (2 credits)

This course studies the characteristics, etiology, prognosis, and treatment of periodontal disease. Periodontal examination, treatment planning, and the dental hygienist's role in periodontal therapy are emphasized and risk assessment is introduced.

Prerequisite: DEH 1130.

DEH 2602L - Periodontology Lab (1 credit)

This course studies additional non-surgical periodontal therapies and equipment available in the treatment of periodontal disease. Periodontal examination, treatment planning, and the dental hygienist's role in periodontal therapy are emphasized through clinical application. An introduction to oral risk assessment, ultrasonic instrumentation, air polishing, chemotherapeutic agents, and adjunctive oral hygiene aids are included.

Prerequisite: DEH 1130, DEH 2602 .

DEH 2702 - Community Dental Health (2 credits)

This course teaches the essential concepts of community and public health dentistry. Basic statistical concepts, program development, implementation, research, and evaluation are included. The role of the dental hygienist in community dental programs and dental health education is emphasized.

Prerequisite: Pre/corequisite: SPC 1608.

DEH 2702L - Community Dental Health Lab (1 credit)

This course teaches the application of basic statistical concepts, program development, implementation, research, and evaluation. The student is provided with the opportunity to apply the principles of public and community dental health, as they relate to the role of the dental hygienist, through project implementation and evaluation. An academic service learning component is included and students are required to complete at least 15 hours of service learning participation, documented by the service learning chart.

Prerequisite: SPC 1608, DEH 2702.

DEH 2804 - Clinical Dental Hygiene III (2 credits)

This course teaches the student to demonstrate independence and to use evidence-based knowledge learned in previous clinical instruction for planning patient services, as well as professional and ethical judgement. Competency in all areas of dental hygiene is stressed. Case documentation, dental hygiene treatment planning, nutritional counseling, and intraoral photography are included.

Prerequisite: DEH 1802, DEH 1802L, DES 1051. Corequisite: HUN 1201, DEH 2804L.

DEH 2804L - Clinical Dental Hygiene III Lab (4 credits)

This course emphasizes individualized evidence-based care planning for the periodontal and special needs patient. The student demonstrates competency in oral prophylaxis, root surface debridement and detoxification. Appropriate integration of newly introduced advanced techniques and technology such as nitrous oxide conscious sedation, intraoral photography, phase contrast microscope, chemotherapeutics and nutritional counseling may be used. Comprehensive patient case reporting is required.

Prerequisite: DEH 1802, DEH 1802L. Corequisite: HUN 1201, DEH 2804.

DEH 2806 - Clinical Dental Hygiene IV (2 credits)

This final course in the clinical dental hygiene series focuses on the understanding of ethics, professional codes, the law and risk management as applied to the dental hygiene practice setting. Students prepare to seek employment as dental hygienists. Other topics include current and future directions of the career field. This course also includes the introduction of advance techniques and new technologies in patient care. Students are prepared for state licensure requirements and examination.

Prerequisite: DEH 2804, DEH 2804L . Corequisite: DEH 2806L.

DEH 2806L - Clinical Dental Hygiene IV Lab (5 credits)

This final course emphasizes increased efficiency in the provision of an oral prophylaxis, root surface debridement and detoxification, comprehensive treatment planning and use of ultrasonics and air polishers. Critical thinking skills are emphasized during patient care to include evidence-based sequential treatment planning. Self assessment and application of professional ethical judgement is expected in all areas of clinical practice. Preparation for the state licensure examination and entry level employment is included.

Prerequisite: DEH 2804, DEH 2804L. Corequisite: DEH 2806.

P000

DEH P941 - Dental Hygiene Clinical Simulation (N) (20-60 hours)

This course provides, but it not limited to the use of instrumentation skills, patient care, and equipment and materials to simulate the clinical dental hygiene practice.

DEP - HUMAN SERVICES

DEP 1002 - Child and Adolescent Psychology (3 credits)

This course teaches theories of mental, emotional, and social development of children from infancy through adolescence. The course stresses identification of problems in this group as well as methods of effectively dealing with these problems.

DEP - PSYCHOLOGY

DEP 2004 - Human Development (3 credits)

This course develops knowledge of the biological, psychological, and social development stages of the human being from conception to death, including their relationship to education.

Prerequisite: Student must score into college-level English and reading on placement test.

DES - DENTAL ASSISTING

DES 1832 - Expanded Functions I (2 credits)

This course teaches how to perform expanded functions as permitted by the Florida State Board of Dentistry. Included are the ethical and legal aspects of dentistry, applying sealants, making impressions for study casts, placing and removing rubber dam and matrices, applying cavity liners, varnishes and bases, and placing or removing temporary restorations.

Corequisite: DES 1832L.

DES 1832L - Expanded Functions I Lab (1 credit)

This course teaches how to perform expanded functions permitted by the Florida State Board of Dentistry. Included are the ethical and legal aspects of dentistry, applying sealants, making impressions for study casts, placing and removing rubber dam and matrices, applying cavity liners, varnishes and bases, and placing or removing temporary restorations.

Corequisite: DES 1832.

DES 1833 - Expanded Functions II (2 credits)

This course teaches how to perform expanded functions permitted by the Florida State Board of Dentistry. Included are suture removal, insert and remove dressings from alveolar sockets in post-operative osteitis, packing and removing retraction cord, fabricating provisional restorations intra-orally, cementing temporary crowns and bridges with temporary cement, removing excess cement from dental restorations and appliances, and placing and removing periodontal dressings.

Corequisite: DES 1833L.

DES 1833L - Expanded Functions II Lab (1 credit)

This course teaches how to perform expanded functions permitted by the Florida State Board of Dentistry. Included are suture removal, insert and remove dressings from alveolar sockets in post-operative osteitis, packing and removing retraction cord, fabricating provisional restorations intra-orally, cementing temporary crowns and bridges with temporary cement, removing excess cement from dental restorations and appliances, and placing and removing periodontal dressings.

Corequisite: DES 1833.

DES 2502 - Dental Office Management (2 credits)

This course teaches telephone techniques, appointment control, records management, accounting and business procedures associated with the dental office, complete third party reimbursement forms, inventory and purchasing control of dental office supplies, as well as written communication skills. Traditional business office procedures are compared and contrasted with those found in offices utilizing more advanced technology. Marketing skills of the dental health care provider are explored in depth. A working letter of application, resume and follow-up letter are prepared.

DES 2502L - Dental Office Management Lab (1 credit)

This course teaches office management procedures, which include manage telephone, plan treatment and appointment control, perform financial transactions, complete third party reimbursement forms, maintain supply inventory, manage recall systems, and operate business equipment including computers.

DES - DENTAL HYGIENE

DES 2051C - Pain Control and Anesthesia (2 credits)

This course teaches and covers pain perception, pain reaction, methods of pain control, and the use of nitrous oxide-oxygen conscious sedation in dentistry. The relevance of psychosomatic pain control and topical and local anesthesia to dental hygiene practice is emphasized.

DES 2530C - Expanded Functions for Dental Hygienists (2 credits)

This course covers the knowledge and clinical practice to perform expanded functions permitted by the Florida State Board of Dentistry.

DES - DENTAL SCIENCE

DES 1020 - Head, Neck & Dental Anatomy (3 credits)

This course teaches tooth morphology and the relationship of the teeth to one another and to their surrounding

structures. Coverage is given to the occlusion of the teeth, bones of the skull, muscles, nerves, and blood vessels.

DES 1051 - Nitrous Oxide Monitoring (1 credit)

This course provides training and monitoring of nitrous oxide inhalation anesthesia and meets the criteria under Chapter 64B5 of the Florida State Board of Dentistry.

DES 1100 - Elements of Dental Materials (2 credits)

This course teaches the nomenclature, characteristics, and application of the materials used in the dental laboratory and clinical practice of dentistry.

Corequisite: DES 1100L.

DES 1100L - Elements of Dental Materials Lab (1 credit)

This course teaches the lab component of DES 1100 (p. 201)and covers materials used in the laboratory and clinical practice of dentistry.

Corequisite: DES 1100.

DES 1200 - Dental Radiography (2 credits)

This course teaches the nature, physical behavior, biological effects, methods of control, safety precautions, and the techniques for exposing, processing, and mounting radiographs.

Corequisite: DES 1200L.

DES 1200L - Dental Radiography Lab (1 credit)

This course is a compliment to the dental radiography lecture. The students apply radiographic techniques to clinical practice, including periapical, bitewing, occlusal, extraoral and digital radiographs.

Corequisite: DES 1200.

DES 1600 - Health Office Emergencies (2 credits)

This course presents information for dealing with medical emergencies that may occur in a dental office/clinic.

DES 1800 - Introduction to Clinical Procedures (2 credits)

This course teaches dental office professionalism, patient reception and positioning for the delivery of care. It also covers instrument exchange and oral evacuation, disease transmission and infection control, principles and techniques of disinfection, principles and techniques of instrument procession and sterilization, occupational health and safety, chemical and waste management. Patient information and assessment, vital signs, oral diagnosis and treatment planning, coronal polishing, history of dentistry, and the dental health team are included.

Corequisite: DES 1800L.

DES 1800L - Introduction to Clinical Procedures Lab (1 - 2 credit)

This course teaches practical skills in dentistry. The student actively participates in scheduled dental evaluations for the following areas: professionalism, the dental office, patient reception and positioning for delivery of care, instrument exchange and oral evacuation, disease transmission and infection control, principles and techniques of disinfection, principles and techniques of instrument processing and sterilization, occupational health and safety, chemical and waste management, patient information and assessment, vital signs, oral diagnosis and treatment planning, history of dentistry and the rolls of the dental health team.

Corequisite: DES 1800.

DES 1840 - Preventive Dentistry (2 credits)

This course teaches the dental auxiliary's role in patient care. The philosophy of preventive dentistry and methods of biofilm control are emphasized in conjunction with patient education. Tooth stains, discolorations, hypersensitive teeth and fluoride are also discussed.

DIG - DIGITAL MEDIA

DIG 1000 - Digital Media Principles (3 credits)

This course teaches the fundamental elements of design emphasizing the vocabulary of graphic design, technical skills required to handle industry specific software, and two-dimensional visual elements. Basic skills in Adobe software are presented and projects are created.

DIG 1115 - Digital Imaging Fundamentals with Photoshop (3 credits)

This course teaches the fundamentals of image-editing tools for professional designers who want to produce sophisticated graphics for print and the Web using the current Adobe Photoshop software. Photo retouching, image editing, and color painting are among the topics covered.

DIG 1930 - Special Topics in Digital Media (.5 - 3 credits)

This course offers selected topics in digital media and emerging technologies. It examines technologies shaping current electronic media, such as introduction to digital video animation; pre-production, production, and post production processes in digital video; presentation technologies and techniques, including digital imaging; wireless technologies, portable devices, virtual reality applications, digital libraries, video, animation, simulation, and gaming.

DIG 2030 - Digital Video Fundamentals (3 credits)

This course teaches the concise workflow of a Digital Video production, camera movements, audio needs, and other basic planning procedures. Foundations for understanding the practical techniques, specialized language, and the dynamic nature of motion graphic aesthetics are developed. This course is designed for students and video enthusiasts interested in presenting video media within today's emerging formats using current Adobe and Apple software.

DIG 2116 - Photoshop Level 2 (3 credits)

This course teaches advanced features of the Adobe Photoshop image application software. Tools and techniques to create, edit and enhance digital images for printing or Web publication are covered. This course is for students interested in taking the software beyond the introductory levels for print, Web, and other multimedia applications.

Prerequisite: DIG 1115.

DIG 2203 - Digital Video 2 Production (3 credits)

This course teaches intermediate techniques for digital video creation and production. Students blend traditional approaches with different stages of production and with non-linear DV technologies.

Prerequisite: DIG 2030.

DIG 2251 - Digital Audio Fundamentals (3 credits)

This course teaches how to create and edit audio with current Adobe, Apple, and other standard software. The curriculum covers recording and editing, removing unwanted noise, customizing sound effects, adding aural emphasis to a scene, and creating royalty-free music to match the mood of a production. Students learn techniques for recording new dialog tracks and sound effects while learning how to modify existing audio files.

DIG 2302 - 3D Digital Animation I (3 credits)

This course teaches Autodesk's 3D Max and/or Maya software for still image renderings and 3D animations. Topics include fundamentals of modeling, texturing, lighting, animation, and rendering. The software is used to create geometric objects, backgrounds, and animated scenes. Numerous short animated videos are created.

DIG 2303 - 3D Digital Animation 2 (3 credits)

This course teaches intermediate skills using 3D Max and/or Maya rendering and animation software. These topics include complex detailed modeling, editing models at the vertex and face levels, in-depth exploration of the lofter function, development of complex materials, multiple path control in the keyframer, and video post functions.

Prerequisite: DIG 2302.

DIG 2430 - Digital Story Development for Film and Gaming (3 credits)

This course teaches the foundations of gaming and film creation including storytelling, screenwriting, storyboarding, and conceptualizing. Specific areas include layout, charts, storyboarding, level development, environment illustrations, character design, model sheets, and graphical user interface (GUI) designs. Other topics covered in this course include beat outlining and concept pitching. Students create non-linear and interactive story structures and read supporting materials, view media for discussion, create and pitch story concepts, and develop a final screenplay. The course introduces several software applications for the creation of concept art, storyboards, and screenwriting.

Prerequisite: GRA 1129.

DIG 2500 - Fundamentals of Interactive Web Design (3 credits)

This course teaches a systematic approach to designing communications and visual communications for the Internet. Emphasis is placed on learning and refining website design from the foundation up. Students gain an understanding of the languages and software necessary to create contemporary, functional and dynamic web pages. Projects focus on control, placement, scale and design of images and types, and the navigation of pages, within a rage of Internet browser possibilities. Students design and develop a user-experience focused website as their final project.

Prerequisite: DIG 1000, DIG 1115.

DIG 2581 - Digital Media Portfolio Fundamentals (3 credits)

This course teaches how to prepare a portfolio of work representative of the curriculum in Digital Media and Graphic Design. The portfolio consists of projects from coursework, professional projects, or internship work. Design principles and creative expression are the primary factors in the development of a representative body of work to reflect the students' efforts.

Prerequisite: DIG 2030, GRA 2160.

DIG 3253 - Digital Audio Production (3 credits)

This course teaches advanced concepts in mixing and editing digital audio content using a variety of technologies within a virtual studio environment. Practical assignments are tailored toward developing audio editing and assembly skills. Students experience the stages of pre-production, production, and post-production in the process of audio creation.

Prerequisite: DIG 1000, DIG 1115, DIG 2030.

DIG 3362 - 3D Character Animation (3 credits)

This course teaches the processes and techniques associated with the design of 3D artificial characters, and the manipulation of those characters to convey a story in a visual medium. Study topics include theory of artificial character acting, techniques to make artificial movement believable, and techniques to bring character to life.

Prerequisite: DIG 1115, DIG 2030, DIG 2303, GRA 1129.

DIG 3375 - Modeling Vehicles and Structures (3 credits)

This course teaches how to attach control mechanisms to structures and vehicles allowing the 3D mesh to be animated for use in simulations. Various methods and skeletal systems used in rigging and movements are explored. Students learn how to use constraints and related advanced software. Topics covered include implementation of computer imaging with mathematical models, representation and rendering techniques, rendering of materials, and photo-realistic production. Students examine methods to develop linked structures, collision detection, and particle animation.

Prerequisite: DIG 1115, DIG 2030, DIG 2303, GRA 1129.

DIG 3713 - Gaming and Simulation Principles (3 credits)

This course teaches techniques used to design and implement computer games. Topics include a historic overview of computer games, gaming documentation, description and use of a game engine, practical modeling of objects and terrain, and use of audio. Physics and artificial intelligence in games are covered briefly. Students design a 3D game developed in a team environment.

Prerequisite: COP 2000 or COP 1800; DIG 2030, GRA 1129; Pre/corequisite: DIG 1000, DIG 2303.

DIG 3823 - Visual Communication 2 (3 credits)

This course presents practical tools to enhance the creative process in the development of novel, and useful ideas for digital media. Explored are transformations resulting from the convergence of digital technologies and global cultures. Students analyze how film, video games, animation and the recording arts intersect in the creation of digital artifacts and cultural phenomena. Interdisciplinary teams study and undertake real-time international communications and collaborations.

DIG 4354 - Character Modeling (3 credits)

This course teaches advanced tools, concepts and techniques for the development of 3D character animations. Topics include character rigging, inverse kinematics, motion capture, motion data, and scripting.

Prerequisite: DIG 4355, DIG 3362.

DIG 4355 - Artificial Effects and Environments (3 credits)

This course teaches design and manipulation of visual media to convey a story, thought, or concept. Imagery in motion such as non-character entities, music videos, and scientific visualizations is used to familiarize students with the design and production process involved in the creation of interesting artificial visual environments.

Prerequisite: DIG 3362, DIG 3375.

DIG 4394 - Motion Graphics: Advanced Compositing (3 credits)

This course teaches advanced techniques used in the development of high-end motion graphics for websites, presentations, broadcasts, movies, and games. Students explore 3D modeling, texturing, lighting and compositing to create motion graphics and visual narratives for 3D content. Work created in this course becomes part of the final student portfolio.

Prerequisite: DIG 1115, DIG 2030, GRA 1129.

DIG 4433 - Advanced Animation Techniques (3 credits)

This course teaches advanced processes in animation for use in film and video games. Topics emphasized include building characters through performance, facial animation, binding techniques, video referencing, rotoscoping, and cinematography.

Prerequisite: Pre/corequisite: DIG 4354.

DIG 4780 - Modeling for Real Time (3 credits)

This course teaches advanced principles of construction of 3D models for real-time applications which respond to internal or external stimuli in a preset time period. The students blend the discrete process of simulation with the continuous nature of real time constraints. Topics include level of detail management and efficiency versus visual quality for video games and simulation.

Prerequisite: DIG 43375.

DIG 4792 - Textures and Lighting (3 credits)

This course teaches techniques used to achieve realistic lighting and surface properties within a virtual environment. Using industry standard software students apply a practical visual aesthetic to 3D objects by altering shader attributes and other parameters. Emphasis is placed on creating scenes with specific moods, styles, and visual narratives using only light and color.

Prerequisite: Pre/corequisite: DIG 3362, DIG 3375.

DIG 4931 - Special Topics in Digital Media (3 credits)

This course teaches computer-aided digital media topics of special and current interest. Main areas of study include the focus on various issues in the field of digital media.

Students pursue production of digital and traditional projects related to the course.

Prerequisite: permission of instructor required.

DIM - AUTOMOTIVE SERVICE TECHNOLOGY

DIM 0004 - Introduction to Diesel Mechanics (N) (150 hours)

This course teaches shop organization, management, safety, and workplace communication skills. Students recognize, identify, and demonstrate the safe use of tools and equipment, and demonstrate knowledge in diesel engine construction, operation, and servicing.

DIM 2250 - Hybrid and Alternative Fuel Vehicles (N) (4 credits)

This course explores hybrid powertrains and alternative fuels, used in current vehicles, through classroom and hands on training. The focus is on reducing environmental impact of vehicles and promoting the use of renewable energies.

Prerequisite: AER 1694C or instructor approval.

DIV - DIVING

X000

DIV X100 - Learn to Dive (N)

Learn to dive course.

DIV X101 - Age Group Diving (N)

Age group diving course.

DSC - EMERGENCY ADMINISTRATION MANAGEMENT

DSC 1002 - Terrorism and U.S. Security (3 credits)

This course teaches the foundations of national security as it relates to world terrorism, the United States engagement in the war against international terrorism, and the application of preemption known as the Bush Doctrine. The course is a survey of the history and cultural development of Islam and the extreme manifestation of political militancy known as Jihad. The cultural and political history will enhance student understanding of the factors leading up to the events of September 11, 2001, and how those events changed American security.

DSC 1003 - Introduction to Homeland Security (3 credits)

This course introduces students to the field, infrastructure, goals and challenges of homeland security in the United States. This includes a history of Homeland Security, the legislative and regulatory authority for Homeland Security, and current structure and organization of Homeland Security, and transportation/environmental security issues.

DSC 1004 - Introduction to NRF and NIMS (3 credits)

This course introduces participants to the National Response Framework (NRF) and specifies how the resources of the Federal Government work in concert with state, local, and tribal governments and the private sector to respond to incidents of national significance. The NRF is predicated on the National Incident Management System (NIMS). This course shows how the NRF and the NIMS provide a nationwide template for working together to prevent or respond to threats and incidents regardless of cause, size, or complexity.

DSC 1033 - Weapons of Mass Destruction (3 credits)

This course teaches how to respond to potential attacks with weapons of mass destruction (WMD). Participants learn to identify, assess, and respond to incidents involving chemical, biological, radiological, nuclear, or explosive weapons. The course includes training with personnel protective equipment, mass decontamination, medical assessment and management of victims as well as coordinating effective multi-agency response.

DSC 1035 - Recognition and Investigation of Terrorism (3 credits)

This course focuses on the identification of terrorist groups, the gathering of intelligence information and aspects terrorism investigations versus traditional investigation.

Prerequisite: DSC 1003.

DSC 1222 - Psychological Management of Disasters (3 credits)

This course teaches the application of psychological knowledge to aid persons affected by natural and technological disasters, terrorist attacks, and other large scale traumatic stress. It places equal emphasis on responder self-care, care of others, and care for communities both short-term and long-term.

DSC 1552 - Critical Infrastructure Protection (3 credits)

This course introduces student to the critical infrastructure protection (CIP) process that is used to protect the people, physical entities, and cyber systems that are critical to many facilities. The course guides students in the systematic protection of critical infrastructures, and introduces decision sequences that assist current and future leaders in determining the degree and type of protection necessary for various facilities. In addition the course introduces a time-efficient and resource-restrained practice that ensures the protection of only those infrastructures

upon which survivability, continuity of operations and mission success depend.

Prerequisite: DSC 1003.

DSC 1641 - Exercise Design and Evaluation (3 credits)

This course teaches how to plan and conduct disaster-training exercises and evaluate the outcome of these exercises. It provides knowledge and skills to manage exercise evaluation activities before, during, and after an emergency management exercise.

DSC 1642 - Field Training Exercise (1 - 3 credits)

This course teaches practical disaster response with a full-scale multi-agency field exercise. Participants apply what they have learned in prerequisite courses in a challenging disaster simulation.

Prerequisite: FFP 2820.

DSC 1930 - Current Topics in Public Safety (.5 - 5 credits)

This course teaches current topics in the public safety profession that are emerging and relevant. Topics include disaster response, incident command, public safety and security, terrorism, weapons of mass destruction hazardous materials, emergency operations and security of public and private property.

DSC 2212 - Disaster Response, Mitigation and Recovery (3 credits)

This course examines three of the four phases of emergency management: response, mitigation, and recovery. For the mitigation phase students identify actions that can prevent emergencies, reduce chances of emergency occurring, and reduce the damaging impacts of unavoidable emergencies. For the response phase students discuss actions that save lives, prevent further property damage, and provide incident stabilization. For the recovery phase students develop methods to return a community to normal operations post-incident.

DSC 2949 - Internship in Emergency Management (3 credits)

This course teaches the practice of emergency management principles and techniques by offering students an opportunity to intern with practicing emergency managers and preparedness officers in the community.

DSC - PUBLIC ADMINISTRATION

DSC 3079 - Foundations of Public Safety (3 credits)

This course explores the history of public safety including the roles of law enforcement, fire services, and emergency management. It examines the evolution of homeland security and the agencies involved; implementation requirements; and evaluation of public safety program effectiveness. Methods for researching program need, budgetary requirements, program implementation, and operational effectiveness are explored.

DSC 3215 - Emergency Planning (3 credits)

This course examines the concept of the emergency operations planning process and the elements necessary for multi-hazard planning such as identification of local hazards, completing hazard assessments, and the writing of a basic emergency plan.

Prerequisite: DSC 3079.

DSC 4218 - Emergency Planning II (3 credits)

This course examines planning and policy processes and interventions that can reduce disaster vulnerabilities and increase resilience at every stage of the disaster management cycle. Consideration is given to how demographic changes, human settlement patterns, land-use decisions, and political and social policy dynamics have increased vulnerability to natural and man-made disasters and the need for emergency plans.

Prerequisite: DSC 3079, DSC 3215, FES 3803.

DSC 4931 - Contemporary Issues in Public Safety (3 credits)

This course provides advanced students an opportunity to examine current issues and themes in Public Safety Administration.

Prerequisite: DSC 3079. Corequisite: Pre/corequisite: DSC 3215.

DSC - PUBLIC SAFETY

DSC 4013 - Capstone Project in Public Safety (6 credits)

This course teaches how to integrate Public Safety Administration knowledge, skills and tools developed in previous Public Safety Administration courses. It emphasizes critical analysis of current topics and trends. It includes a major research paper and presentation on a public safety topic of the student's choice. Permission to registered required.

Prerequisite: BUL 3130, ACG 3024, ISM 3011, MAN 3240, MAN 3303, MAN 4301, DSC 3079, DSC 3215, DSC 4226. Corequisite: Pre/corequisite: DSC 4755, DSC 4931.

DSC 4226 - National Incident Management (3 credits)

This course teaches the standards and requirements for full implementation of national incident management standards and the development of National Response Plans.

Prerequisite: DSC 3079.

DSC 4755 - National Security (3 credits)

This course teaches all aspects of national security and how strategic issues affect public safety administration and operations. Topics include national security preparedness, terrorism and counter-terrorism, critical infrastructure, disaster management, and strategic communications for local and regional governments.

EAP - ENGLISH AS A SECOND LANGUAGE

EAP 0320 - ESL Prep Reading I (N) (3 credits)

This course offers comprehensive skills to nonnative students of English who have been admitted for college-preparatory study. The course emphasizes improving reading in the academic content areas. Credit not applied toward degree.

Prerequisite: Placement scores.

EAP 0384 - ESL Grammar and Writing I (N) (3 credits)

This course provides a review of English grammar and structure for Limited English Proficient (LEP) students. The course focus is verb tenses, subject/verb agreement, and preposition use, verbal idioms and other English grammar problem areas for LEPs. Credit not applied toward degree.

Prerequisite: Placement scores.

EAP 0420 - ESL Prep Reading II (N) (3 credits)

This is a continuation of EAP-0320 (p. 206) and provides a comprehensive review of study and test-taking skills and basic writing skills aimed specifically at nonnative students. Credit not applied toward degree.

Prerequisite: Placement scores or EAP 0320.

EAP 0484 - ESL Grammar and Writing II (N) (3 credits)

This is a continuation of EAP-0384 (p. 206) and focuses on correct written expression at the college level. College preparatory. Credit not applied toward degree.

Prerequisite: Placement scores or EAP 0384.

ECO - ECONOMICS

ECO 2000 - Introduction to Economics (3 credits)

This course examines both microeconomic and macroeconomic principles and problems. Students are introduced to the structure, functioning, and stabilization of a market-directed capitalistic economy. The microeconomic topics include supply, demand, and elasticity; and the profit maximizing behavior of the firm under the market structures of pure competition and pure monopoly. The principles underlying international trade, economic growth, and labor markets are also presented. The macroeconomic topics covered are the Great Depression, business cycle theory, Keynesian Revolution, money and banking, counter-cyclical monetary and fiscal policy, and the national debt. ECO-2000 (p. 206) does not satisfy the university requirement for either ECO-2013 (p. 206) or ECO-2023 (p. 206).

ECO 2013 - Principles of Economics Macro (3 credits)

This course focuses on the study of macroeconomics including, but not limited to, national income accounting, consumption, saving and investment, government spending as it affects economic activity and as it influences money and banking, problems of inflation and unemployment, international trade and its impact on domestic activity.

Prerequisite: Student must score into college-level English and reading on the placement test.

ECO 2023 - Principles of Economics Micro (3 credits)

This course provides an introduction to economic theory and the fundamentals of economic analysis. The course includes emphasis on the study of microeconomics: market structure, price determination, factors of production, distribution of income and effects of monopoly and oligopoly on markets.

Prerequisite: Student must score into college-level English and reading on the placement test.

ECO 3411 - Statistical Methods for Economics & Business (3 credits)

This course introduces statistical techniques developed through the use of business and economic problems. Time-series and index number analysis, simple and multiple regression and correlation, analysis of variance, and quality control are also discussed. This course should be taken as early as possible in the student's upper-level curriculum.

Prerequisite: ACG 2071, STA 2023, and MAC 2233 or MAC 2311.

EDE - ELEMENTARY EDUCATION

EDE 4220 - Integrated Health and Recreation (3 credits)

This course addresses health education and content in addition to teaching methods and materials in health education appropriate for K-6 students. The course also addresses fundamental skills, fitness, and games for elementary physical education and recreation.

Prerequisite: EDF 3214.

EDE 4223 - Integrated Music, Art and Movement (3 credits)

This course helps the student gain knowledge and competencies necessary to become an effective teacher and leader in the areas of elementary school integrated music, art and movement. It develops the theoretical basis for music, art and movement learning and teaching; illustrates and applies models for integrating elementary teaching; provides practical experience in curriculum, instruction and assessment. This course addresses specific subject matter competencies and pedagogy pertinent to the disciplines and requirements for certification.

Prerequisite: EDF 3214.

EDE 4936 - Seminar in Elementary Education (3 credits)

This course provides pre-service teachers with support in instructional strategies, planning techniques, evaluation procedures, and classroom management skills during their full-day internship in a K-6 public school setting to demonstrate professional competencies.

Prerequisite: EDF 3214, EDF 4430, EME 3410, TSL 4081, TSL 4100, EDG 4410, RED 3009, RED 4348, RED 4519C, EEX 4601, EDG 3620, LAE 4416, EDF 4782, EDE 4223, EDE 4220, EDG 4377C, EDG 4376, EDE 4936. Corequisite: EDE 4940.

EDE 4940 - Internship in Elementary Education (10 credits)

This course requires a teacher candidate to demonstrate pre-professional competencies during a 12 week (or 60 days), full-time internship in a public school approved by the department and the school district. A minimum of 35 contact hours per week are required for 12 weeks (or 60 days). Permission to registered required.

Prerequisite: EDF 3214, EDG 4410, EDF 4430, EME 3410, TSL 4081, TSL 4100, RED 3009, RED 4348, RED 4519C, EEX 4601, EDG 3620, LAE 4416, EDF 4782, EDE 4223, EDE 4220, EDG 4377C, EDG 4376. Corequisite: EDE 4936.

EDF - CHILD DEVELOPMENT AND EDUCATION

EDF 1021 - Social Elements in Early Childhood Education (3 credits)

This course studies the sociocultural elements of society and how these influence the child, the family, and the educational program. Emphasis is on 0-to-8 year-old children.

EDF - EDUCATION

EDF 2005 - Introduction to the Teaching Profession (3 credits)

This course consists of a survey of the historical, sociological, and philosophical foundations of education and an orientation to professional education which includes the Code of Ethics of the teaching profession. In addition to class lectures, 15 hours of field experience in an elementary, middle, or secondary school is required. Additional fee for background check is required by school district.

Prerequisite: student must score into college-level English on placement test. Additional fee for background check is required by school district.

EDF 2085 - Introduction to Diversity & Exceptionalities for Educators (3 credits)

This course explores the multiple facets of diversity as represented in an educational setting. It emphasizes the value of diversity and commonality and focuses on valuing diversity in the classroom and the elimination of barriers to cultural understanding. In addition to class lecture, 15 hours of field experience in appropriately diverse settings is required.

Prerequisite: Student must score into college-level English on placement test.

EDF 2090 - Current Issues in Education (.5 - 5 credits)

This course provides the teacher and prospective teacher with a broad professional perspective through the exploration of selected topics in the areas of education in reference to philosophical and social issues. Current realities confronting educators are explored. Each of these areas make a unique contribution in the preparation and reaffirmation of teachers as professionals.

EDF 2930 - Special Topics in Education (.5 - 6 credits)

This course is an introduction to cooperative learning strategies and includes curriculum design and development, alternative assessment techniques, cooperative learning strategies, and classroom management.

EDF 3214 - Human Development and Learning (3 credits)

This course teaches learning theories as they apply to student development, learning styles, learning ability as well as disabilities. Students explore varying ideologies relative to intelligence and intellectual assessment. Additionally, students are required to arrange visits totaling at least 15 hours to area schools to observe teaching and learning styles, the interactions between student and teacher, and intervention techniques.

Additional fee for background check is required by school district.

Prerequisite: Pre/corequisite: EDF 2005 or consent of the department.

EDF 3933 - Special Topics in Education (3 credits)

This course reinforces and strengthens the development and implementation of cooperative learning strategies and includes curriculum design and development, and alternative assessment techniques.

Prerequisite: Minimum of A.A. Degree.

EDF 4430 - Measurement, Evaluation and Assessment (3 credits)

This course teaches basic concepts in educational measurement utilizing measurement in instruction, construction of teacher-made tests and other classroom assessments, portfolio and performance assessment, and interpretation of standardized test scores.

Prerequisite: EDF 2005.

EDF 4782 - Ethics and Law (3 credits)

This course examines public and private school law and ethical issues as they affect teachers' rights and legal responsibilities to students, including an examination of students' legal rights and the ethical parameters of education. State and federal statutes and case law and policies affecting school district management, educators, parents, and students are reviewed.

Prerequisite: EDF 3214.

EDG - EDUCATION

EDG 1011 - Educational Professional Skills Development (.5 - 3 credits)

This course teaches, through various educational topics, the importance of the role of the educator, his knowledge, his skills and his attitude in improving. Professional development activities vary based upon current issues and initiatives in education.

EDG 1211 - Curriculum Design/Development (.5 - 3 credits)

This course teaches students how to identify curriculum design appropriate for integration activities. Students participate in planning short and long-term projects which identify team building, cooperative learning, and higher-order thinking skills into integrated curriculum.

EDG 1932 - Enhancing Teacher Effectiveness (.5 - 5 credits)

This course provides educators an opportunity to enhance teaching techniques that promote student success and improve teacher effectiveness.

Prerequisite: Permission of instructor.

EDG 2301 - General Teaching Skills (3 credits)

This course teaches topics in generic teaching skills, techniques, and strategies basic to all grade levels and subject matter areas specific to the group enrolled.

EDG 3343 - Instructional Strategies (3 credits)

This course teaches an overview of instructional models and strategies. Emphasis is placed on principles of State standards, instructional methods, lesson planning, and instruction. Students develop knowledge of instructional models and lesson plan construction for effective implementation including the diverse student populations.

Prerequisite: Pre/corequisites: EDF 2005, EDF 3214. Corequisite: EDG 3949 or (Middle Grades: MAE 4941 or SCE 4942) or (Secondary: MAE 3940 or SCE 3940) .

EDG 3620 - Curriculum and Instruction (3 credits)

This course is an introduction to major concepts, assumption, debates, processes of injury, and ways of knowing within the school curriculum. Pre-service teachers create coherent, meaningful learning experiences using the major philosophical theories of education to develop learners' competence in subject mater knowledge. Pre-service teachers evaluate the suitability of content against learners' intellectual, social, emotional, and physical characteristics.

Prerequisite: pre/corequisite: EDF 3214.

EDG 3949 - EPI Practicum (1 credit)

This course reinforces education and professional growth in a teacher candidate's academic major by providing supervised experience in a K-12 setting.

Prerequisite: Pre/corequisites: EDF 2005, EDF 2085, EME 2040, EDF 3214. Corequisite: EDG 3343.

EDG 4376 - Integrating Language Arts and Social Science (3 credits)

This course provides an overview of current methods of instruction in language arts and social sciences, with emphasis on the writing process, and strategies to make the curriculum accessible to diverse students including those with various disabilities and LEP (Limited English Proficient) students. Practical experience in curriculum, instruction and assessment are provided. This course addresses Sunshine State Standards, educator accomplished practices and pedagogy pertinent to specific disciplines required for certification.

Prerequisite: EDF 2005, EDF 3214, EEX 2010. Corequisite: Pre/corequisite: RED 3009.

EDG 4377C - Integrating Mathematics and Science (3 credits)

This course focuses on specialized methods for the creation of instructional curricula and appropriate pedagogic methods for students with disabilities in grades K-12. The development of curricula and the use of instructional approaches that correspond to the capabilities and styles of the various learners are emphasized. Minimum of 20 hours structured field experience required.

Prerequisite: EDF 3214, EEX 2010. Corequisite: Pre/coreqisite: EDF 4430, EDG 4410, EEX 4601.

EDG 4410 - Classroom Management and Communication (3 credits)

This course provides basic skills and knowledge for creating a learning environment that encourages positive social interaction and effective communication among members of the learning community. The course emphasizes attitudes, language patterns, values and behaviors. The course also includes methods and strategies for consulting with other school professionals and parents.

Prerequisite: Pre/corequisite: EDF 3214, EDF 2005.

EDM - EDUCATION

EDM 3001 - Introduction to Middle School (3 credits)

This course provides an introduction to the modern middle school, its history, and purpose. It includes the philosophy and practice of the ideal middle school. The roles of middle school teachers and teams are highlighted.

EDP - EDUCATION

EDP 2002 - Introduction to Educational Psychology (3 credits)

This course teaches psychology as it is applied to teaching and learning. This course focuses on the investigation of the characteristics of physical, social, cultural, emotional, and intellectual differences among learners. Major topics in the study of the teaching/learning process include learning and problem-solving, motivation, and assessment.

Corequisite: ENC 1101.

EEC - CHILD DEVELOPMENT AND EDUCATION

EEC 1202 - Principles of Early Childhood Curriculum (3 credits)

This course presents the techniques used to develop effective teaching-learning situations with preschool children. The teacher's role in determining these learning experiences and implementing them in a classroom is identified.

EEC 1520 - Early Childhood Organizational Leadership and Mgmt. (3 credits)

This course provides advanced level director credential training including organizational structure, ethics and professionalism, leadership, personnel policies and relationships, and staff development, evaluation and retention.

EEC 1523 - Programming for Early Childcare Administrators (3 credits)

This course is designed for the advanced early childcare administrator and is a course that counts for director re-certification.

EEC 1601 - Observing and Recording Behavior (3 credits)

This course teaches observing and recording as it relates to the early childhood classroom.

EEC 1730 - Basic Childhood Nutrition (3 credits)

This purpose of this course is to provide participants with knowledge of appropriate health, safety, and nutritional practices implemented in developmentally appropriate educational programs for children ages birth through eight. The course focuses on proper emergency procedures, and the recognition and prevention of childhood diseases as well as child abuse and neglect.

EEC 1946 - Practicum in CDA Assessment (3 credits)

This course provides an opportunity for supervised participation in the Child Development Center. Students are introduced to trends and issues in Early Childhood Education in preparation for CDA Assessment.

EEC 1947 - Practicum in Teaching Strategies (3 credits)

This course provides an opportunity for supervised participation in the Child Development Center. Students are introduced to trends, issues, and practices in Early Childhood Education as they relate to teaching strategies in the classroom.

EEC 2948 - Practicum in Early Childhood Curriculum (3 credits)

This course provides an opportunity for supervised participation in the Child Development Center. Students are introduced to trends, issues and practicus in designing and implementing Early Childhood curriculum.

EEC 2949 - Practicum Child Care Center Management (3 credits)

This course provides an opportunity for supervised participation in the Child Development Center. Students are introduced to trends, issues and practices in child care center management.

EET - ELECTRONIC ENGINEERING TECHNOLOGY

EET 1015C - DC Circuits (3 credits)

This course teaches the fundamental theories of DC circuits with emphasis on circuit operation and troubleshooting. Topics covered include: electronic components, Ohm's law, Power law, series DC circuits, parallel DC circuits, electromagnetic devices and DC test instruments.

Prerequisite: Pre/corequisite: MAC 1105, PHY 1020, EET 1215C.

EET 1025C - AC Circuits (3 credits)

This course teaches the fundamental theories of AC circuits with emphasis on circuit operation and troubleshooting. Topics covered include: AC voltage theory, inductive and capacitive reactance, transformers, series RCL circuits, parallel RCL circuits, resonance, capacitor and inductor pulse response.

Prerequisite: Pre/corequisite: EET 1015C.

EET 1180C - Troubleshooting and Repair Techniques (3 credits)

This course teaches proper troubleshooting and repair techniques for a variety of electronic equipment such as amplifier systems, equalizers, mixers, power inverters, and other common electronic systems. Emphasis is placed on safety and correct use of electronic testing instruments.

Prerequisite: EET 2141C.

EET 1215C - Introduction to Electronics (3 credits)

This course teaches the basic manual techniques and use of tools found in the field of electronic engineering technology. It also covers the computer skills and knowledge expected from an electronics technician. Electronics topics covered are electrostatic discharge (ESD), high reliability soldering, prototyping, and the use of the volt-ohm-amp meter. Computer topics covered are hardware, software, computer architecture, operating systems, world wide web, e-mail, word processing, and spreadsheets. Additional software covered in schematic capture and printed circuit board layout.

EET 2141C - Electronic Devices I (3 credits)

This course is the first of two courses covering solid state electronics for students requiring a foundation in electronics. Students learn how to apply electronic principles to analog circuits and systems, including semiconductor diodes, fundamental theory of transistors and other solid-state devices, analysis of amplifiers, oscillators, and other applications using a sinusoidal wave. Students also learn basic safety procedures required in an electronics laboratory and with electronic circuits and systems.

Prerequisite: EET 1025C.

EET 2142C - Electronic Devices II (3 credits)

This course teaches how operational amplifiers, analog integrated circuits, oscillators, control devices, and regulated power supplies are designed and work.

Prerequisite: EET 1025C; pre/corequisite: EET 2141C.

EET 2325C - Telecommunication Circuits I (3 credits)

This course teaches the principles of electronic communication, modulation and demodulation methods, radio transmitter and receiver theory and circuits, and multiplexing and de-multiplexing schemes.

Prerequisite: EET 2141C.

EET 2335C - Communication Circuits II (3 credits)

This course teaches technologies supporting antennas, transmission lines, wave propagation, microwave communication, waveguides, fiber optics and cellular telephones.

Prerequisite: EET 2141C; pre/coreq: EET 2325C.

EET 2515C - Motors and Generators (3 credits)

This course is designed for students specializing in industrial equipment maintenance. Students learn how to analyze, troubleshoot, and repair rotating electric machinery with emphasis on industrial applications. Students learn terminology specific to motors, generators, and transformers, electromechanical device theory, circuits connecting electromechanical devices to voltage sources and loads, and how to apply mathematical analysis to determine quantitative circuit functioning in terms of voltage current, and power.

Prerequisite: EET 1025C.

EET 2527C - Motor Starters, Controllers, and Breakers (3 credits)

This course is designed for students specializing in industrial equipment maintenance covering AC and DC power distribution in a power plant. Students learn operating principles, troubleshooting, repair, and maintenance of switch gear, motor control centers, breaker panel power, control, and instrument cable, raceways, protective devices and grounding as related to the generating station. Hands-on laboratory exercises reinforce each major concept studied.

Prerequisite: EET 1025C.

EET 2547C - Transformers and Power Distribution (3 credits)

This course is designed for students specializing in industrial equipment maintenance. Students learn about components and devices used to distribute power and how to protect major elements involved in power distribution. The curriculum includes uses and maintenance of fuses, circuit breakers, reclosures, and relay coordination, how to protect against lightning and other abnormal conditions, and the protection of transformers, motors, and generators.

Prerequisite: EET 1025C.

EET 2930 - Special Topics in Electronic Engineering (N) (.5 - 3 credits)

This course teaches specific competencies related to circuit analysis, low frequency analog electronics, RF circuits, digital, microprocessors, microcontrollers, computer architecture, and networking. The content of the course is customized to meet the special technical training needs of electronic engineering professionals.

EET 2950 - Electronics Capstone Project (3 credits)

This is a group project course integrating many of the learning outcomes of the associate's degree. The class is divided into groups, each with a distinct mission of designing, building, troubleshooting, testing, documenting and commissioning an electronic system. Students learn problem solving, project planning, cost estimation, and other project related real world skills.

Prerequisite: CET 1113C, ETS 2544.

EEX - CHILD DEVELOPMENT AND EDUCATION

EEX 1013 - Special Needs in Early Childhood Education (3 credits)

This course teaches a survey of special-needs children during the early years, their families, and the agencies and systems available to provide assistance.

EEX 2010 - Introduction to Special Education (3 credits)

This course teaches the major areas of exceptional students' education. Emphasis is on etiology, terminology, classification, prevalence, educational approaches, legal and medical implications, and personal and social growth adjustments of student labeled exceptional.

Prerequisite: Student must score into college-level English on placement test. .

EEX - EDUCATION

EEX 2030 - Teaching Exceptional Learners in Inclusive Setting (1 credit)

This course teaches the development of knowledge and skills necessary for inclusive general and special educators to meet the needs of students with exceptionalities in grades K-12. Focus is on specialized instructional methods and strategies for students with exceptionalities. The adaptation of general education curricula and the use of evidenced-based instructional approaches that correspond to the capabilities and types of the various learners are emphasized. This course meeting Florida recertification credit for Teaching Students with Disabilities (as approved by the School district).

EEX 3103 - Survey of Normal/Abnormal Language and Speech (1 credit)

This course teaches an overview of major communication disorders and supportive strategies as well as normal language and speech development for classroom teachers.

Corequisite: Pre/corequisite: EEX 2010.

EEX 4094 - Educating Students with Autism (3 credits)

This course provides class participants with an overview of characteristics, etiology, and prevalence of autism spectrum disorders. Additionally, this course supplies participants with the knowledge and skills necessary to support the learning of children with autism spectrum disorders including instructional strategies, classroom organization, and teaming with families and professionals.

EEX 4221 - Educational Assessment of Exceptional Students (3 credits)

This course teaches the theory and practice of informal and formal assessment of behavior and/or learning problems. Practice with evaluation instruments and curriculum based assessment strategies are key components of the course. Use of assessment information in designing academic K-12 curriculum plans is also a component of this course.

Corequisite: Pre/corequisite: EDF 2005, EEX 2010 .

EEX 4232 - Identification and Assessment of Individuals with Autism (3 credits)

This course provides class participants with the knowledge and skills necessary to critically analyze the processes in place to identify students with low incidence disabilities. The influence of such disabilities of development and learning in a least restrictive environment is explored. Inherent in this is the complexity of learning needs that this group of students experience, and for many students, the co-morbidity of different developmental disabilities along with the influences of societal and environmental issues. This course also provides participants with the ability to

appropriately assess the skills and abilities of students with severe disabilities in a way that assessment results can be translated into meaningful educational interventions in a least restrictive environment.

EEX 4264 - Curriculum and Instruction for Students with Disabilities K-5 (3 credits)

This course teaches the development of knowledge and skills necessary for special educators to meet the needs of students with disabilities in grades K-5. Students identify the scope and sequence of the elementary general education curriculum including Florida Sunshine State Standards, and local county curriculum guides. Focus is on specialized methods for the creation of instructional methods and strategies for students with disabilities in grades K-5. The development of curricula and the use of instructional approaches that correspond to the capabilities and styles of the various learners are emphasized.

Prerequisite: EDF 3214, EEX 2010, EEX 4221.
Corequisite: Pre/corequisite: EDF 4430, EDG 4410, EEX 4601.

EEX 4265 - Curriculum and Instruction for Students with Disabilities 6-12 (3 credits)

This course teaches the development of knowledge and skills necessary for special educators to meet the needs of students with disabilities in grades 6-12. Students identify the scope and sequence of the general education curriculum including Florida Sunshine State Standards, and local county curriculum guides for students in grades 6-12. Focus is on specialized methods for the creation of instructional methods and strategies for students with disabilities in grades 6-12. The development of curricula and the use of instructional approaches that correspond to the capabilities and styles of the various learners are emphasized.

Prerequisite: EDF 3214, EEX 2010, EEX 4221.
Corequisite: Pre/corequisite: EDF 4430, EDG 4410, EEX 4601.

EEX 4601 - Effective Behavioral Interventions and Practices in Exceptional Students (3 credits)

This course teaches familiarization of students with the educational management of exceptional learners. Emphasis is on behavior practices and consultation skills leading to students managing their own behavior. Strategies to create and maintain safe, healthy environments for learning in exceptional and inclusive classroom are presented.

Prerequisite: EDF 3214, EEX 2010.

EEX 4603 - Positive Behavior Support (3 credits)

This course provides class participants with the knowledge and skills necessary to develop, implement, and evaluate the impact of positive behavior support. Emphasis is placed on understanding the communicative function of challenging behaviors, the teaching of new skills that make the challenging behavior unnecessary for the learner, and the prevention of the reoccurrence of challenging behaviors including students with autism spectrum disorder. The course includes functional behavior assessment and positive behavior support as foundations of appropriate behavioral intervention in keeping with the Individuals with Disabilities Education Act.

EEX 4760 - Assistive Technology for Students with Autism (3 credits)

This course is a broad introduction to educational and assistive technology (AT) used for instruction of students with low incidence disabilities with a particular emphasis on students with autism. It is designed to allow special educators and others to analyze and apply research-based strategies in the application of AT in classrooms, schools, and school districts. Students critically examine strategies for creating supportive environments for students to effectively use high and low tech AT devices, including those for augmentative/alternative communication systems. Particular attention is given to issues related to AT assessment, implementation, and prevention of AT discontinuance in collaboration with other professionals and family members.

EEX 4940 - Student Teaching/Exceptional Student Internship and Seminar (12 credits)

This course teaches pre-service teachers how to demonstrate professional competencies during one semester of full-day internship in a public school.

Prerequisite: Senior level status, all program requirements must be met, and permission of clinical education coordinator.

EGN - ENGINEERING

EGN 1002 - Introduction to Engineering (3 credits)

This course introduces engineering and technology professions with emphasis on the spectrum of professionalism, opportunities, and careers. The student is introduced to engineering concepts and principles, responsibilities, communication and presentation, problem-solving techniques and technical calculations. Various engineering specialties are represented through appropriate presentation made by working professionals from the local engineering community. Basic knowledge of MS Word, Excel, and PowerPoint is recommended.

Prerequisite: MAT 1033 or higher.

EGN 1111 - Engineering Graphics (3 credits)

This is an introductory level course, covering basic hand drafting skills, such as line techniques, lettering, scaling, dimensioning, and symbols, leading to the development and submission of engineering drawings. Students draw

sketches, orthographic projections, sections, geometric constructions, and dimensions with tolerances using drafting equipment. This course provides basic instruction in the concepts, engineering standards, and graphics language used in technical drawings.

EGN 2322 - Engineering Analysis - Dynamics (3 credits)

This course teaches kinematics and kinetics of particles and rigid bodies, mass and acceleration, work and energy, impulse and momentum.

Prerequisite: EGN 2312 with a grade of "C" or higher. Corequisite: MAC 2313.

EME - EDUCATION

EME 1013 - Education Professional Skills Development 2 (.5 - 3 credits)

This course prepares the learner to teach online for the Indian River State College Virtual Campus. The focus is on advanced topics in online teaching and learning, including the design and facilitation of group activities. Mastering both the knowledge and skills presented in this course helps to prepare the learner with a sound approach and understanding of online course management systems and technologies.

Prerequisite: EDG 1011.

EME 1014 - Education Professional Skills Development (.5 - 3 credits)

This course is a continuation of EME 1013 and prepares the learner to teach online for the Indian River State College Virtual Campus. The focus is on advanced topics in online teaching and learning, including creating assessments and content online. Mastering both the knowledge and skills presented in this course helps to prepare the learning with a sound approach and understanding of online course management systems and technologies.

Prerequisite: EDG 1011, EME 1013.

EME 1310 - Media in Instruction (3 credits)

This course teaches skills to assist educators in developing resources to integrate media into instruction.

Prerequisite: Permission of instructor.

EME 1318 - Advanced Media in Instruction (3 credits)

This course teaches skills to assist educators in developing advanced online resources to integrate media into instruction.

Prerequisite: EME 1310.

EME 2040 - Introduction to Technology for Educators (3 credits)

This course provides applied instruction in the use of technology in an educational setting. Media includes computers, information technology, presentation technology, and educational software. Software includes Windows based (or equivalent) word processing and use of the Internet. Ethical, legal, and social issues regarding educational technology are examined.

Prerequisite: Student must score into college-level English on placement test.

EME 2041 - Introduction to Applications of Technology for Educators (3 credits)

This course provides applied instruction in the use of technology in an educational setting. Media includes computers, information technology, presentation technology, and educational software. Software includes Windows based (or equivalent) word processing and use of the Internet. Ethical, legal and social issues regarding educational technology are examined.

EME 3232 - Intermediate Applications of Technology for Educators (3 credits)

This course assists educators in developing resources to integrate media into instruction. Teachers learn how to incorporate the tools available for the 21st Century classroom to challenge students; create a hybrid classroom blending traditional classroom techniques and Web based tools; incorporate wikis, blogs, and podcasts in all subject areas; and use social networking tools to challenge and inform both students and parents.

EME 3319 - Advanced Media for Educators (3 credits)

This course addresses the innovative use of computer software and other electronic devices such as graphing calculators; the use and integration of software, electronic spreadsheets, data analysis, and instructional software are studied from a problem-solving perspective; and specific subject-matter competencies and pedagogy pertinent to the discipline.

Prerequisite: Pre/corequisite: EME 3232.

EME 3410 - Integrating Technology in the Classroom (3 credits)

This course teaches the innovative use of computer software and other electronic devices such as graphing calculators. The use and integration of software, electronic spreadsheets, data analysis, and instructional software are studied from a problem solving perspective. This course addresses specific Sunshine State Standards, subject matter competencies, and pedagogy pertinent to the discipline and is required for certification.

Prerequisite: EDF 2005 or consent of the department.

EMS - EMERGENCY MEDICAL SERVICES

EMS 1119 - Emergency Medical Technician (9 credits)

This course provides instruction in basic life support emphasizing the theory and skills required to recognize, assess, plan, and provide basic management of acutely ill and injured patients. Students participate in a combination of classroom discussions and scenario-based application.

Requires acceptance to the EMT program. Student must maintain EMT program eligibility throughout the course

Corequisite: EMS 1119L, EMS 1431.

EMS 1119L - Emergency Medical Technician Lab (2 credits)

This course provides instruction in basic life support emphasizing the skills required to recognize, access, plan, and provide basic management of acutely ill and injured patients. Students participate in scenario-based skills lab practice and application.

Requires acceptance to the EMT program. The student must maintain EMT program eligibility throughout the course.

Corequisite: EMS 1119, EMS 1431.

EMS 1431 - EMT Clinical/Field Experience (1 credit)

This course reinforces EMT theory and skills as students participate as members of the emergency medical services (EMS) team in both the hospital and prehospital settings during clinical rotations in emergency departments and onboard advanced life support (ALS) ambulances. Requires admission to the EMT program. Student must maintain EMT program eligibility throughout the entire course. Liability insurance required.

Corequisite: EMS 1119, EMS 1119L.

EMS 2601C - Paramedic I (12 credits)

This course provides introductory-level instruction in advanced life support emphasizing the theory and skills required to recognize, assess, plan, and comprehensively manage acutely ill and injured patients. Students participate in a combination of classroom discussions, online exercises, and scenario-based skills lab practice and application as well as physical conditioning. Requires acceptance to the Paramedic program. Students must maintain Paramedic program eligibility throughout the course.

Prerequisite: BSC 2094, BSC 2094L; MAT 1033 or MAT 1100, or higher. Corequisite: EMS 2664.

EMS 2602C - Paramedic II (12 credits)

This course provides developing-level instruction in advanced life support emphasizing the theory and skills required to recognize, assess, plan, and comprehensively manage acutely ill and injured patients. Students participate in a combination of classroom discussions, online exercises, and scenario-based skills lab practice and application as well as physical conditioning. Requires acceptance to the Paramedic program. Student must maintain Paramedic program eligibility throughout the entire course.

Prerequisite: EMS 2601C, EMS 2664. Corequisite: EMS 2665.

EMS 2659 - Paramedic III (6 credits)

This is the capstone course of the Paramedic program. During a field internship, students participate as team leaders onboard an advanced life support (ALS) ambulance under the direct supervision of a licensed preceptor. Additionally, students complete specialty certification courses and required summative assessments. Requires acceptance to the Paramedic program. Student must maintain Paramedic program eligibility throughout the entire course.

Prerequisite: EMS 2602C, EMS 2665.

EMS 2664 - Paramedic Clinical/Field Experience I (5 credits)

This course provides introductory-level reinforcement of paramedic theory and skills as students participate as part of the multi-disciplinary healthcare team during rotations through various departments of local hospitals, health departments, clinics, and specialty centers. Students also serve as part of the emergency medical services (EMS) team during rotations onboard advanced life support (ALS) ambulances. The Program provides clinical schedules, and students practice under the direct supervision of licensed clinical facilitators and/or preceptors. Requires acceptance to the Paramedic program. Student must maintain Paramedic program eligibility throughout the course.

Prerequisite: BSC 2094, BSC 2094L; MAT 1033 or MAT 1100. Corequisite: EMS 2601C.

EMS 2665 - Paramedic Clinical/Field Experience II (5 credits)

This course provides developing-level reinforcement of paramedic theory and skills as students participate as part of the multi-disciplinary healthcare team during rotations through various departments of local hospitals, health departments, clinics, and specialty centers. Students also serve as part of the emergency medical services (EMS) team during rotations onboard advanced life support (ALS) ambulances. The Program provides clinical schedules, and students practice under the direct supervision of licensed clinical facilitators and/or preceptors. Requires acceptance to the Paramedic program. Student must maintain Paramedic program eligibility throughout the course.

Prerequisite: EMS 2601C, EMS 2664. Corequisite: EMS 2602C.

EMS 2931 - Special Topics in Prehospital Medicine (.5 - 4 credits)

This course provides students with current research and information on a variety of emergency medical topics affecting prehospital medicine. This course serves as an elective for the AS EMS degree program. Specific topics may vary by each course offering.

P000

EMS P335 - Emergency Vehicle Operator Course (N) (16 hours)

This course combines lecture and a driving laboratory to train students in the safe operation of an emergency vehicle. The course demonstrates the requirements of the Florida Department of Health, Division of Emergency Preparedness and Community Support, Bureau of Emergency Medical Oversight, EMS Program that all emergency vehicle operators employed by EMS providers have completed an emergency vehicle driving program. Students (except those on active duty with the military) must possess a valid Florida driver's license to participate.

EMS P375 - EMT Practical Skills Verification (N) (8 hours)

This course consists of a comprehensive practical exam to revalidate an EMT program graduate's EMT practical skills verification that has expired due to the individual's failure to successfully complete the National Registry cognitive exam within one-year of program completion. Student must provide documentation of successful EMT program completion within past 24 months. Student must possess valid healthcare provider CPR certification.

EMS P551 - Advanced Cardiac Life Support (N) (16 hours)

This course is a 16-hour education program for healthcare providers developed by the American Heart Association. The course focuses on recognition and initial care of unstable adult patients and also provides training in the management of adults who have already suffered arrest. ACLS certification is a requirement for paramedic licensure in the State of Florida and certification by the National Registry of Emergency Medical Technicians. Requires current advanced healthcare licensure or certification, or completion of or enrollment in an advanced healthcare education program, or permission of the instructor.

EMS P920 - Prehospital Trauma Life Support (N) (16 hours)

This course is a 16-hour continuing education program for EMS providers developed by the National Association of Emergency Medical Technicians in cooperation with the American College of Surgeons. The course focuses on trauma patients in the prehospital environment and how to identify, manage, and transport these patients with the highest level of care to give them the greatest change of survival. The course includes didactic training on topics such as the kinematics of injury, rapid patient assessment, and pathophysiology. It also includes skill stations with procedures such as rapid extrication, airway management and ventilation, spinal immobilization and pediatric assessment. Students receive a certification valid for a period of four year. Required current healthcare licensure or certification or of enrollment in a healthcare education program, or permission of the instructor.

ENC - ENGLISH

ENC 0017 - Integrated Reading and Writing (N)

This laboratory course provides foundational support for ENC 1101, by enhancing skills in the areas of reading, grammar, and composition. This multimedia based individualized instruction offers the opportunity to review core skills of grammar, mechanics, and rhetoric and helps in developing the comprehension, organization, composition, and editing skills needed for writing and reading at college level.

Credit does not apply toward degree.

Prerequisite: Placement score.

ENC 1101 - English Composition I (3 credits)

This course presents the rhetorical principles of modern and classical essays, which in practical application enable students to compose college level expository and argumentative essays. This course contains a required speech component. Students demonstrate college-level writing skills through multiple assignments. Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

Prerequisite: Student must score into college-level reading and English on placement test or complete ENC 0017 with a grade of "S" or higher.

ENC 1102 - English Composition II (3 credits)

An extension of ENC 1101, this composition course emphasizes research methods and textual interpretation. Students read a variety of texts and demonstrate analytical and critical thinking skills via formally documented essays. ENC 1102 is an intensive writing course.

Prerequisite: ENC 1101 with a grade of "C" or higher, and must place into college-level reading on placement test.

ENC 1107 - Advanced College Writing (3 credits)

This course develops critical thinking through analysis of writings in history, literary theory, philosophy and ethics, psychology, sociology, science, and technology. As an alternative to ENC-1102 (p. 215), this Gordon Rule course requires text analysis, argumentation, and research-based college-level writing skills through multiple assignments. Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

Prerequisite: ENC 1101 with a grade of "C" or higher, and must score into college-level reading on placement test.

ENC 2210 - Technical Writing (3 credits)

This writing course focuses on various methods of composition applicable to technical information. It includes collecting and researching information, analyzing, organizing, formatting, and presenting technical information for specific audiences.

Prerequisite: ENC 1101 with a grade of "C" or higher, and must score into college-level reading on placement test.

ENL - ENGLISH

ENL 2012 - English Literature to 1798 (3 credits)

This course provides an introduction to English literature based upon selected masterpieces from Beowulf to Samuel Johnson. Students demonstrate college-level writing skills through multiple assignments. Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

Prerequisite: ENC 1101 with a grade of "C" or higher, or permission of instructor and student must score into college-level reading on placement test.

ENL 2022 - English Literature after 1798 (3 credits)

This course provides an introduction to English literature based upon selected masterpieces from the Romantic Movement to the present. Students demonstrate college-level writing skills through multiple assignments. Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

Prerequisite: ENC 1101 with a grade of "C" or higher, or permission of instructor and student must score into college-level reading on placement test.

ENL 2330 - Introduction to Shakespeare (3 credits)

This course provides an overview and contextual analysis of Shakespeare's best known plays. It discusses techniques of characterization, thematic relevance, and similarities between Shakespeare's culture and our own, including his current iconic stature.

Prerequisite: ENC 1101 with a grade of "C" or higher, and students must score into college-level reading on placement test.

ENY - AGRICULTURE PRODUCTION TECHNOLOGY

ENY 1002 - Fundamentals of Entomology (3 credits)

This course teaches the fundamental principles of entomology. Topics include insect morphology, development, specialization, ecology and behavior.

EPI - EDUCATOR PREPARATION INSTITUTE

EPI 0001 - Classroom Management (3 credits)

This course teaches how to maintain a classroom. Topics include record keeping, classroom management, school safety, Sunshine State Standards into curriculum, development of lesson plans, parent conferences, assessment techniques, implications of FCAT and other standardized tests, professional ethics, and school law and the teacher. A minimum of a Baccalaureate Degree required.

EPI 0002 - Instructional Strategies (3 credits)

This course teaches the application of a variety of instructional strategies based on learning styles, cooperative and collaborative learning, accommodations for exceptional students, and the infusion of technology into lesson plans. A minimum of a Baccalaureate Degree required.

EPI 0003 - Technology (3 credits)

This course teaches the use of technology as an integral part of the teaching and learning process. Instruction is provided in commonly used software suites and on the Internet. A minimum of a Baccalaureate Degree required.

EPI 0004 - The Teaching and Learning Process (3 credits)

This course teaches a foundation in various learning theories as applied in the instructional process. Topics include learning theories, motivation and persistence, intelligence, exceptionalities, standardized testing, critical thinking, multiple intelligences, and second language acquisition. A minimum of a Baccalaureate Degree required.

EPI 0009 - Foundations of Language and Cognition (3 credits)

This course teaches language structure and function and cognition of phonemic awareness, phonics, fluency, vocabulary, and comprehension. This instruction is grounded is scientifically-based research.

EPI 0010 - Foundations of Research-Based Practice (3 credits)

This course teaches language structure, function and cognition of phonemic awareness, phonics, fluency, vocabulary, and comprehension; and is grounded in scientifically-based research. A minimum of a Baccalaureate Degree required.

EPI 0011 - Foundations of Assessment (3 credits)

This course teaches the role of assessments in guiding reading instruction and instructional decision-making for reading progress of struggling readers.

EPI 0020 - Professional Foundations (2 credits)

This course teaches the foundation for becoming a productive member of the teaching profession. Topics include history and philosophy of education, school governance, school finance, school law, ethics, purpose of schools, and continuing professional development. A minimum of a Baccalaureate Degree required.

Prerequisite: EPI 0940.

EPI 0030 - Diversity (2 credits)

This course teaches the variety of backgrounds and cultures that may be found in a typical classroom and how social class, religion, language, gender differences, culture and ethnicity, physical differences, and prejudices have an effect on how a student learns. A minimum of a Baccalaureate Degree required.

Prerequisite: EPI 0945.

EPI 0940 - Field Experience (1 credit)

This course provides a 15 hour field experience segment in a public, charter, or accredited private school for the EPI-0020 (p. 217) module. A minimum of a Baccalaureate Degree required.

Prerequisite: EPI 0020.

EPI 0945 - Field Experience (1 credit)

This course provides a 15 hour field experience segment in a public, charter, or accredited private school for the EPI-0030 (p. 217) module. A minimum of a Baccalaureate Degree required.

Prerequisite: EPI 0030.

ETD - DRAFTING AND DESIGN TECHNOLOGY

ETD 1316 - Orientation to AutoCAD Applications (.5 credit)

This course teaches overall concepts, program orientation, and basic instructions in the various commands, methods and techniques of application-based computer-aided drafting systems using AutoCAD as a base. Software operations are stressed and the student completes a series of tutorials, exercises, and drawings.

ETD 1320 - Introduction to AutoCAD (3 credits)

This course teaches AutoCAD software for 2-Dimensional technical drawings. Elementary procedures, use of menus and ribbons, and demonstration of drawing commands are presented. The student uses this knowledge in the construction of numerous technical drawings. Extensive hands-on practice using AutoCAD software is required as students complete a series of tutorials, exercises, and drawings.

Prerequisite: MAT 1033.

ETD 1842 - 3D Visualization with AutoCAD (3 credits)

This course teaches 3D Studio VIZ, a 3D visualization software. This course covers the creation of 3D models combined with intuitive multimedia tools for the creation of presentation graphics. Methods of modeling, creation of lighting systems, application of materials and production of rendered images along with special effects are among the topics covered.

ETD 2340 - AutoCAD Level 2 (3 credits)

This course teaches intermediate AutoCAD commands and concepts especially highlighting 3D drawings and renderings. Emphasis is on implementing productivity tools in the design process through various drawing, editing, and display techniques.

Prerequisite: ETD 1320.

ETD 2364 - 3D Modeling with Solidworks (3 credits)

This course teaches mechanical design utilizing advanced computer-aided drafting techniques with the current Solidworks software. Three-dimensional coordinate systems, parametric modeling, wire frame development, surface generation, and multiple-part/assembly construction techniques are among the topics covered as students complete a series of tutorials, exercises, and drawings.

ETD 2365 - Computer Aided Drafting - Mechanical (3 credits)

This course teaches CAD for mechanical engineering using the current Autodesk's Inventor software, a feature-based parametric solid modeler with many advanced features for 3D parts and assemblies. The students generate 2D views and 3D animations from the drawings and models. Topics include instruction in all four modules: part modeling, assembly creation, surface formation, and the drawing manager system.

Prerequisite: ETD 1320 .

ETD 2395 - Computer Aided Drafting - Architectural (3 credits)

This course teaches architectural drawing using current Autodesk software with specialized CAD commands applicable to the architectural field. The architectural module is used in conjunction with AutoCAD to complete the required assignments, which include real world examples.

Prerequisite: BCN 1250 and ETD 1320 or permission of instructor.

ETD 2551 - Computer Aided Drafting - Civil (3 credits)

This course teaches how to develop civil engineering drawings using current AutoCAD Civil Engineering application software. Students learn terminology and complete tutorials and drawing assignments which include real world examples in the field of civil engineering. Command of the application software is stressed along with file management and plotting techniques.

Prerequisite: ETD 1320 or permission of instructor. .

ETD 2554C - Computer Aided Drafting - Surveying (3 credits)

This course teaches how to develop survey drawings using AutoCAD based survey application software. Students complete advanced problems with state plane coordinate transformation, traverse balancing, land surveys, and site layout. Field operations are also included for real world projects. Commands of the application software are stressed along with file management and plotting techniques.

Prerequisite: ETD 1320 or permission of instructor.

ETD 2930 - Special Topics in Drafting (1 - 3 credits)

This course teaches computer-aided drafting topics of special and current interest. Main areas of study include technical updates of CAD software along with exploration of newly developed processes or CAD software pertaining to specialized engineering disciplines.

Prerequisite: ETD 1320 or ETD 2364 and permission of instructor.

ETI - DRAFTING AND DESIGN TECHNOLOGY

ETI 1000 - Industrial Plant Tools and Equipment (3 credits)

This course teaches the skills necessary to properly select, inspect, use and care for the tools, test equipment, and lifting/handling equipment commonly used in the performance of assigned tasks in an industrial plant setting.

ETI 1701 - Industrial Safety (3 credits)

This course teaches the knowledge and skills to recognize hazardous situations in industrial plants and the precautions to be observed and practiced to perform work activities safely. Among the topics covered are industrial safety hazards, electrical safety, working with chemicals, gases, and solvents, protective equipment, and safe working conditions.

ETI 1805C - Introduction to Rigging and Lifting (3 credits)

This course prepares students for careers in industrial maintenance that involve mechanical maintenance of heavy equipment. Students learn how to determine rigging requirements for lifts, select equipment, calculate loads, and safely operate different types of lift equipment.

Prerequisite: ETI 1000, ETI 1701.

ETI 2315C - Fluid and Pneumatic Instrumentation (3 credits)

This course teaches principles of pneumatic instrumentation and control loops encountered in industry. Transmitter, indicator, positioner, controller, and actuator theories are covered in depth. Curriculum also covers operation, arrangement, and calibration methodologies.

Prerequisite: MAC 1105.

ETI 2408C - Welding Processes (3 credits)

This course teaches basic welding processes and techniques for entry-level maintenance technician positions. Students learns welding safety, fundamental practices of shielded arc welding, arc welding with consumable and non-consumable electrodes, brazing, soldering, and plasma cutting.

Prerequisite: ETI 1000, ETI 1701 .

ETI 2425C - Metallurgical Properties and Dynamics (3 credits)

This course teaches principles of metallurgy. Curriculum includes metal properties, treatment and transformation processes, elasticity, deformation, and failure. Thermal, electrical, magnetic, physical, and chemical properties of steel are covered.

Prerequisite: MAC 1105, PHY 1020 .

ETI 2451C - Mechanical Maintenance for Power Plants (3 credits)

This course prepares students for mechanical and industrial maintenance operations. Students learn how to read and interpret drawings and blueprints, how to apply lubrication, how to perform torque operations, and the correct procedures for maintaining sealants, o-rings, and gaskets in power plant environments.

Prerequisite: ETP 2231C.

ETI - ELECTRICAL POWER TECHNOLOGY

ETI 1000 - Industrial Plant Tools and Equipment (3 credits)

This course teaches the skills necessary to properly select, inspect, use and care for the tools, test equipment, and lifting/handling equipment commonly used in the performance of assigned tasks in an industrial plant setting.

ETI 1701 - Industrial Safety (3 credits)

This course teaches the knowledge and skills to recognize hazardous situations in industrial plants and the precautions to be observed and practiced to perform work activities safely. Among the topics covered are industrial safety hazards, electrical safety, working with chemicals, gases, and solvents, protective equipment, and safe working conditions.

ETI 1805C - Introduction to Rigging and Lifting (3 credits)

This course prepares students for careers in industrial maintenance that involve mechanical maintenance of heavy equipment. Students learn how to determine rigging requirements for lifts, select equipment, calculate loads, and safely operate different types of lift equipment.

Prerequisite: ETI 1000, ETI 1701.

P000

ETI P931 - Manufacturing Production Tech Certification (N)

This course provides entry-level employees with knowledge and skills preparing for the Manufacturing Skills Standards Council (MSSC) Certified Production Technician credential. Students are awarded the CPT credential at successful completion of all four (4) certification exams.

ETM - BUILDING CONSTRUCTION TECHNOLOGY

ETM 1111 - Energy in Building Design (3 credits)

The student studies the Florida Energy Codes, and learns to do energy calculations required for permitting a structure.

ETM - ELECTRICAL POWER TECHNOLOGY

ETM 2315C - Pneumatics and Hydraulics (3 credits)

This course teaches typical pneumatic indication and control loops encountered in industry. Topics include transmitter, indicator, positioner, controller and actuator theory. Operation, arrangement and calibration methodologies are also covered in the laboratories.

Prerequisite: MAC 1105.

ETP - ELECTRICAL POWER TECHNOLOGY

ETP 1220 - Power Plant Fundamentals (3 credits)

This course teaches the theory of operation of power plants. Additionally, the student is presented with instruction in industrial safety and general administrative procedures for completing routine tasks.

ETP 1230 - Power Plant Systems (3 credits)

This course teaches the fundamentals of the major systems and components of a nuclear power plant.

ETP 1420 - Solar Thermal Systems (3 credits)

This course teaches technical development background, essential theory, principles and the future of solar thermal systems. Topics covered are solar fundamentals, solar water heating systems and components, systems installation, check-out and commissioning procedures, troubleshooting and repair, solar pool heating systems, and code and safety issues.

ETP 2210 - Radiation Fundamentals (3 credits)

This course teaches basic nuclear power plant systems and components. Topics include fundamentals of radioactivity, radioisotopes and radioisotope properties (use, decay mode, emissions, interaction with matter, shielding, half-life, biological effects, and risks associated with exposure to ionizing radiation), and systems that produce isotopes (reactors and accelerators). Students find and determine pertinent properties of radioisotopes and how these properties affect their usage and control.

ETP 2211 - Radiation Instrumentation (3 credits)

This course teaches how to safely and properly use radiological survey and analysis instrumentation, calibration sources, and sample collection equipment when monitoring radiation and dose. Students select appropriate monitoring instrumentation for given radionuclide(s) and/or workplace conditions, learn how to determine if the instrument is calibrated and in proper working order, and perform material and equipment surveys, workplace surveys, and environmental monitoring.

ETP 2212 - Radiation Detection Principles (3 credits)

This course examines biological effects and risks associated with exposure to ionizing radiation, radiation detection and measurement principles, radiological survey and analysis instruments, radioactivity and radioactive decay, sources of radiation, and environmental monitoring for radiation. Students learn stochastic versus deterministic effects, units of exposure, dose and dose equivalent, external and internal dosimetry, control of external and internal exposure, and detection and instrumentation systems for measuring dose.

ETP 2213 - Radiological Safety and Protection (3 credits)

This course examines concepts and skills for ensuring and maintaining safety in the use of radioactive materials, with an emphasis on implementing ALARA principles. Concepts of time, distance, shielding, and protective clothing to minimize dose exposure in a variety of situations (both routine and off-normal) within radiological environments are covered. Students learn sources of radiation, biological effects and risks associated with exposure to ionizing radiation, radiological protection standards, external exposure control, contamination control, airborne radioactivity control, and conducting and monitoring of radiological work.

ETP 2219 - Radiation Protection/Capstone Project (3 credits)

This course teaches principles of radiological incident evaluation and control, decontamination, and radioactive material control. Students review radiation protection problems embedded in different environments, particularly in those around nuclear power reactors. Students solve problems related to radiological coverage of jobs and high-risk activities such as outages, planning for protection from hazardous radiation, monitoring or activities in radioactive zones, and responding to emergencies.

Prerequisite: CHM 1020, ETP 2210, ETP 2211, ETP 2212, ETP 2213.

ETP 2231C - Power Plant Machines and Components I (3 credits)

This course prepares students for careers in industrial and/or power plant mechanical maintenance. Students learn the principles, concepts, and applications of various mechanical systems encountered in industrial applications, how to identify basic systems and components encountered in power plants, how to troubleshoot equipment problems, and basic procedures involved in maintaining and replacing component parts.

Prerequisite: ETP 1230.

ETP 2232C - Power Plant Machines and Components II (3 credits)

This advanced level course teaches additional concepts and applications of various mechanical systems encountered in industrial environments. Students identify systems and components supporting power generation and learn how to troubleshoot equipment problems. Basic procedures involved in maintaining and replacing component parts are also covered.

Prerequisite: ETI 1701, ETP 2231C.

ETP 2410 - Solar Photovoltaic Systems (3 credits)

This course teaches how photovoltaic (PV) systems work, how to determine the size of PV system needed for a certain application, and how to install and connect the PV system to the electrical grid. This course requires an understanding of DC and AC electrical theory.

ETP 2930 - Special Topics in Electrical Power Technology (3 credits)

This course covers a variety of technical and organizational skills of the electrical power industry that are required as different seasonal needs emerge. Learning outcomes are defined based on training needs of the maintenance and radiation protection cohorts. Emphasis is placed on industry standards (ISO, INPO and others), safety (OSHA and others), tools and equipment use, processes, quality assurance, and troubleshooting.

ETP 2941 - Professional Internship for Maintenance Technicians (2 credits)

This course offers opportunities to work in a utility or corporation that has an on-the-job training program if they meet the employment criteria of these companies. Students work on assignments pertinent to their career track of choice under the guidance and supervision of experienced professionals. Permission of instructor required.

Prerequisite: EET 1025C.

ETS - ENGINEERING TECHNOLOGY

ETS 2210 - Introduction to Photonics (3 credits)

This course teaches the fundamental principles of optics, electro-optics, lasers, and fiber optics. The technologies covered in this course can be applied in the fields of electronics, instrumentation, telecommunications, and biomedical equipment. This course also addresses the technical training needs of working professionals required to update their skills with current technologies.

ETS 2215 - Geometrical Optics (3 credits)

This course teaches the theory of light as geometric rays, and pertinent applications of the laws of reflection and refraction from the mathematical, graphical, and

experimental points of view. Lens and mirror aberrations and the study of thick lenses are also part of this course.

Prerequisite: pre/corequisite: ETS 2210.

ETS 2220 - Fiber Optics and Data Communications (3 credits)

This course teaches the technical and business aspects of data communications.It provides comprehensive coverage of technologies used in current data and voice communications along with extensive discussion of emerging technologies such as converged data/voice networks and voice over IP.

Prerequisite: pre/corequisite: ETS 2210.

ETS 2230 - Laser Technologies (3 credits)

This course teaches theory and procedures for the safe use of lasers. Pulsed solid-state lasers are the primary example in laboratory exercises. Topics covered in this class include the shape of laser rods, pumping cavities, flashlamps, resonator cavities, power supplies, and cooling systems.

Prerequisite: ETS 2210.

ETS 2424 - Biomedical Electronics (3 credits)

This course starts with the introduction of the area of biomedical electronics and its importance to the medical field. A brief overview of various parts of the human body and systems are given. The course covers the basis of biomedical instrumentation and measurement techniques. Electrodes, sensors, and transducers used in biomedical field are analyzed in detail. The second half of the course covers a few most important human body systems and the corresponding electronic equipment used to measure different functions of these systems. The following functional systems are analyzed in some detail: the circulatory system, respiratory system, nervous system, and brain functions.

ETS 2436 - Biomedical Instrumentation (3 credits)

This course focuses on the large-scale equipment used in hospitals, emergency rooms, intensive and coronary units, and operating rooms. Students are offered a broad overview of the electronics used in these facilities, their functional role and nodes of operations. Devices such as electrosurgery generators, EEG units, battery operated equipment and waveform display devices are covered in detail. A special emphasis is given to lasers and other optical devices used in medical institutions.

Prerequisite: EET 1025C; pre/corequisite: ETS 2424.

ETS 2520 - Process Measurement Fundamentals (3 credits)

This course is designed for students who will be supporting industrial equipment processes. Students learn typical operations performed in industrial measurement and control loops. Topics include basic physics involved in the measurements and common types of sensors used in industry with emphasis on pressure, temperature, flow, level, and analytical measurement theory.

Prerequisite: EET 1025C.

ETS 2530 - Process Control Technology (3 credits)

This course is designed for students studying systems and associated electronic circuits encountered in the field of electric machinery and industrial controls. Students learn to analyze systems and devices and perform calculations to determine parameters to accurately predict operation. Students examine the concepts and principles of open and closed loop systems, transducers, transformers, transmission, and distribution systems.

Prerequisite: EET 1025C.

ETS 2542 - Programmable Logic Controllers I (3 credits)

This course in programmable logic controllers (PLC) is designed for students preparing for careers in electronics, manufacturing, electrical or industrial technology. Students learn the basic operational concepts common to PLCs, focusing on PLC principles, programming, numbering, numbering systems, data manipulation, math and sequencer instructions.

Prerequisite: EET 2141C.

ETS 2544 - Programmable Logic Controllers II (3 credits)

This course is a continuation of ETS-2542 (p. 221) for students who are familiar with basic PLC operations and concepts. Students learn the skills required to troubleshoot and maintain logic controllers in a simulated industrial environment. Topics include program control instructions, data manipulation instructions, math instructions, sequencer and shift registers, PLC installation and troubleshooting, process control and data acquisition, computer-controlled machines, and processes.

Prerequisite: EET 1025C; pre/corequisite: ETS 2542.

ETS 2550 - SCADA Systems (3 credits)

This course introduces the basic Supervisory, Control And Data Acquisition (SCADA) systems that are widely used in industrial controls. Topics include typical applications uses, common system components, human-machine interface, communication infrastructure, SCADA generational architectures, and security.

Prerequisite: ETS 2544.

ETS 2630 - Manufacturing Processes (3 credits)

This course teaches the fundamental principles of the use of computers to integrate and automate a broad range of engineering and manufacturing functions. Topics covered include manufacturing and process planning, flexible

manufacturing, automation cells, material handling, resource planning (MRP), and just-in-time (JIT) production.

Prerequisite: Pre/corequisite: ETS 2676.

ETS 2676 - Introduction to Robotics (3 credits)

This course teaches the basic principles of industrial electronics, computers, automated equipment, sensors, servo systems, stepper motors, relays and controllers. Students gain practical experience by building and programming a basic robotic system.

Prerequisite: pre/corequsite: ETS 2542.

EUH - HISTORY

EUH 2000 - Western Civilization: Origins to 1485 (3 credits)

This course teaches how the first Western Civilization rose from the Greek peninsula, creating a 'classical' era which set the European stage for a Roman Empire and a Medieval Culture to follow.

Prerequisite: student must score into college-level English and reading on placement test.

EUH 2001 - Western Civilization: 1485 to 1815 (3 credits)

This course teaches how Western Civilization, based in Europe, moved from Medieval Times into a Modern Age and expanded into the Western Hemisphere, Africa and Asia.

Prerequisite: student must score into college-level English and reading on placement test.

EUH 2002 - Western Civilization: 1815 to the Present (3 credits)

This course teaches how western nation-states developed into powerful global empires, dominating the political, economic, cultural and social sectors of 19th and 20th century affairs.

Prerequisite: student must score into college-level English and reading on placement test.

FAS - AGRICULTURE PRODUCTION TECHNOLOGY

FAS 1010 - Introduction to Aquaculture (3 credits)

This course teaches the fundamentals of aquaculture. Topics include aquaculture species, culture systems, production facilities, career opportunities, job requirements and tasks performed in the field of aquaculture.

FAS 1400 - Introduction to Hydroponics (3 credits)

This course teaches the basic principles of hydroponic plant production. Topics include system designs, site considerations, equipment components, and nutrient delivery and testing.

FAS 1402 - Introduction to Aquaponics (3 credits)

This course teaches the basic principles of aquaponics production. Topics include system design, site considerations, equipment components, species selection and nutrient delivery and testing.

FAS 2020 - Principles of Fish Aquaculture (4 credits)

This course teaches methods and techniques used in the aquaculture of fresh and saltwater fish species. Topics include biology, anatomy and life cycles, environmental requirements, production systems technology, stocking and feeding practices, harvest and processing, economics and marketing, and regulations.

FAS 2150 - Principles of Crustacean Aquaculture (4 credits)

This course teaches methods of culturing crustacean species with an emphasis on marine shrimp. Topics include biology and anatomy, nursery and growout systems technology, stocking and feeding practices, harvest and processing, economics and marketing, and regulations.

FAS 2151 - Principles of Molluscan Aquaculture (4 credits)

This course teaches methods of culturing molluscan species with an emphasis on hard clams. Topics include comparative biology, land and field based system design and operation, feeding and growth parameters, sieving, sorting and record keeping, production strategies, predation, marketing, economics, leasing and regulations.

FAS 2252 - Aquatic Animal Health Management (4 credits)

This course teaches recognition of diseases in aquaculture species. Basic diagnostics and treatment methods are covered. Prevention and biosecurity through proper management are emphasized. Students are strongly advised to take a biology course and FAS-1010 (p. 222) before attempting this course.

FAS 2412 - Water Quality, Systems and Operations (4 credits)

This course teaches aquaculture water quality and culture systems focusing on aspects of recirculating system components in use today. Topics include water quality parameters, measurement and analysis, solids removal, microfiltration and screens, biofilters, aeration, design, flow and carrying capacity, and new innovations.

FAS 2930 - Special Topics in Aquaculture (1 - 4 credits)

This course focuses on selected current topics in aquaculture.

FAS 2940 - Aquaculture Internship (1-3 credits)

This course provides on-the-job-training in the aquaculture industry. Supervised training in industry tools, techniques, practices and problems at selected aquaculture facilities with weekly evaluations included.

Prerequisite: minimum of 6 credits in FAS courses; FAS1010 or FAS2412.

FES - PUBLIC ADMINISTRATION

FES 3003 - Emergency Services Public Policy (3 credits)

This course examines many facets of policy development and implementation in emergency services including the legal foundations from which public service agencies operate. An emphasis is placed on the politics of managing emergency service organizations and operations, the social aspects of government's role in public safety, employment and personnel issues, the roles of emergency service providers and legislative and political influences.

Prerequisite: PAD 3003, PAD 3034.

FES 3803 - Multi-Agency Incident Command (3 credits)

This course examines the framework for multi-agency coordination in the response to and mitigation of large-scale events, both man-made and natural. The course focuses on command and control of law enforcement, fire and emergency services organizations in the response to large-scale incidents. Emphasis is placed on the vertical coordination among federal, state, local and non-government resources.

FFP - FIRE SCIENCE

FFP 0010 - Firefighting Academy I (N) (206 hours)

This course introduces the student to the basic skills and techniques used in firefighting. Classroom instruction includes a variety of fire related topics which are reinforced and enhanced through practical skills activities. Upon completion, the student is eligible to receive certification as a volunteer firefighter and may elect to continue training in Firefighting Academy II to pursue state certification as a firefighter. Permission of the Fire Science Director required.

FFP 0020 - Firefighting Academy II (N) (192 hours)

This course is the second part of the Basic Fire Recruit Academy and prepares students for employment as a certified firefighter in the State of Florida. The delivery of instruction includes a variety of training in the practical skills necessary for the mastery of the basic competencies required in the program. Upon successful completion of this course, the student is eligible to take the Bureau of Fire Standards and Training written and practical examination.

Prerequisite: FFP 0010.

FFP 1000 - Principles of Emergency Services (3 credits)

This course introduces the history of fire services in the United States, including philosophy and traditions of the fire service, and career orientation.

FFP 1040 - Private Fire Brigade (3 credits)

This course contains basic firefighting principles for the industrial worker, including fire behavior, hose lines and nozzles, protective breathing apparatuses, ladders, ventilation, water distribution systems, and extinguishers.

FFP 1109 - Principles of Fire and Emergency Services Safety and Survival (3 credits)

This course teaches the basic concepts of occupational health and safety as it relates to emergency service organizations. Topics include risk evaluation and control procedures for fire stations, training sites, emergency vehicles, and emergency situations involving fire, EMS, hazardous materials, and technical rescue. Upon completion of this course, students should be able to establish and manage a safety program in an emergency service organization.

FFP 1120 - Building Construction for Fire Service (3 credits)

This course presents information about construction as it relates to the spread of fire and/or inspection. It reviews general information about most types of structures. One of five courses for Fire Inspector and one of eight courses for Fire Officer.

FFP 1505 - Fire Prevention (3 credits)

This course familiarizes students with state and local statutes and ordinances relating to fire prevention, survey national fire codes, Underwriters Laboratories, South Florida Building codes, and N.F.P.A. manuals. The course presents inspections, surveys, and report findings. One of five courses for Fire Inspector and one of eight courses for Fire Officer.

FFP 1521 - Plans Examination and Blueprint Reading (3 credits)

This course presents plans-examination process and blueprint reading as it pertains to the prospective Fire Inspector. One of five courses for Fire Inspector.

FFP 1540 - Fire Protection Systems (3 credits)

This course explains the various types of private fire protection systems, including automatic sprinklers and standpipes. This course is part of the State Inspectors program. One of five courses for Fire Inspector and one of eight courses for Fire Officer.

FFP 1610 - Fire Behavior and Combustion (3 credits)

This course teaches the theories and fundamentals of how and why fires start, spread, and how they are controlled.

FFP 1812 - Engine and Truck Company Fireground Operations (3 credits)

This course reviews operations of the Engine and Truck Company on the firegrounds. Students study the objectives of firegrounds operations, duties of company personnel, apparatus positioning, and building coverage related to occupancy.

FFP 2510 - Building and Fire Codes I (3 credits)

This course studies and compares national, state, and local building and fire codes, emphasizing local laws and ordinances pertaining to building construction and design. One of five courses for Fire Inspector.

FFP 2720 - Company Officer Leadership (3 credits)

This course presents leadership skills including the topics of management systems and theories, motivation, communication, and individual behavior for firefighters soon to be fire officers. One of eight courses for Fire Officer.

FFP 2740 - Fire Service Course Delivery (3 credits)

This course emphasizes techniques having wide applications to teaching situations, as well as teaching devices for specific areas. The course stresses measuring teaching effectiveness, communication of ideas, and methods of strengthening retention of knowledge and skills. One of eight courses for Fire Officer.

FFP 2741 - Fire Service Course Design (3 credits)

This course teaches the prospective fire science instructor the principles of effective curriculum design to include issues related to teaching the adult learner and basic elements of student-centered learning. Designing courses that address learning, performance, and behavioral objectives are presented. One of eight courses for Fire Officer.

FFP 2770 - Legal Issues for the Fire Service (3 credits)

This course teaches the federal, state, and local laws that regulate emergency services, national standards influencing emergency services, standard of care, tort, liability, and a review of relevant court cases.

FFP 2781 - Fire Department Organization and Administration (3 credits)

This course presents the principles of management theory, and its application to the fire service. The course is intended for officers and managers whose area of responsibility encompasses long and short range planning, budgeting, and administration.

FFP 2801 - Incident Command System (3 credits)

This course teaches the essential skills and principles associated with an Incident Command System (ICS). Emphasis is placed on the organizational development of the ICS as an incident management tool. Instruction includes the logistical and fiscal considerations, incident planning, and the management of incidents with needs that may vary depending on the magnitude of the event.

FFP 2810 - Firefighting Tactics and Strategy I (3 credits)

This course teaches the skills necessary to access, evaluate and extinguish a fire with maximum utilization of manpower, equipment and apparatus. Emphasis is on pre-planning, fireground decision-making skills and problem solving. Firefighting experience required. One of eight courses for Fire Officer.

FFP 2811 - Firefighting Tactics and Strategy II (3 credits)

This course teaches the skills to effectively and efficiently respond to a crisis through the advanced study of fire attack. Instruction focuses on the importance of strategy and tactics in a fire situation with a focus on critical thinking. One of eight courses for Fire Officer.

Prerequisite: FFP 2810.

FFP 2820 - Principles of Emergency Management (3 credits)

This course teaches all aspects of emergency preparedness and planning related to natural and man-made disasters, and basic principles of emergency management. Planning concepts and the planning process are discussed.

FFP 2840 - Disaster Operations (3 credits)

This course teaches all aspects of disaster operations with an emphasis on disaster response and recovery. Tactics, techniques and procedures for meeting the needs of disaster victims, providing mass care, and organizing and maintaining response operations are examined.

FFP 2949 - Internship in Fire Science (1 - 4 credits)

This course provides on-the-job experience wherein students are given the opportunity to strengthen and develop expertise in a practical setting within the Fire Science field. The student and instructor develop a training plan outlining the expected student outcomes. Student

progress is monitored and evaluated weekly by the instructor and the student's agency supervisor. The student completes a written project related to the internship.

P000

FFP P931 - Fire Science Special Topics (N) (8 - 40 hours)

This course covers current topics of interest and updated information for employed firefighters.

FIN - ACCOUNTING

FIN 1100 - Personal Finance (3 credits)

This course teaches the expertise to make informed financial decisions. It is divided into five parts and each part covers one specific component needed to develop a financial plan. Continuity is provided throughout the course to show how personal finance decisions in the early chapters have an effect on other decisions in the later chapters.

FIN 2001 - Introduction to Finance (3 credits)

This course is an introduction to the theory and practice of financial management that focuses on the practitioner, with particular emphasis for the small to medium size business owner, as well as one who performs in a middle management capacity in a large firm. The course prepares students for employment in areas such as business development, installment, credit, commercial loans, or public relations.

FIN 3400 - Financial Management (3 credits)

This course teaches a firm understanding of all elements of organizational finance, from budget development to finance management, and from procurement to accounting and auditing. In addition, the course explores alternative sources of finance in various types of public and private organizations. A key component of the course is the student's preparation and presentation of an organizational budget.

Prerequisite: ACG 2001 and ACG 2011; or ACG 2071; or FIN 2001.

FIN 3403 - Corporate Finance (3 credits)

This course provides an overview of the acquisition, financing, and management of business assets. An integrated perspective on financial markets, financial institutions, and financial management is included along with how businesses meet their financial goals. Topics include securities markets; evaluation of securities; financial statement analysis; financial planning and forecasting; the time value of money; risk and return; valuation; weighted average cost of capital; debt and equity capital structures; capital budgeting; ratio analysis; cash flow; and miscellaneous financial decision-making techniques.

Prerequisite: ACG 2071, ECO 2013, ECO 2023.

FOS - RESTAURANT MANAGEMENT

FOS 2201 - Food Service Sanitation Management (3 credits)

This course acquaints students with the Food and Drug Administration's Food Code as well as the challenges and opportunities facing hospitality managers in the area of sanitation management. It presents a systems approach to sanitation management, utilizing the Hazard Analysis Critical Control Point Program (HACCP), and it provides a basic understanding of quality sanitation management.

FRE - FRENCH

FRE 1120 - Elementary French I (4 credits)

This course teaches fundamentals of speaking, reading, and writing. The course also focuses on introducing students to the cultures of the French-speaking world. This course is for students who have had less than 2 years of high school French. This course can be used toward the foreign language requirements for university admission.

Prerequisite: Student must score into college-level English on placement test.

FRE 1121 - Elementary French II (4 credits)

This course is beginning college - level for students who have had 2 years of high school French. It is a continuation of FRE-1120 (p. 225) and further develops students' communicative competencies in the four skills areas. This course can be used toward the foreign language requirements for university admission.

Prerequisite: FRE 1120 or permission of instructor.

FSS - RESTAURANT MANAGEMENT

FSS 1203C - Quantity Food Production I (3 credits)

This course teaches the fundamental concepts, skills and techniques involved in the management of resources; use of recipes; use and care of equipment; and evaluation of food products. Special emphasis is given to practical demonstrations in breakfast cookery; salads; dressings; cold sauces; sandwiches; and safety and sanitation principles.

FSS 1240C - Classical Cuisine (3 credits)

This course teaches the skills and management theories involved in classical dishes. Concentration is on the basics of classical cuisine, such as stocks, soups, and sauces.

Attention is given to the management tasks of portion control, costing, and presentation. Special emphasis is given to classics such as emulsion sauces, thickening agents, and sauces derived from Mother sauces.

Prerequisite: FOS 2201, FSS 1203C, FSS 2251.

FSS 1246C - Baking and Pastries I (3 credits)

This course teaches the terminology and practical techniques of basic baking, including ingredient identification, volume, weights and measures, and mixing types. Emphasis is on connecting the function of ingredients to a range of basic baked products, including measurements and formulas; functions of baking ingredients; safety and sanitation; yeast dough; quick breads; pastry dough; and a variety of cakes.

Prerequisite: FOS 2201.

FSS 1930 - Creative Culinary Cooking (.5 - 3 credits)

This course teaches applied food preparation through special topics which may include ethnic specialties, holiday meal preparation, international cuisine, baking, and pastries.

FSS 2204C - Quantity Food Production II (4 credits)

This course teaches methods of vegetable, starch, meat, fish and poultry cookery, including the basic cooking techniques: sauteing, roasting, poaching, braising, and deep frying.

Prerequisite: FSS 1203C.

FSS 2206C - Quantity Food Production III (4 credits)

This course prepares students to identify primal cuts of meat and poultry; how they are processed into restaurant portion-size cuts; identification of fishes and seafood quality; cooler management techniques; and butchery techniques. Speed scratch and hot food preparations are reviewed and practiced.

Prerequisite: FSS 2204C.

FSS 2242C - International and Regional Foods (3 credits)

This course places emphasis on learning to use various condiments and seasonings that are indigenous to different parts of the world in food preparation. Topics may include Far East, Middle Eastern, Mediterranean, North African, Continental, and American cuisine.

Prerequisite: FSS 1246C, FSS 2204C.

FSS 2247C - Baking and Pastries II (3 credits)

This course enables the student to apply advanced techniques in the baking science and be able to demonstrate production management procedures in the pastry department. Students prepare a variety of pies, tarts, meringues, and modern trend desserts, such as low-fat desserts. Basic cake decorating skills and an introduction to chocolate and dessert presentation are covered.

Prerequisite: FSS 1203C, FSS 1246C.

FSS 2248C - Pantry and Garde Manger (3 credits)

This course introduces three main focuses of the cold kitchen: reception food, a la carte appetizers, and grand buffet arrangements. Students learn to prepare canapes, hot and cold hors d'oeuvres, appetizers, pates, galantines, terrines, and salads. Curing and smoking techniques for seafood and poultry items are practiced. Modern decorating and food arranging techniques for practical and show purposes are emphasized. Students learn techniques on how to sculpture centerpieces using various mediums and ice carving techniques.

Prerequisite: FSS 1246C, FSS 2204C.

FSS 2251 - Food & Beverage Management (3 credits)

This course introduces students to principles in commercial and institutional food and beverage facilities including marketing, menu development, effective cost control in purchasing, pricing, labor and service technique. Procedures, approaches, and techniques of management are explored and developed as they relate to commercial and institutional food and beverage facilities.

FSS 2263 - Food Merchandising and Service (3 credits)

This course is a study of theory and practice in acceptable procedures in serving foods. It includes how to display and merchandise foods in an attractive manner and how to evaluate the food service operation.

FSS 2284C - Catering and Banquet Management (3 credits)

This course teaches the logistics of preparation, production, transportation, and implementation of the catered event, including analysis of typical banquet/event contracts. Students learn to determine cost of the project, including rental and transportation. Emphasis is given to menu planning for various types of banquets, theme buffets, and physical management of floor lay-out and table set-up. Training techniques for supervisors in dining room and banquet service are practiced. Development of stewardship and production checklists is practiced. Permission of department is required.

Prerequisite: FOS 2201.

FSS 2500 - Food and Beverage Cost Control (3 credits)

This course gives emphasis to methods of menu pricing, systems of controlling and accounting for food and beverage costs, and methods of controlling sales income,

through both electronic spreadsheets and manual systems. Permission of department is required.

Prerequisite: FOS 2201.

FSS 2942 - Internship in Culinary Management (1-3 credits)

This course provides students with a planned work-based experience to enhance workplace skills related to their career objectives. Permission of department is required.

Prerequisite: FSS 1203C.

FSS 2950C - Culinary Competition (1-2 credit)

This course introduces the student to Junior Culinary Competitions where they practice skills learned in the culinary and baking-pastry classes. Included in this class are the development of advanced knife skills, teamwork, kitchen organization, menu development, and French classical cuisine following the Escoffier guide. Students also practice the timing elements for cooking and service of the food; taste the texture and flavors of all food being prepared; practice sanitation; and learn how to organize work stations in the kitchen. Permission of department is required.

GCO - GOLF COURSE OPERATIONS

GCO 1402 - Turfgrass Science (3 credits)

This course teaches students the structure and growth patterns of the grass plant and how this information can be used to sustain a dynamic and complex turfgrass community.

GCO 1450 - Integrated Pest Management (IPM) for Turf (3 credits)

This course teaches how to combine proper plant selection, correct cultural practices, monitoring of pests and environmental conditions, biological controls and judicious use of pesticides to manage pest problems in golf courses.

GCO 1611 - Golf Course Shop Management (3 credits)

This course introduces the elements of golf course equipment shop management including shop safety and OSHA regulations and maintaining an effective shop records system.

GCO 1942 - Field Training in Turf Equipment Management (3 credits)

This course introduces business skills and economic principles related to the maintenance of tools and equipment. Permission of instructor required.

GCO 1947 - Golf Course Design Concepts (3 credits)

This course is the study, practice and analysis of landscape design with specific emphasis on grooming and maintaining greens, tees, fairways, roughs and other areas.

GCO 2601 - Materials Calculations (3 credits)

This course teaches students how to measure and calculate the amount of materials needed in golf course and landscape operations. Materials discussed include fertilizers, pesticides, grass seeds, irrigation water, plant materials, and soil amendments.

GCO 2632 - Golf Course Organization and Administration (3 credits)

This course is a detailed analysis of golf course and landscape operations, including personnel, planning, budgeting, purchasing, recordkeeping, labor management and other administrative functions.

Prerequisite: Permission of Instructor.

GCO 2944 - Golf Course Internship (3 credits)

This course provides on-the-job-training in the golf course industry. Supervised training in industry tools, techniques, practices, and problems at selected golf courses with weekly evaluations are included.

Prerequisite: Permission of Instructor.

GCO 2945 - Supervised Work Experience (1 - 4 credits)

This course provides supervised on the job training at selected golf courses. Permission of instructor required.

GEA - GEOGRAPHY

GEA 2000 - World Regional Geography (3 credits)

This course provides a basic knowledge of world geography that enables the student to develop a global perspective. The focus of the course is upon identifying and describing all of the world's principal geographic features, including each of the world's independent countries and their political dependencies as well as the earth's prominent land forms and major bodies of water. The principal geographic, demographic, linguistic, political, and economic features of contemporary sovereign states are described.

Prerequisite: Student must score into college-level English and reading on placement test.

GEB - BUSINESS ADMINISTRATION AND MANAGEMENT

GEB 1011 - Introduction to Business (3 credits)

This course provides an overview of the economic system, the private business sector and its major components. No prerequisite courses or experiences are required for student enrollment.

GEB 1350 - Introduction to International Business (3 credits)

This course teaches understanding of the interdependence of globalized world economy and similarities and dissimilarities between domestic and international business domain.

GEB 2214 - Business Communications (3 credits)

This course is a comprehensive study of various areas of business communication with emphasis on the writing of business letters and reports. The course is designed for business administration and pre-business education students.

GEB 2941 - Applied Internship (3-4 credits)

The purpose of this course is to allow students the opportunity to apply real world work experiences with supervised and evaluated practical work experiences to enhance their workplace skills for their major field objectives. This course requires 75 clock hours of work plus Collegiate DECA participation.

GEB 3035 - Effective Career Management (3 credits)

This course assist students in developing a personal career plan and advanced management skills. Using a thorough self-assessment of personal values, interests and skills, students learn the steps necessary to become an employable individual and retain job status.

GEB - ORGANIZATIONAL MANAGEMENT

GEB 3213 - Business Writing (3 credits)

This course teaches the basics of business writing while reviewing the various kinds of written business correspondence. Students are expected to integrate business decision making and analytical thinking skills into the content. Students must be able to determine solutions to problem-based exercises.

GEB 4891 - Strategic Planning (3 credits)

This course teaches strategic planning and strategy implementation in an organization. Students learn how to perform internal and external audits, identify problems, formulate goals and objectives, develop action plans, and evaluate the effectiveness of the plan. Case studies are used to develop decision-making abilities.

GEB 4930 - Selected Topics in Management (3 credits)

This course teaches the application of management skills through the use of current topics, issues, and trends pertinent to supervisors and managers which are explored and discussed.

GEB 4970 - Senior Management Project (3 credits)

This course provides students with an opportunity to critically investigate and develop explanations or solutions to academically interesting business problems or opportunities through the development of a thesis. The thesis integrates content, knowledge, and skills developed through the Organizational Management Program. Permission to register required.

GER - GERMAN

GER 1120 - Elementary German I (4 credits)

This course teaches the fundamentals of understanding, speaking, reading, and writing the German language with the goal of students reaching the 'Novice High' level of proficiency as defined by the American Council on the Teaching of Foreign Languages. This course can be used toward the foreign language requirements for university admission.

Prerequisite: student must score into college-level English on placement test.

GER 1121 - Elementary German II (4 credits)

This course teaches the fundamentals of understanding, speaking, reading, and writing the German language with the goal of students reaching the 'Intermediate Low' level of proficiency as defined by the American Council on the Teaching of Foreign Languages. This course can be used toward the foreign language requirements for university admission.

Prerequisite: GER 1120 or its equivalent.

GIS - DRAFTING AND DESIGN TECHNOLOGY

GIS 1060 - Introduction to GIS with ArcGIS (3 credits)

This course teaches how to implement Geographic Information Systems (GIS) by utilizing ESRI's (Environmental Systems Research Institute) current ArcGIS software. The curriculum focuses on GIS software and procedures by viewing, analyzing, and producing maps based on various geographic/spatial data including local area information.

GIS 2041 - Introduction to GIS and GPS Applications (3 credits)

This course teaches the basic concepts of geographic information systems (GIS) and global positioning systems (GPS), related software program orientation, and basic procedures in the techniques of these applications. Practical experience in local projects related to agriculture, civil engineering, Everglades Restoration, and government operations are highlighted. The students complete a series of tutorials, exercises, and projects.

Prerequisite: GIS 1060.

GLY - PHYSICAL SCIENCES

GLY 1010 - Introduction to Geology (3 credits)

This course introduces the basic principles of geology, relating to sedimentation, structural deformations, erosion and weathering. Topics covered include identification of rocks and minerals, the rock cycle, historical geology, volcanism, earthquakes, plate tectonic theory, and physical evolution of the Earth. The practical applications of geology in a profession or in a research field are also addressed.

Prerequisite: Students must score into college-level reading on placement test.

GRA - DIGITAL MEDIA

GRA 1121 - Publication Design (3 credits)

This course teaches publication layout and design in the graphics design industry with focus on current software. The curriculum focuses on specific applications of tools and functions of these programs. Students use this integrated publishing package to combine text, pictures, typography, writing, editing, and printing.

GRA 1129 - Visualization Basics (3 credits)

This course teaches how to develop visual skills in drawing, sketching ideas and concepts, and storyboarding. Developing drawing skills with a focus on package design, rendering formats, application of non-digital drawing sketches for advertisements, brochures, and idea development for logos is the primary focus of the class. Students are challenged to render several story board panels. Development of perception, structure, and composition are the primary goals in each project.

GRA 1151 - Illustrator Fundamentals (3 credits)

This course teaches the design and composition of illustrative artwork for print publishing and multimedia graphics using Adobe Illustrator software. The course consists of a series of lessons and projects, covering the tools and functions of this software.

GRA 1206 - Typography (3 credits)

This course teaches typography as a primary tool of all graphic designers. The emphasis of the course is in the elements and anatomy of type and its expressive, technical and visual aspects. This course also teaches typeface, size, leading, line length, headlines, grids, hierarchy and the overall character in developing creative elements. Readability in type is examined in the development of publications - ads, books, brochures, identity systems and posters.

Prerequisite: DIG 1000.

GRA 2152 - Illustrator Level 2 (3 credits)

This course teaches how to create imagery from various sources using the current Adobe Illustrator software. Techniques to enhance or alter existing images and the creation of totally new visuals are covered. The curriculum focuses on intermediate and advanced techniques for print, Web, and other multimedia applications.

Prerequisite: GRA 1151.

GRA 2160 - Digital Animation I (3 credits)

This course teaches motion graphics using Adobe Flash and other animation software. Students work on projects integrating digital assets for presentations in multimedia projects and the Web. Design fundamentals and editing techniques are covered in the production of interactive compositions.

Prerequisite: Pre/corequisite: DIG 1000 or DIG 1115.

GRA 2161 - Digital Animation 2 (3 credits)

This course teaches how to design and created motion graphics. Content includes 2D and 3D tools for compositing, animation, and effects that digital media professionals, web designers, and video professionals use. Fundamentals in the design of composited layers are combined with sophisticated visuals and audio effects for animations. Students are also introduced to the use of digital assets created in object-oriented and digital imaging software.

Prerequisite: DIG 1000, DIG 1115, DIG 2030.

GRA 3102 - Visual Communication I (3 credits)

This course increases awareness and understanding of the impact that images have in a visual message. Explored are design principles and image making techniques including the idea, concept development, information hierarchy, visual metaphors, and composition. Through lectures, examples, and independent research, students gain insight into a variety of major design influences.

Prerequisite: DIG 1000, DIG 1115, DIG 2030, GRA 1129, GRA 1151.

GRA 3154 - Illustration Methods (3 credits)

This course presents theoretical and practical aspects of digital imaging in graphic design. It emphasizes communication through images, visual thinking, creation of a visual language, imaginative use of forms, symbols, and techniques. Topics include a comprehensive exploration of both the message and the medium. Students design high-quality printed portfolio pieces such as design of posters, CD covers, electronic collages and illustrations, Internet Web pages, and other projects of relevance in today's society.

Prerequisite: GRA 3512.

GRA 3209 - Advanced Typography (3 credits)

This course reviews basic principles and teaches advanced principles of typography through exercises and projects. Topics include typographic form and type-and-image in visual communication. Emphasis is placed on terminology, historical origins, form and compositional elements used while designing with type. Problem-solving skills, process and research are stressed. Graphic design principles are reinforced with projects concentrating on typographic detail.

Prerequisite: DIG 1000, DIG 1115, GRA 1129, GRA 1206.

GRA 3512 - Branding and Corporate Identity (3 credits)

This course explores the application of visual identity systems for large, medium, and small companies. Comprehensive research on color symbolism, graphic forms, typography, and design is required. Students design identity systems stressing creative solutions and originality.

GRA 3735 - Multimedia Video Production (3 credits)

This course teaches narrative forms of time-based graphics software and their uses in digital media projects. Visual language content is integrated into web sites, print graphics and other images, animations, video and audio files for multimedia productions. The emphasis is on creating cohesive presentations using effectively diverse digital media in an efficient manner.

Prerequisite: GRA 3512, GRA 3758.

GRA 3758 - Scripting for Web Sites (3 credits)

This course teaches advanced techniques in Web page design. Topics covered include HTML, XML, XHML, DHTML, and Javascript. The use of Cascading Style Sheets (CSS) and database information are emphasized. Students create numerous original and template-based Web page designs for professional applications and e-commerce.

Prerequisite: CGS 1821.

GRA 4116 - Advanced Advertising Design and Graphics (3 credits)

Students create a variety of individual advertisements and creative concepts. After some historic overview, this course emphasizes the analysis and application of design principles for logos and trademarks, brochures and flyers, and newsletters. Other topics include psychology of color, typography, color and black-and-white visuals. The focus is in integrating software skills, art fundamentals, business approaches, and entrepreneurship principles to real-life situations. Students may be dealing directly with outside clients with advanced design projects in visual communications.

GRA 4591 - Art Direction and Creative Process (3 credits)

This course examines the role of the art director in producing multi-faceted design projects. Students work in a team environment in improving leadership, communication, and negotiation skills. Emphasis is placed upon coordinating creative efforts from concept to finished product.

Prerequisite: GRA 3512.

GRA 4930 - Special Topics in Graphic Design (3 credits)

This course teaches computer-aided graphic design topics of special and current interest. Main areas of study include the focus on various issues in the field of graphics design. Students pursue production of digital and traditional projects related to the course.

Prerequisite: permission of instructor required.

GRA 4941 - Digital Media Internship/Practicum (3 credits)

This course offers practical experience in the application of graphic design knowledge acquired in the classroom. Students work in a digital media related business or independently as a consultant to an established business with varied graphics needs. Students are required to work a minimum of 100 unpaid hours, maintain information log sheets, secure samples of their work, satisfy two employer evaluations, and produce a resume and a portfolio. This course gives trained students the opportunity to work in a digital media related business prior to graduation.

Prerequisite: DIG 3375 or GRA 3512 or permission of instructor.

GRA 4950 - Digital Media Portfolio (3 credits)

This course focuses on the development and execution of an advanced digital media portfolio with emphasis on printed and digital materials, including an online format. Topics include the creation of a personal business packet and self promotional pieces. Interview and job search skills are discussed and developed. Individual assignments are

given to strengthen and round out each portfolio and expand skills in 3D modeling, animation, and digital compositing. Students interview industry professionals on-site, present a class seminar, and organize a video/multimedia exhibit. Guest lecturers review student work and advise on career opportunities.

Prerequisite: DIG 3375 or GRA 3512 or permission of instructor.

GRA 4954 - Digital Media Capstone Project (3 credits)

This course teaches the development of a personal Web site to showcase the student's professional portfolio, design philosophy and credentials. Students enrolling in this course are required to launch a Web site with a proprietary URL on a commercial server prior to the completion of the course. Students are evaluated on the appropriateness and level of completion of the Web site, and on the conceptual, formal and technical development of their portfolio. Permission to register required.

Prerequisite: GRA 3512 or DIG 3375; pre/corequisite: GRA 4950 .

GRA - GRAPHIC DESIGN

GRA 1121 - Publication Design (3 credits)

This course teaches publication layout and design in the graphics design industry with focus on current software. The curriculum focuses on specific applications of tools and functions of these programs. Students use this integrated publishing package to combine text, pictures, typography, writing, editing, and printing.

GRA 1151 - Illustrator Fundamentals (3 credits)

This course teaches the design and composition of illustrative artwork for print publishing and multimedia graphics using Adobe Illustrator software. The course consists of a series of lessons and projects, covering the tools and functions of this software.

GRA 2111C - Graphics (3 credits)

This course introduces the student to printing techniques with emphasis on the layout process using hand and computer methods. The design elements and principles are stressed as they apply to the graphic process.

GRA 2130 - Presentation Technology (3 credits)

This course teaches techniques to enhance presentations using digital video, motion graphics, audio editing, and content development. Audio, video, and current cutting-edge technologies are explored. Course topics include targeting presentations, creating visual aids, using audio and video equipment, and desktop presentation software/hardware. Students develop a business, education, or corporate communications project featuring an opening impact visual, informational content, and closing that is consistent with the message. The emphasis is on using the most effective media to fit the corresponding imagery. Video, animation, typographic effects, backgrounds, and effective sound and composition are some of the elements students consider in the development of their presentations.

Prerequisite: DIG 1000, DIG 1115.

GRA 2152 - Illustrator Level 2 (3 credits)

This course teaches how to create imagery from various sources using the current Adobe Illustrator software. Techniques to enhance or alter existing images and the creation of totally new visuals are covered. The curriculum focuses on intermediate and advanced techniques for print, Web, and other multimedia applications.

Prerequisite: GRA 1151.

GRA 2160 - Digital Animation I (3 credits)

This course teaches motion graphics using Adobe Flash and other animation software. Students work on projects integrating digital assets for presentations in multimedia projects and the Web. Design fundamentals and editing techniques are covered in the production of interactive compositions.

Prerequisite: Pre/corequisite: DIG 1000 or DIG 1115.

GRA 2161 - Digital Animation 2 (3 credits)

This course teaches how to design and created motion graphics. Content includes 2D and 3D tools for compositing, animation, and effects that digital media professionals, web designers, and video professionals use. Fundamentals in the design of composited layers are combined with sophisticated visuals and audio effects for animations. Students are also introduced to the use of digital assets created in object-oriented and digital imaging software.

Prerequisite: DIG 1000, DIG 1115, DIG 2030.

GRA 2170 - Introduction to Advertising Design and Graphics (3 credits)

This course teaches the conceptual skills to create advertisements and related graphics. A historical perspective covers the evolution of advertising trends, past and present. The primary focus is on designing within specifications for print - trim size, live area, and bleed size for designing advertisements for magazines. Subjects covered include creative headline design, typographic style, visual content in photography, logo placement, color schemes, formatting, grid system organization, innovative communication design in the selection of paper weight and style, ink (PMS System) varnishes, coating, die-cuts, and embossments. Continuity and composition are the basic components that students explore in their concepts.

Prerequisite: DIG 1000, DIG 1115.

HCP - NURSING - PATIENT CARE TECHNICIAN - MEDICAL ASSISTING

HCP 0120 - Nursing Assistant - Clinical (N) (40 hours)

This course teaches the clinical application of nursing assistant classroom theory and laboratory skills practice to prepare the student for the state certification exam for the nurse assistant.

HCP 0122 - Nursing Assistant - Classroom and Lab (N) (125 hours)

This course teaches the classroom theory and laboratory skills practice to prepare students for clinical experience as a nurse assistant. Students learn to identify and meet basic patient care needs for safety, comfort, and activities of daily living.

HCP 0410C - Nursing Assistant (N) (165 hours)

This course teaches skills for certification and employment as nursing assistants in long-term care facilities. Students learn to identify and meet basic patient care needs for safety, comfort, and activities of daily living.

HCP 0720C - Electrocardiograph Technical Skills (N) (75 hours)

Students enrolled in this course have completed the Patient Care Assistant competencies and are adding these skills to be further cross-trained to perform basic electrocardiograph patient care techniques. Course includes patient care experiences in a health care facility.

Prerequisite: MEA 0200C, HSC 0003. Corequisite: MEA 0201C, MEA 0254C, MEA 0258, MEA 0234, MEA 0334.

HCP 0750C - Basic Concepts of Phlebotomy (N) (75 hours)

This course provides a general overview and update on those techniques, procedures, and issues pertaining to the proper collection of blood specimens for routine clinical laboratory testing in order to develop well-trained, proficient and professional phlebotomists.

HCP 0940 - Phlebotomy Practicum (N) (90 hours)

This course applies practical application and technical performance of phlebotomy in a clinical setting. Student must have passed a drug screening and FDLE background check.

Prerequisite: HCP 0750C with a grade of "C" or higher.

HEV - CHILD DEVELOPMENT AND EDUCATION

HEV 0115 - 30-Hour Statewide Childcare Training (N) (30 hours)

This course presents the state rules and regulations governing childcare; health, safety, and nutrition; identifying and reporting child abuse; and principles of child growth and development. It presents the skills required to implement a developmentally appropriate, anti-bias program for children ages birth to age five.

HEV 0116 - Introduction to Preschool Practices (N) (10 hours)

This course presents skills necessary to implement a developmentally-appropriate, antibiased program for children ages birth to five.

HEV 0118 - Family Day Care Worker Training (N) (3 - 30 hours)

This course teaches rules and regulations of operating a licensed home day care, including nutrition and health issues, safety procedures, identification and reporting of child abuse and neglect, principles of child growth and development, and management of a family day care home.

HEV 0126 - Special Needs (N) (10 hours)

This course teaches concepts necessary for an understanding of children with special needs and how to include them in a variety of settings.

HEV 0132 - Child Growth and Development (N) (6 hours)

This course teaches the principle of child development; the influences of nutrition, environment, heredity and health status on child development, the developmental characteristics of children ages birth to 12, observation and documentation of child development, and effective communication with children.

HEV 0166 - Health, Safety and Nutrition (N) (8 hours)

This course teaches the characteristics of a safe and healthy environment and age appropriate proper nutrition for children.

HEV 0171 - Infant Toddler Appropriate Practices (N) (10 hours)

This course is for child care providers responsible for the care of children birth through 36 months. The course provides an overview of the need for quality care, stages of development, appropriate interactions, learning environments and experiences, health and safety practices, positive guidance strategies, observation and assessment, relationships with families and quality care givers.

HEV 0181 - Behavioral Observation and Screening in Child Care (N) (6 hours)

This course teaches the appropriate techniques necessary for observing the developmental behavior of children, specifically through the use of a checklist, or similar tools to match observed behaviors with the corresponding developmental age level.

HEV 0199 - Identifying and Reporting Child Abuse and Neglect (N) (4 hours)

This course teaches the procedures for identifying child abuse and neglect and the process for reporting the abuse and or neglect.

HEV 0805 - Rules and Regulations (N) (6 hours)

This course teaches the rules, regulations and laws governing child care centers' state and local licensing.

HEV 0806 - Family Child Care Rules and Regulations (N) (6 hours)

This course teaches the rules, regulations and best practices governing a Family Child Care Home.

HEV 0870 - Child Care Worker I (N) (110-150 hours)

This course covers the competencies that support the DCF (Department of Children and Families) mandated training coursework. Also included are components on communication skills, methods of guidance, and literacy activities.

HEV 0871 - Child Care Worker II (N) (150 hours)

This course covers competencies on professionalism, community resources, the importance of relationship skills and communicating with children's families. The course also covers the use of technology in the child care profession, and observing and recording methods.

Prerequisite: Recommended HEV-0870.

HEV 0872 - Teacher Aide (Preschool) (N) (150 hours)

This course includes competencies in developing lesson plans, child development theories, factors that affect the development of a child, and developmentally appropriate practices and activities for infants/toddlers, preschoolers, and school-age children. Also covered in this course are components on working with students with special needs, classroom management techniques, and creating optimum environment for all children.

HEV 0873 - Preschool Teacher (N) (150 hours)

This course covers the areas of creating a successful developmentally appropriate curriculum; mentoring; developing the ability to motivate children; recognizing cultural differences when planning activities; including children with special needs; recent trends and issues in early childhood education; and professionalism.

HFT - HOSPITALITY MANAGEMENT

HFT 1000 - Introduction to Hospitality and Tourism (3 credits)

This course is an introduction to many facets of hotel-motel and food services industries. It includes a study of history, scope, and innovations in industry as well as orientation visits to local establishments. It provides an understanding of the complexity of the hospitality industry; introduces key hospitality management definitions; the opportunities available; and the training necessary to achieve a successful hospitality management career. Analysis of links among hotel, food, transportation, recreation, and other industries comprising tourism is covered.

HFT 1300 - Managing Housekeeping Operations (3 credits)

This course acquaints the student with a systematic approach to managing housekeeping operations in the hospitality industry. Emphasis is on the role of housekeeping department and understanding managerial skills necessary to efficiently operate the department.

HFT 1410 - Front Office Management (3 credits)

This course acquaints the student with front office management in the hospitality industry. The course encompasses theory and simulations including reservations, arrival and departure of guests, night audit reports and procedures, yield management, and exception handling and reporting.

HFT 1820 - Food and Beverage Purchasing (3 credits)

This course provides a basic study of information on purchasing food and beverages. Students learn to create estimates of needed materials, safety and sanitation standards development, and food receiving and storage techniques. This course covers techniques for purchasing food, beverages, and supplies used in hotels and restaurants. Students learn to analyze the operation, promotion, sales cost, and inventory controls on food and beverages. Students gain realistic experience by writing food service specifications, based on general purchasing methods, requirements, and procedures, while emphasizing the importance of controlling portions, inventories and costs and their effect on menu pricing.

HFT 2210 - Hospitality Mgmt & Leadership (3 credits)

This course relates managerial functions to the hospitality industry and trains students to become effective managers by applying management theories. Much emphasis is placed on human relations and how to work efficiently with peers, superiors and subordinates.

HFT 2223 - Human Relations and Supervisory Development (3 credits)

This course provides basic skills and knowledge of supervision with specific examples in the hospitality industry. It details the characteristics and responsibilities of an efficient and effective supervisor with emphasis placed on such management skills as solving problems, motivating employees, and improving employee performance.

HFT 2500 - Marketing & Sales in the Hospitality Industry (3 credits)

Students develop marketing campaigns for business within the hospitality industry. Emphasis is on analysis of market; competition and product; planning a financial budget; and developing short-term and long-range strategies to achieve desired profit through effective advertising, sales, and public relations planning. Specifically, this course focuses on the techniques and analysis of effectiveness of marketing within the industry, decision-making processes for product/service development, advertising, pricing, and promotion.

HFT 2600 - Hospitality Law (3 credits)

This course provides awareness of rights and responsibilities law grants to or imposes upon hotelkeepers and food service operators, and illustrates possible consequences of failure to satisfy legal obligations. Specific attention is given to innkeeper-guest relationships, contracts, torts, civil and property rights, and insurable risks.

HFT 2630 - Security Issues in the Hospitality Industry (3 credits)

Students learn how to identify and control security issues concerning the restaurant and hospitality industries, including strategies employed in loss and theft protection efforts.

HFT 2840 - Table Service Etiquette (1 credit)

Students learn acceptable procedures in serving foods, including display techniques. Special emphasis is given to learning strategies to evaluate food service operations.

HFT 2942 - Internship in Hospitality (3 credits)

This course is a planned work-based experience that provides students with an opportunity to fine-tune skill sets learned in coursework and enhance workplace skills through supervised practical experiences related to their career objectives.

HFT 2943 - Internship in Restaurant Management (1 - 3 credits)

This course provides students with a planned work-based experience to enhance workplace skills related to their career objectives.

Prerequisite: HFT 1000.

HIM - HEALTH INFORMATION MANAGEMENT

HIM 1000 - Introduction to Health Information Management (3 credits)

This course teaches an introduction to health information management including the health care environment, health care data, and health information analysis. The history, evolution of health care in the United States, and the health information management professional are studied. Ambulatory care, long term care, mental health, and acute care health records are introduced. Forms design, filing methods, and types of numbering systems are covered.

HIM 1012 - Legal Aspects of Health Information (3 credits)

This course provides the principles of legal issues affecting the preparation and use of health information documents and electronic health records. Both the computer-based record and the paper record are examined with regard to local, state, and federal laws. Legal guidelines for release of information by health care providers are taught.

HIM 1273C - Billing and Reimbursement Methods (3 credits)

This course teaches reimbursement issues for health care facilities. Diagnosis related groups (DRG's), ambulatory related groups (APG's), resources-based relative value scale (RBRVS), health maintenance organizations (HMO's), and other major insurance/third party payors are studied. The various types of reimbursement methodologies are studied and practiced.

HIM 1282 - Basic CPT Coding (3 credits)

This course covers Current Procedural Terminology (CPT) and the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) including coding of diseases, operations, and physicians' office procedures.

HIM 1442 - Pharmacology for HIM (2 credits)

This course teaches general pharmacological concepts and principles in the management of patient/client care. Therapeutic drugs and indications and contraindications associated with drug therapy and related disease processes are described.

HIM 1510C - Health Care Data Analysis (3 credits)

This course covers indices, databases, and registries as techniques in the collection of data for analysis of health information. Students present, calculate, and interpret health data for quality management, utilization

management, risk management, and other patient care related studies.

HIM 1722 - ICD-10-CM Coding (2 credits)

This course addresses the use of the International Classification of Diseases (ICD-10-CM) Diagnosis Coding. This includes the coding of diseases and their relationship to the reimbursement for healthcare treatment in hospitals and physicians' offices. Coding conventions, sequencing, and rules for correct coding are introduced.

HIM 1723 - ICD-10-PCS Coding (2 credits)

This course addresses the use of the International Classification of Diseases (ICD-10-CM) Procedure Coding. This includes the coding of procedures and their relationship to the reimbursement for healthcare treatment in hospitals. Coding conventions, sequencing, and rules for correct coding are introduced.

Prerequisite: HIM 1000, HIM 1012, HIM 1442, HIM 2433.

HIM 2112 - Electronic Health Record and Technology (3 credits)

This course explores the history of the electronic health record and current trends in healthcare information applications such as clinical information systems, administrative information systems, and management support systems. Students explore the transition from a paper-based health record to an electronic health record, and associated issues.

HIM 2211 - Health Information Systems (3 credits)

This course provides introductory knowledge in information technology related to healthcare and the automated tools and techniques for collecting, storing, and retrieving data. Topics include: system analysis, design, and security, file structure, networking, telecommunications, document imaging, medical informatics, electronic health record, and implementation issues. Upon completion, students assist in the design, implementation, evaluation, and maintenance of automated information systems in healthcare.

HIM 2400 - Alternative Health Care Settings (3 credits)

This course addresses medical services, health record systems, regulatory agencies, and controls in non-acute care settings. Topics include the activities of the front office and their relationship to the health information department and the role of a health information management consultant.

HIM 2433 - Pathophysiology (3 credits)

This course presents the nature, cause, and treatment of human diseases including a basic knowledge of the body's defense mechanism.

Prerequisite: BSC 1084 or BSC 2093, BSC 2093L and BSC 2094, BSC 2094L; HSC 2531 . Corequisite: HIM 1000, HIM 1012, HIM 1442.

HIM 2506 - Quality Assessment (2 credits)

This course teaches the application of quality assurance, quality improvement, utilization management, risk management, recredentialing, and infection control to health information management. Tools for improving the quality of patient care and services rendered are studied including analysis of records and identification of inconsistencies, omissions, or patient care problems through screening mechanisms.

HIM 2512 - HIM Supervision and Organizational Life (2 credits)

This course provides knowledge of management and supervision principles as they apply to healthcare and health information management. Aspects and techniques of planning, organizing, motivating, and controlling is presented with emphasis on communication, collaboration, and decision-making.

Prerequisite: HIM 1273C. Corequisite: HIM 2112, HIM 2506.

HIM 2725L - Coding Lab (2 credits)

This course applies concepts and techniques for inpatient and outpatient coding using actual patient records and simulated patient records. It builds upon the skills that the students have acquired in their coding courses and provides hands-on experience.

Prerequisite: HIM 2112, HIM 2506, HIM 2512. Corequisite: HIM 2211.

HIM 2729 - Intermediate Coding (4 credits)

This course focuses on assigning appropriate CPT, ICD, and Level II (HCPCS) codes to a wide range of original source medical documents. This course increases the quality of code selection by applying the decision process in problem solving using well-defined medical record review methods and guidelines.

HIM 2805L - Professional Practice Experience I (1 credit)

This course provides the initial supervised professional practice experience in health information management department. Emphasis is on record assembly, analysis, filing, admission and discharge procedures. Basic coding is addressed. Upon completion, the student attains an understanding of the daily functional operations of a health information management department.

HIM 2815L - Professional Practice Experience II (1 credit)

This course is a continuation of the supervised professional practice experience in a health information management department. Emphasis is on health information systems, coding, and law and ethics. Upon completion, students apply health information theory to practice.

Prerequisite: HIM 2112, HIM 2506, and HIM 2512. Corequisite: HIM 2211.

HIM 2822 - HIT Capstone Seminar (3 credits)

This course focuses on integration into the health information management field by exploring career options, developing a professional development plan, creating a resume, exploring credentialing requirements, and preparing to enter the workplace. It introduces the preparation needed to sit for the Registered Health Information Technician (RHIT) National Credentialing Examination by American Health Information Management Association.

Prerequisite: HIM 2112, HIM 2506, and HIM 2512. Corequisite: HIM 2211.

HIM 2960 - Coding Credential Exam Review (1 credit)

This course provides an exam review for students that are completing the Medical Information Coder/Biller certificate. Fundamentals of medical coding and test taking strategies will be reviewed.

Corequisite: HSC 2531.

HLP - PHYSICAL EDUCATION RECREATION WELLNESS

HLP 1081 - Personal Wellness (3 credits)

This course establishes in students a lifestyle conducive to total wellness, which involves an awareness and appreciation for the values of holistic health and physical fitness.

HMV - RESTAURANT MANAGEMENT

V000

HMV 0930 - Apprenticeship - C/A Introduction to Foodservice (N) (48 hours)

This course introduces career options in the culinary arts field and provides initial preparation for employment in foodservice. Focus is on the basic skills involved in food preparation. Registration with the American Culinary Federation Educational Foundation Apprenticeship and permission of instructor are required.

Corequisite: HMV 0940.

HMV 0931 - Apprenticeship - C/A Food Preparation I (N) (48 hours)

This course teaches the fundamental concepts, skills and techniques involved in the management of resources; use of recipes; use and care of equipment; and evaluation of food products. Special emphasis is given to practical demonstrations in cooking and preparing standard breakfast items, salads, dressings, sauces, vegetarian items, vegetables, farinaceous foods, and pasta utilizing safety and sanitation principles. Registration with the American Culinary Federation Educational Foundation Apprenticeship and permission of instructor are required.

Prerequisite: Pre/corequisite: HMV 0940, HMV 0930.

HMV 0940 - Apprenticeship - Culinary Arts - Sanitation (N) (48 hours)

This course introduces career options in the culinary arts field and provides initial preparation for employment in food service including national certification in sanitation management. Registration with the American Culinary Federation Educational Foundation Apprenticeship and permission of instructor are required.

HMV 0943 - Apprenticeship - Culinary Arts On-the-Job Learning (N) (670 hours)

This course implements the theoretical concepts introduced in the classroom components of the culinary arts apprenticeship program through on-the-job learning. Registration with the American Culinary Federation Educational Foundation Apprenticeship and permission of instructor are required.

HMV 0944 - Apprenticeship - Culinary Arts - Nutrition Principles (N) (48 hours)

This course teaches intermediate commercial food and culinary arts techniques and fundamental nutrition principles. Registration with the American Culinary Federation Educational Foundation Apprenticeship and permission of instructor are required.

Prerequisite: HMV 0940, HMV 0941.

HMV 0945 - Apprenticeship - Culinary Arts - Food Cost Accounting (N) (48 hours)

This course presents advanced commercial food preparation, cost controls, and business mathematics in the culinary arts industry. Registration with the American Culinary Federation Educational Foundation Apprenticeship and permission of instructor are required.

Prerequisite: HMV 0940, HMV 0941.

HMV 0946 - Apprenticeship - Culinary Arts - Garde Manger (N) (48 hours)

This course introduces the student to specialty culinary arts techniques in both classroom instruction and in the kitchen

lab. Course content includes preparation and service of dips and basic desserts, garnishing and presentation of hors d'ouevres and ice carvings, and cake decorating for all occasions. Registration with the American Culinary Federation Educational Foundation Apprenticeship and permission of instructor are required.

Prerequisite: HMV 0940, HMV 0941.

HMV 0948 - Culinary Arts - Supervisory Management (N) (48 hours)

This course teaches management principles and techniques, customer relations, employability skills, in both front and back-of-house operations including beverage service. Registration with the American Culinary Federation Educational Foundation Apprenticeship and permission of instructor are required.

Prerequisite: HMV 0940, HMV 0941.

HOS - AGRICULTURE PRODUCTION TECHNOLOGY

HOS 1010 - Fundamentals of Horticulture (3 credits)

This course examines the fundamentals of plant structure, growth, and development. It also covers the principles and methods of growing various ornamental, fruit, vegetable, and agronomic crops.

HSA - HEALTH SERVICES MANAGEMENT

HSA 2182C - Health Services Management Concepts (3 credits)

This course helps students to develop the skills necessary to be health care managers by providing an overview of the U.S. Health System and the application of principles of management in a health care setting. Topics include health care management information systems; policies and regulations; and evaluating performance outcomes. This course includes a lab component.

Corequisite: Pre/corequisite: HSC 1001C, HSC 1632C.

HSA 3113 - Healthcare Trends and Issues (3 credits)

This course provides the student with the knowledge, skills, and tools to influence positive change as a leader in the U.S. health care system. This course promotes the analysis of key healthcare issues with an emphasis on health care policies and initiatives that shape health care delivery. Analyses of the current structure of profit versus non-profit health care organizations, financing healthcare, and the impact of financial stakeholders are emphasized. Ethical issues that develop when government, the private sector, and consumers vie to influence health care are presented as a component of evidence-based policy revision. Students are introduced to the different types of research, its focus, methods and the nature of their subsequent findings.

Prerequisite: A.A. or A.S. degree, HSA 2182C, HSC 1001C, HSC 1632C, HSC 2531, HSC 2802C.

HSA 3184 - Leadership and Management in Healthcare Organizations (3 credits)

This course provides an introduction to and overview of leadership, management, and organizational behavior in health care organizations, with an integration of theory, practice, assigned readings, lecture and laboratory simulation exercises. The focus includes leadership and management in hospitals, ambulatory care facilities, nursing homes, and county health departments.

Prerequisite: A.A. or A.S. degree, HSC 1001C, HSA 2182C, HSC 2802C, HSC 1632C, HSC 2531.

HSA 4110 - Healthcare Management Competencies (3 credits)

This course explores, simulates, and applies the five core competencies established by the American College of Healthcare Executives as necessary for a healthcare manager to function at an optimal level. The competencies include Communication and Relationship Management, Leadership, Professionalism, Knowledge of the Healthcare Environment, and Business Skills and Knowledge. As a major outcome of this course, each student develops a portfolio of work that assists in advancement toward accomplishing career development goals.

Prerequisite: A.A. or A.S. degree, HSC 1001C, HSA 2182C, HSC 2802C, HSC 1632C, HSC 2531.

HSA 4160 - Healthcare Marketing (3 credits)

This course teaches the concepts of marketing and customer service specific to health care. The focus is on market principles and strategies as they apply to the healthcare industry and the unique constraints of federal healthcare regulations. Included are the marketing process, understanding the consumer, pricing, distribution, advertising, sale of health care products and services, and developing and measuring customer satisfaction and loyalty.

Prerequisite: A.A. or A.S. degree, HSC 1001C, HSA 2182C, HSC 2802C, HSC 1632C, HSC 2531.

HSA 4170 - Healthcare Financial Management (3 credits)

This is an introductory healthcare finance course, seeking to broaden and deepen student understanding of issues involved in financial activities of healthcare organizations. The emphasis is on principles and application of healthcare finance relevant to entry-level supervisors and managers.

Prerequisite: A.A. or A.S. degree, HSC 1001C, HSA 2182C, HSC 2802C, HSC 1632C, HSC 2531.

HSA 4340 - Human Resources Management in Healthcare Organizations (3 credits)

This course provides knowledge and skills needed for identifying and managing human resources in health care organizations. The students are exposed to modern management, human performance, leadership skills, and techniques needed to function effectively in healthcare settings such as personnel, building management, budgeting requirements, equipment, and risk management resources.

Prerequisite: A.A. or A.S. degree, HSC 1001C, HSA 2182C, HSC 2802C, HSC 1632C, HSC 2531.

HSA 4383 - Quality Improvement in Healthcare (3 credits)

This course focuses on issues confronting healthcare managers seeking to improve the quality of healthcare delivery. Students review quality indicators and quality improvement tools. The course includes change management, team building, use of information technology to improve quality, and the analysis and interpretation of statistical data for quality improvement.

Prerequisite: A.A. or A.S. degree, HSC 1001C, HSA 2182C, HSC 2802C, HSC 1632C, HSC 2531.

HSA 4421 - Policy and Governmental Regulations in Healthcare (3 credits)

This course explores and analyzes the legislative process, examines health system issues at the federal, state and local levels, and differentiates the components of the policy analysis process. Through lecture, class projects, and research this course prepares students to identify health care issues, develop evidence-based policy recommendations, and create a proposal to influence change in a health care policy.

Prerequisite: A.A. or A.S. degree, HSC 1001C, HSA 2182C, HSC 2802C, HSC 1632C, HSC 2531.

HSA 4423 - Healthcare Law (3 credits)

This course introduces students to legal issues they are likely to face in managing a healthcare organization. Topics include a wide range of legal, regulatory and ethical issues in healthcare work settings.

Prerequisite: A.A. or A.S. degree, HSC 1001C, HSA 2182C, HSC 2802C, HSC 1632C, HSC 2531.

HSA 4817 - Practicum in Healthcare Management (3 credits)

This course teaches applied concepts introduced in the classroom component on the Healthcare Management Program that are sustained in practicum work experience healthcare settings. This supervised practicum work experience allows for student professional preparation healthcare management in Healthcare Institutions such as community agencies, hospitals, nursing homes and assisted living facilities.

Prerequisite: HSA 2182C, HSC 1001C, HSC 1632C, HSC 2531, HSC 2802C; pre/corequisite: HSA 3113, HSC 4730, HSA 3184, HSA 4421, HSC 3661, HSA 4383, HSA 4160, HSA 4110, HSA 4340, HSA 4423, HSA 4170.

HSA 4922 - Capstone Project in Healthcare Management (6 credits)

This course integrates the knowledge, skills and abilities learned in the program through a capstone project. It is intended to strengthen and synthesize skills related to management, leadership, business law, ethics, epidemiology, financial management, marketing, healthcare policies, human resource management, information system management and research. Permission to register required.

Prerequisite: HSA 2182C, HSC 1001C, HSC 1632C, HSC 2531, HSC 2802C, HSA 3113, HSC 4730, HSA 3184, HSA 4421, HSC 3661, HSA 4383, HSA 4160, HSA 4110, HSA 4340, HSA 4423, HSA 4170, HSA 4817, and permission of Program Director.

HSC - HEALTH SCIENCE

V000

HSC 0003 - Introduction to Health Care (N) (82 - 90 hours)

This course teaches the knowledge and skills necessary for entry into a course of study in the health care field. It includes a knowledge of the health care delivery system, health occupations, and communication skills. Safety, health promotion, and legal/ethical issues are presented. This course also fulfills the state mandatory four-hour bloodborne pathogens (HIV/AIDS) requirement.

HSC 0530C - Concepts of Medical Language (N) (35 hours)

This course teaches the language of health care, medical terminology, as well as the ability to read and comprehend fundamental terminology used in a variety of medical records and reports. This course focuses on definition, spelling, and pronunciation of medical terms relating to the human body and disease.

HSC 0540 - Body Structure and Function (N) (60 hours)

This course teaches a general overview of anatomy and physiology of the human body. It assists the beginning student in understanding how the human body works by providing essential aspects of structure and function in a simple and direct way. This course explains the relationships among organ systems as well as the

relationship of each system to the well-being of the entire organism.

HSC 1001C - Introduction to Healthcare Management (4 credits)

This course provides a basic overview of the healthcare delivery system, roles of the health team members, and basic skills necessary for success in a health career. This course includes a lab component.

Effective Spring 2019, course becomes 4 credit hours.

Prerequisite: pre/corequisite: HSC 2531.

HSC 1101 - Developing Personal Well-being (1 credit)

This course introduces students to a holistic approach to personal health and well-being. Self-assessment is an integral part of the course and positive behavior change is encouraged.

HSC 1242 - Instructing Health Professionals (1 - 3 credits)

This course enables instructors and trainers in the industry of health occupational programs to more effectively plan, deliver, and evaluate their classes. It focuses on the development of appropriate learning materials, effective teaching methods, testing procedures and policies and procedures specific to the health science student and encompasses all related specialized educational and institutional accreditation standards and legal requirements.

HSC 1632C - Overview of Healthcare Delivery (3 credits)

This course teaches an overview of contemporary healthcare delivery systems. Topics include marketing and customer service practices, political, social, economic, and technical issues the healthcare industry. This course contains a lab component.

Corequisite: pre/corequisite: HSC 1001C.

HSC 1653 - Healthcare Ethics (3 credits)

This course examines ethical issues in healthcare. Students focus on a variety of situations including ethical, moral, and social standards. The course addresses doctor-patient relationships, informed consent, patient dignity and confidentiality, and the responsibilities of healthcare managers and administrators.

HSC 2100 - Personal and Community Health (3 credits)

This course examines the physiological and psychological bases for health, health hazards, fitness, and family living.

HSC 2400 - First Aid and Safety (3 credits)

This course examines the basic and advanced instruction in First Aid principles and skills which enable the individual to act in emergency situations.

HSC 2531 - Medical Terminology I (3 credits)

This course is the foundation for understanding the language of medicine. By beginning with roots, suffixes, and prefixes, the student learns to interpret and recognize medical terminology by system.

HSC 2802C - Health Science Seminar (4 credits)

This course examines personal and professional characteristics for success in the health care setting through classroom discussions, written assignments, presentations, and off campus visits to area health care agencies and service learning experiences in a health care environment. This course contains a lab component.

Prerequisite: pre/corequisite: HSC 1001C, HSA 2182C, HSC 1632C.

HSC 3661 - Healthcare Communications (3 credits)

This course explores the many facets of the communication competency healthcare managers must embrace, including communication skills, relationship management, and negotiation techniques. Communications are examined through current patient communication models, team-building trends and application of oral and written skill building exercises.

Prerequisite: A.A. or A.S. degree, HSC 1001C, HSA 2182C, HSC 2802C, HSC 1632C, HSC 2531.

HSC 4730 - Foundations of Health Science Research (3 credits)

This course introduces the research process with emphasis on the critique and utilization of research as it pertains to health care management. This course explores the research process as a foundation for acquiring skills needed to access, critically appraise, and synthesize research literature. The relationship of research and the utilization of evidence-based practice is addressed.

Prerequisite: A.A. or A.S. degree, HSC 1001C, HSC 1632C, HSA 2182C, HSC 2802C, HSC 2531.

P000

HSC P931 - Special Topics in Health (N) (1 - 60 hours)

This course provides health care professionals and/or the general public with updates on personal and community health issues.

HUM - HUMANITIES

HUM 1020 - Introduction to Humanities (3 credits)

This course examines traditional philosophical problems in applied contexts such as the arts, religion, ethics, history, education, and the natural and social sciences. For example, it studies theories of truth in the context of artistic expression, and the problem of evil in the context of religious worship. Students demonstrate college-level writing skills through multiple assignments. Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

HUM 1233 - Humanities Literature: Baroque to Present (3 credits)

This course teaches the aesthetic, social, and philosophical theories expressed in the literature from the Baroque period to the present. Students demonstrate college-level writing skills through multiple assignments. Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

Prerequisite: ENC 1101 or permission of instructor and student must score into college-level reading on placement test.

HUN - NUTRITION

HUN 1201 - Nutrition (3 credits)

This course is a study of nutrients, their digestion and absorption, and the relationship of food to the development and maintenance of health. Includes a study of nutritional needs of all age groups and interpretation of the National Council's recommended dietary allowance.

Prerequisite: Students must score into college-level reading and English on placement test.

HUN - RESTAURANT MANAGEMENT

HUN 1203 - Culinary Nutrition (3 credits)

This course provides instruction related to nutrition in the food service industry, especially the role and food sources of the essential nutrients. It emphasizes the retention of the essential nutrients during preparation, the basic principles for health-conscious cooking, and nutrition-related diseases.

HUS - HUMAN SERVICES

HUS 1001 - Introduction to Human Services (3 credits)

This course teaches the dynamics of the human services delivery system. Students become familiar with the activities, duties, and training of human services workers. The focus includes identifying issues and problems relevant to the scope of personnel employed in this field.

HUS 1200 - Group Dynamics (3 credits)

This course teaches a basic overview of the group experience. Essential characteristics of the effective group are presented as well as the tasks and techniques of the group facilitator. Dynamics of the group experience, including the various theoretical approaches, are explored.

HUS 1400 - Introduction to Drugs of Abuse (3 credits)

This course teaches the dynamics of drug addiction and dependence, classification and origins of drugs, short and long-term effects, risk of dependence, and medical uses. Drug education, laws, treatment, and rehabilitation are additional areas of focus.

HUS 1540 - Family Relations (3 credits)

This course teaches a variety of topics including: the nature and functions of marriage, marital problems, parenting, step-families, conflict resolution, divorce, and remarriage.

HUS 2111 - Introduction to Interpersonal Behavior (3 credits)

This course teaches the student the fundamental skills of interpersonal communication. Various theories of mental health are examined and the dynamics of both normal as well as dysfunctional interactions are explored.

HUS 2301 - Counseling Techniques (3 credits)

This course teaches students to develop individual, group, and family coping skills to prepare for roles as paraprofessionals in the human services field. Theoretical, ethical, and practical issues of counseling are addressed and skill development is encouraged through role-playing.

HUS 2302 - Techniques of Interviewing and Intervention (3 credits)

This course teaches the basic techniques and theories of interviewing and evaluation. Students participate in classroom skill-building exercises. Special attention is given to crisis theory and intervention.

HUS 2401 - Substance Abuse and Treatment (3 credits)

This course teaches theories of substance abuse and treatment. Causes of addiction including biological and environmental influences are explored. Emphasis is placed on understanding the dynamics of successful treatment.

HUS 2500 - Introduction to Ethics in Human Services (3 credits)

This course teaches ethical decision making in the human services arena. It explores professional and legal standards such as confidentiality, privileged communication, candor and informed consent, competence, loyalty, diligence, fairness, and due care. It addresses moral issues including multicultural counseling, dual role relationships, suspected child abuse, third party harm, suicide, paternalism, and involuntary commitment.

HUS 2820 - Internship in Human Services (3 - 4 credits)

This course teaches on-the-job experience wherein students are given the opportunity to strengthen and further develop expertise in the Human Services field. Permission of instructor required.

Prerequisite: HUS 1200, HUS 2302, HUS 2500, HUS 2401, HUS 1540, CLP 2140.

HUS 3300 - Humanistic and Existential Counseling Theory (3 credits)

This course explores the theories and techniques of humanistic and existential approaches. Primary focus is on application of techniques.

Prerequisite: HUS 1200, HUS 2301.

HUS 3314 - Cognitive and Behavioral Theory (3 credits)

This course explores the theories and techniques of cognitive-behavioral and behavioral therapy. In-class simulated scenarios are used to promote understanding of practical application of the theories.

Prerequisite: HUS 1200, HUS 2301.

HUS 3340 - Trauma and Post-Traumatic Stress Disorder (3 credits)

This course explores the various causes of PTSD including child abuse, war, and domestic violence. Focus includes the development of interviewing, evaluation, and networking skills necessary for working effectively with clients who have suffered traumas. The course also examines the connection between PTSD and substance abuse.

Prerequisite: CLP 2140, HUS 2302.

HUS 3350 - Issues in Domestic Abuse and Family Violence (3 credits)

This course explores theories explaining familial abuse and teaches evaluation and outreach skills. The dynamics of partner violence, child abuse, elder abuse, and sibling violence are examined. Legal issues related to family violence are also addressed.

HUS 3351 - Family Systems and Dynamics (3 credits)

This course provides an overview of family systems theories and the roles of family members in traditional and non-traditional families. The theoretical bases for family therapy modalities are described. Role playing and skill-building exercises allow for practical application of techniques.

HUS 3360 - Sexual Abuse of Children and Adolescents (3 credits)

This course prepares human and social service workers with the interviewing, evaluation, assessment, and networking skills necessary for working effectively with child abuse victims. Videos and movies are used to illustrate techniques and strategies for interviewing abused children. Individual projects involving creation of comprehensive prevention of sexual abuse programs are included.

Prerequisite: HUS 2302.

HUS 3409 - Addictive Experiences (3 credits)

This course examines theories and techniques of addiction and their application to drugs, sex, gambling, eating and the Internet. Practical exercises include in-class application of techniques and treatment regimes in simulated scenarios. The class also examines non-addictive and addictive lifestyles and the role of supervisors in addictions treatment.

HUS 3575 - Human Services for Special Needs Families (3 credits)

This course examines human services programs, agencies, and interventions available to special needs populations. Issues of client empowerment and family decision-making are addressed.

HUS 3650 - Administration in Human Services (3 credits)

This course examines planning, evaluation, management, fund raising, community relations, and other activities that affect the operation of a human service agency.

Prerequisite: HUS 1001.

HUS 4319 - Introduction to Play Therapy (3 credits)

This course explores theoretical basis for play therapy. Basic elements of play therapy including the role of the play therapist and indications for using play therapy are examined. An experiential component includes live observation of local professionals and videotaped therapists performing play therapy.

HUS 4352 - Family Diversity in Human Services (3 credits)

This course explores how social, cultural, religious, ethnic, disability, and gender related factors influence family structure and dynamics. Theories, techniques, and

strategies for evaluation, treatment, program planning, and intervention are examined.

HUS 4361 - High Risk and Offender Youth (3 credits)

This course examines theories and approaches to working with high risk and offender youth who are experiencing problems related to violence, sexually transmitted diseases, alcohol, drugs, teen pregnancy, and truancy. Emphasis is on the role of family, community, culture, and human services related resources. Both prevention and remediation are addressed.

HUS 4364 - Youth, Drugs, and Gangs (3 credits)

This course examines the reasons youth join gangs and the connections between substance abuse, child abuse, and violence. Focus includes prevention and intervention strategies and techniques including outreach.

HUS 4407 - Substance Abuse and Aging (3 credits)

This course provides an overview of the problem of substance abuse in the aging population. Abuses of prescription medicines, alcohol, and illegal drugs are examined. Issues related to lack of independence, mobility, depression, and bereavement are also discussed.

HUS 4410 - Internet Addictions (3 credits)

This course explores the dynamics of Internet addiction. Focus includes identifying issues related to diagnosis and treatment of this emerging problem. Various types of Internet addiction are explored including online gambling, online affairs, and pornography.

HUS 4416 - Issues in Impulse Control (3 credits)

This course explores the dynamics of both eating disorders and gambling and their relation to impulse control. Causal models, prevention, and treatment approaches are also explored.

HUS 4442 - Addictions Family Counseling (3 credits)

This course explores a variety of theories and approaches relevant to the treatment of families affected by alcohol or drug abuse. Focus includes family roles, family diversity, parental substance abuse, and child and adolescent substance abuse.

HUS 4462 - Gender Issues in Treatment and Recovery (3 credits)

This course examines how differences in socialization of males and females can affect substance abuse. Gender related issues that may impact treatment such as domestic abuse, depression, sexual abuse and gender scripting are explored.

HUS 4574 - Issues of Aging and Family Dynamics (3 credits)

This course examines how factors such as health, finances, and social roles affect the elderly and influence familial role changes and independence. A holistic approach to the overall well-being of the elderly in particular and the family unit in general is presented.

HUS 4945 - Capstone - Advanced Internship in Human Services (6 credits)

This course provides on-the-job experience wherein students are given the opportunity to strengthen and further develop expertise in the Human Services field.

All General Education courses must be satisfied prior to enrollment in the course.
Course must be taken during the final semester.

Prerequisite: MHS 3460, HUS 3300, HUS 3314, with a grade of "C" or higher; HUS 3340, HUS 3360, HUS 3650, HUS 2301, HUS 2500, CLP 2140, HUS 2302. All General Education courses must be satisfied prior to enrollment in this course. Course must be taken during the final semester.

IDS - INTERDISCIPLINARY STUDIES

IDS 1110 - The Pursuit of Knowledge (3 credits)

This course focuses on the nature of knowledge acquisition throughout the liberal arts curriculum and is required as an orientation course for all students entering the Honors Program.

The course is taught by a team of Honors Faculty drawn from the humanities, the social sciences, and the natural sciences/mathematics. The fundamental goal of the course is to help students appreciate the interconnectedness of knowledge across the entire range of academic disciplines. Students demonstrate college-level writing skills through multiple assignments.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.
Student must be accepted into the Honors Program.

IDS 1955 - Interdisciplinary Study Abroad (3 credits)

This course examines a variety of comprehensive, interdisciplinary perspectives in subject fields such as psychology, literature, philosophy, art, history or education. Student knowledge is enhanced in these fields through study abroad. Students demonstrate college-level writing skills through multiple assignments.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

Prerequisite: Student must be in college-level English and reading on placement test.

IDS 2930 - Special Issues in Arts and Sciences (3 credits)

This course reviews specialized information on topics in the social sciences, natural sciences, mathematics, communications or humanities. These topics are explored in work-shop type classes.

IDS 3956 - Interdisciplinary Study Abroad (3 credits)

This course explores a variety of comprehensive, interdisciplinary perspectives in subject fields such as psychology, literature, philosophy, art, history, sociology or education. This course enhances student knowledge in these fields through study abroad.

A minimum of an A.A. Degree. Permission of instructor required.

IND - INTERIOR DESIGN

IND 1015 - Residential Interior Design (3 credits)

This course presents residential interior design using creative problem-solving. Elements and principles of design are reviewed and applied with emphasis on graphic skills and presentation techniques, including orthographic projection and scale variations.

IND 1020 - Principles of Interior Design (3 credits)

This course is an overview of the professional field of Interior Design. All phases of Interior Design are introduced with career requirements and opportunities stressed.

IND 1301 - Interior Design Graphics (3 credits)

This course focuses on basic graphic presentation techniques, including freehand sketch, floor plans, perspective, and materials boards. Pencil, pen/ink, and electronic media are used.

IND 1401 - Technical Design I (2 credits)

This course introduces the basic technical aspects of interior design. Emphasis is on drafting and creation of drawing types, visualizations and other essential technical systems used in the interior design profession. Work is completed by hand, using a drafting table and a computer. Appropriate uses of tools and materials are stressed.

IND 1423 - Survey of Materials and Resources (1 credit)

This course provides the student with market information regarding materials and sources used in the field of interior design. On-site visits are required.

IND 1429 - Textiles for Interiors (3 credits)

This course prepares students to identify and analyze fibers, fabrics, and finishes. Consumer factors such as durability, care, and price of various textile furnishings are presented.

IND 1462 - Introduction to Architectural CAD (3 credits)

This course is an introduction to CAD focusing on using the computer as a drafting and design tool. AutoCAD software is used; focus is architectural/interior design. Basic CAD drafting, 3-dimension viewing, detail drawings, and creation of templates and symbols are covered.

IND 1935 - Building Codes and Barrier Free (3 credits)

This course focuses on contract documents and building interior systems that apply to the interior environment. It examines standards relating to safety, building codes, barrier free and material/construction testing.

IND 2016 - Commercial Interior Design I (3 credits)

This course presents the design processes used in commercial interiors. Space planning, human factors, technical issues, furniture and material selection, budgets, code requirements, and presentation techniques are reviewed.

The course is project-oriented and includes tours of commercial installations.

IND 2019 - Commercial Interior Design II (3 credits)

This course examines Commercial Interior Design using a project approach.

IND 2100 - History of Interiors I (3 credits)

This course gives a survey of historic interiors from the early American periods through contemporary interior design. Current trends in interior furnishings are examined.

IND 2134 - History of Interiors II (3 credits)

This course is a study of the historical periods of architecture, furniture, and interiors. Emphasis is on style recognition and application to the present.

IND 2209 - Designing for the Aging Client (1 credit)

This course examines interior design concepts that when applied, allow an aging client to remain in their personal residence as long as possible. Established, national design guidelines are presented; a case study approach is used.

IND 2420 - Materials and Sources of Interior Design (3 credits)

This course covers the non-textile construction materials of interior design. Wood, plastic, stone, masonry, glass, paint, wall coverings, and marble are a few of the materials studied. Also studied are appliances and bathroom fixtures. Applications of materials are covered and specifications recommended by professional trade associations are reviewed.

The completion of a vendor resource file and a visit to a design center are integral parts of the course.

IND 2432 - Lighting for Interior Design (3 credits)

This course provides an introduction to the fundamentals of residential, commercial, and landscape lighting.

IND 2500 - Interior Design Business Practices (3 credits)

This course presents specialized information on establishing and maintaining a successful interior design business.

IND 2608 - Sustainable Design for Interiors (3 credits)

This course reviews the basic theories and practices of ecology relating to interior design products and practices. Students become aware of the impact of their material and design selections on the environment. "Green" or "Eco" is an emerging field of importance in both residential and commercial interior design.

IND 2910 - Kitchen and Bath Design I (3 credits)

This course focuses on basic residential kitchen design. The National Kitchen and Bath Association design principles are presented. Students complete a kitchen design project including programming, space planning, mechanical systems and product selection.

Industry Standard CAD software is used. Students need drafting ability and computer skills.

IND 2911 - Kitchen and Bath Design II (2 credits)

This course emphasizes advanced kitchen design. After a review of basic principles of kitchen design, advanced techniques are presented. National Kitchen and Bath Association guidelines are stressed. Students complete kitchen design projects using industry standard CAD program.

Students need drafting ability and computer skills.

IND 2931 - Special Topics in Interior Design (.5 - 5 credits)

This course focuses on interior design technology topics of current interest. Main areas of study include technical updates of CAD software and exploration of newly developed interior design technology specific to licensed, professional interior designers including kitchen and bath designers.

IND 2940 - Interior Design Practicum I (3 credits)

This course is a practical application in an interior design business situation of knowledge acquired in the classroom. Business principles and practices, promotional techniques, and career development are practicum topics.

IND 2941 - Interior Design Practicum II (3 credits)

This course is a practical application in an interior design business situation of knowledge acquired in the classroom. The student increases proficiency in the field by benefiting from on-the-job experiences.

Prerequisite: IND 2940.

IND 2942 - Interior Design Practicum III (4 credits)

This course provides a practical application of interior design principles in an interior design business situation. The student increases proficiency in the field and moves toward employment in the interior design industry.

Topics for this practicum rotate through a two year cycle.

Prerequisite: IND 2941.

INR - POLITICAL SCIENCE

INR 2002 - Introduction to International Relations (3 credits)

This course provides a working knowledge of international relations including the history of international relations, nationalism, foreign policy, imperialism, militarism,

economics, international organizations, and the United Nations.

Prerequisite: student must score into college-level English and reading on placement test.

INR 2500 - Model United Nations (3 credits)

This course explores the history, structure, and functions of the United Nations as well as its diplomatic roles within the global community. Also, through research and simulated debates of major issues, students become familiar with the practical aspects of the UN and are able to participate in Model UN conferences.

IPM - AGRICULTURE PRODUCTION TECHNOLOGY

IPM 1323 - Application of Pesticides (3 credits)

This course demonstrates to students the safe handling of pesticides, selection of appropriate application equipment, calibration, and mixing of chemicals.

ISM - COMPUTER INFORMATION TECHNOLOGY

ISM 3011 - Introduction to Management Information Systems (3 credits)

This course presents an introductory use of information technology in the business environment. The language, concepts, structures, and processes involved in the management of information systems are discussed. The course has an applications component where software is used to support managerial decision-making.

ISM 3133 - Systems Analysis and Design (3 credits)

This course introduces the student to the analysis, design, implementation, and operation of information of systems. Addressed are various approaches to analyzing information systems, and the steps necessary to gather information on the system requirements and to model business needs. System design blueprints are created and real world projects are utilized.

Prerequisite: COP 2000, CGS 1540.

ISM 3212 - Database Design and Administration (3 credits)

This course introduces data structures, data modeling and data dictionaries. Main features of linked-list, hierarchical, network, and relational database models are covered as well as extensive business application problem-solving.

Prerequisite: CGS 1540.

ISM 3321 - Cyber Security Essentials (3 credits)

The management of information security problems is covered including attack methods; detection and prevention techniques; cryptography, firewalls and intrusion detection systems; security policies and risk management; and incident response.

Prerequisite: CTS 1650, CTS 1334.

ISM 4117 - Data Mining and Data Warehousing (3 credits)

This course examines techniques of data mining and the implementation and benefits of data mining for industries such as retail, target marketing, fraud protection, health care, web, and e-commerce are examined. Detailed case studies are analyzed using current mining tools on real data.

Prerequisite: ISM 3212, CGS 1540.

ISM 4220 - Network Technologies for Information Professionals (3 credits)

This course examines the basic features and technologies used in computer networks including those necessary to implement voice, data, and information networks. Practical applications of networks in the management of a business are investigated.

Prerequisite: CTS 1334, CTS 1650.

ISM 4320 - Applications in Information Security (3 credits)

This course examines applications necessary to secure a network from intrusion including firewalls, bastion hosts, proxy servers, and honeypots. Applications to perform vulnerability testing to determine network weaknesses are also employed.

Prerequisite: CTS 1334, CTS 1650, ISM 3321.

ISM 4323 - Information Security Policy Administration (3 credits)

This course examines managerial aspects of information security including security management planning, policies, risk assessment and risk management, disaster recovery and personnel issues. Examples of information security management issues, practices, and applications are presented.

Prerequisite: CTS 1334, CTS 1650.

ISM 4324 - Computer Forensics (3 credits)

This course addresses the importance of computer forensics and the procedures and responsibilities of investigators. Digital evidence is obtained through the forensic analysis of computers and networks. Network surveillance and the analysis of intrusion signatures are performed. The methodology of how intrusion incidents should be handled is examined.

Prerequisite: CTS 1334, CTS 1650, ISM 3321.

ISM 4881 - Capstone in Information Technology Management (3 credits)

This course integrates knowledge, skills and abilities learned in the Information Technology program through a Capstone project. Permission to register required.

Prerequisite: Permission of Department Chair required. .

JOU - BROADCAST COMMUNICATIONS/JOURNALISM - PUBLIC RELATIONS

JOU 1100 - News Reporting and Writing (3 credits)

This course includes instruction and practice in news writing for newspaper and broadcast media with emphasis on newspapers. Functions of media, media organization, news standards, ethics, media law and news judgment are discussed thoroughly.

Reporting techniques, interviewing skills and the basic process of news production are covered. This course serves as a foundation for editing and advanced-reporting courses as well as journalism labs.

Corequisite: Pre/corequisite: ENC 1101.

LAE - ELEMENTARY EDUCATION

LAE 4416 - Children's Literature in Elementary Education (3 credits)

In this course students learn to select, evaluate and use fiction, nonfiction and poetry for instructional, informational, and recreational purposes in Early Childhood Education. Included in this course is the development of analytical thinking, writing skills, and oral expression as they are applied to the study of children's literature.

LAH - HISTORY

LAH 2023 - History of the Caribbean (3 credit hours.)

This course introduces students to some of the main issues and debates in Caribbean history from the eve of Columbus' arrival to the mid-twentieth century. Approximately equal attention is given to Anglophone, Francophone, and Hispanophone regions, and to political, cultural, and economic developments.

No other part of the world has been shaped so completely as the Caribbean by the two institutions of European colonialism and plantation slavery. The rise and fall of these institutions in this region, and their shaping the contemporary Caribbean constitute the dominant themes of this course. This course focuses on the types of society that evolved the region and the internal and external forces that influenced their development.

LDE - LANDSCAPE TECHNOLOGY

LDE 1000 - Principles of Landscape Design (3 credits)

This course presents the basic principles of landscapes design. Topics include function and use of drawing tools, lettering methods, use of landscape symbols, site analysis and design criteria.

LIS - COMPUTER SCIENCE

LIS 1002 - Electronic Access to Information (1 credit)

This course focuses on research skills and provides instruction in accessing information resources, including books, journals, newspapers, governmental documents and other research materials using online catalogs, databases, and the Internet.

Analysis of Internet sites, effective search strategies, information literacy, critical thinking skills, and citing electronic resources are also addressed.

LIS 2004 - Introduction to Internet Research (1 credit)

This course demonstrates the methods of accessing information through the Internet and is delivered through the World Wide Web and Internet e-mail. Students learn Internet history, communication, research strategies, Web search tools, search engines, evaluating resources, downloading files, and documenting Internet and other online resources.

Recommended prerequisite: LIS-1002 (p. 246) or CGS-1555.

LIS 2005 - Advanced Electronic Access to Information (3 credits)

This course introduces advanced skills and strategies, and provides instruction in accessing information resources, including books, journals, newspapers, government documents, deep Web, media and other research material using online catalogs, databases, and the Internet.

Analysis of Internet sites, effective search strategies, information literacy, annotated bibliographies, critical thinking skills, and citing electronic resources using APA/MLA are also addressed.

LIT - ENGLISH

LIT 1000 - Introduction to Literature (3 credits)

This course introduces students to the challenge of reading classic literary and philosophical writing. Emphasis is placed on interpretive reading, writing and discussion in order to enhance critical thinking, communication, and an understanding of the human condition.

Prerequisite: ENC 1101 with a grade of C or higher, and student must score into college-level reading on placement test. .

LIT 2110 - World Literature: Homer to the Renaissance (3 credits)

This is an academic survey of significant authors and their works from Homer to the Renaissance with emphasis on literary trends, forms, and appreciation. Students demonstrate college-level writing skills through multiple assignments.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

Prerequisite: ENC 1101 with a grade of "C" or higher, or permission of instructor and student must score into college-level reading on placement test.

LIT 2120 - World Literature: Enlightenment to the Present (3 credits)

This is an academic survey of significant authors and their works from the 17th century into the 20th century. Students demonstrate college-level writing skills through multiple assignments.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

Prerequisite: ENC 1101 with a grade of "C" or higher, or permission of instructor and student must score into college-level reading on placement test.

LIT 2330 - Current Children's Literature (3 credits)

This course presents a critical introduction to the study and appreciation of children’s literature through a survey of classic and contemporary children’s works. Students will analyze a variety of different genres such as fables, poems, myths, fairy tales, picture books, and fiction for young readers. Topics covered may include literary value, gender, ethnicity, family dynamics, book awards, pedagogy, and censorship.

Prerequisite: ENC 1101 with grade of "C" or higher.

MAC - MATHEMATICS

MAC 1105 - College Algebra (3 credits)

This course covers the following topics: functions and functional notation, domain and ranges of functions, graphs of functions and relations, operations on functions, inverse functions, polynomial and rational functions, absolute value and radical functions, exponential and logarithmic properties, functions, and equations; and systems of equations and inequalities.

A graphics calculator is required for this course.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. and A.S. Degree.

Prerequisite: MAT 1033 with a grade of "C" or higher, or placement scores.

MAC 1114 - Plane Trigonometry (3 credits)

This course covers the following topics: trigonometric and inverse trigonometric functions with their properties and graphs, trigonometric identities, conditional trigonometric equations, solutions of triangles, vector algebra, parametric equations, polar coordinates, and applications.

A graphics calculator is required for this course.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. and A.S. Degree.

Prerequisite: MAC 1105 with a grade of "C" or higher, or placement scores.

MAC 1140 - Precalculus Algebra (3 credits)

This course is required for students who need calculus. Topics in this course include polynomial, rational, exponential and logarithmic functions with their properties and graphs, polynomial and rational inequalities, conic sections, matrices and determinants, sequences and series, mathematical induction, and Binomial theorem and application.

A graphics calculator is required for this course.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. and A.S. Degree.

Prerequisite: MAC 1105 with a grade of "C" or higher, or placement scores.

MAC 1147 - Precalculus/Trigonometry (5 credits)

This is a one-semester course combining Precalculus Algebra and Trigonometry. The topics covered are algebraic functions (polynomial, rational, exponential, logarithmic, and piecewise), their properties and graphs; polynomial and rational inequalities; conic sections; matrices and determinants; sequences and series; mathematical induction; binomial theorem; trigonometric functions, their properties and graphs; inverse trigonometric functions, their properties and graphs; trigonometric identities; trigonometric equations; solutions of triangles; vector algebra; parametric equations; polar coordinates; and their applications.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. and A.S. Degree.

Prerequisite: MAC 1105 with a grade of "C" or higher.

MAC 2233 - Business Calculus I (3 credits)

This course is for business students. Major topics include limits, differentiation and integration of algebraic functions, exponential and logarithmic functions, areas, and applications of the preceding topics to problems in business.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. and A.S. Degree.

Prerequisite: MAC 1105 with a grade of "C" or higher, or placement scores.

MAC 2311 - Calculus I with Analytic Geometry (5 credits)

This course is for students who need calculus for engineering, math, and science programs. Major topics include limits, differentiation of algebraic, exponential, logarithmic, and trigonometric functions; and applications of derivatives. The definite integral is developed, and its applications are investigated.

A graphics calculator is required for this course.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. and A.S. Degree.

Prerequisite: MAC 1114, MAC 1140 with a grade of "C" or higher, or placement scores; or MAC 1147 with a grade of "C" or higher.

MAC 2312 - Calculus II (4 credits)

This course includes techniques of integration; applications of integration including arc length, volume, and work; polar coordinates, indeterminate forms, improper integrals, sequences, and series.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. and A.S. Degree.

Prerequisite: MAC 2311.

MAC 2313 - Calculus III (5 credits)

This course includes calculus of several variables including limits, partial derivatives, multiple integrals, vector functions, line integrals, cylindrical, and spherical coordinates.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. and A.S. Degree.

Prerequisite: MAC 2312.

MAD - MATHEMATICS

MAD 2104 - Discrete Mathematics (3 credits)

This course teaches the following topics: sets, functions, relations, combinatory, prepositional logic, graphs and trees, and applications.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. and A.S. Degree.

Prerequisite: MAC 1105 with a grade of "C" or higher.

MAE - MATHEMATICS

MAE 1930 - Special Topics/Seminars in Math (1-3 credits)

This course centers around topics of current interest or of special interest to students or instructors. The topics or focus of this course may vary from semester to semester.

MAE 3651 - Learn Math with Technology (1 credit)

This course is designed for pre-service and practicing middle and high school math teachers. It includes the use of innovative computer software and graphing calculators for students to experience learning mathematics with technology at the middle and secondary school levels. The use and integration of dynamic geometry software, computer algebra, electronic spreadsheets, data analysis, and instructional software are studied from a problem-

solving perspective. Students also create programs on a graphing calculator.

This course addresses specific Florida Sunshine State Standards, subject matter competencies, and pedagogy pertinent to the discipline and is required for certification.

A programmable graphing calculator is required for this course.

Prerequisite: EME 3410 or consent of the Department Chair.

MAE 3816 - Elements of Geometry (3 credits)

This course teaches a variety of traditional and innovative geometric topics via a hands-on approach. This course presents the axioms, basic concepts, proofs and constructions of Euclidean geometry involving line segments, angles, triangles, polygons, circles, parallel lines and similarity. Basic concepts of non-Euclidean geometries are explored. The course focuses on proficiencies related to geometric reasoning to develop effective strategies for understanding geometry from conceptual, representational, and problem-solving perspectives. Development of critical mathematical reasoning and application of theories using technology are emphasized.

Not open to students majoring in mathematics.

Prerequisite: MAC 2311, and either MTG 2204 or MTG 3212.

MAE 3940 - Teaching Middle School Mathematics Practicum (2 credits)

This course provides the opportunities to present interactive curriculum projects to middle school students in local area school districts. Students spend a minimum of 30 school-based hours in the middle school classroom. Project presentations are coordinated with in-service middle school teachers and their curriculum schedules and needs.

This course addresses specific Sunshine State Standards, subject matter competencies, and pedagogy pertinent to the discipline and required for certification. This course is designed for students majoring in mathematics education and who will be obtaining teacher certification in grades 5-9 or 6-12.

Prerequisite: EDF 2005, EDF 3214, nine (9) hours of math content courses. . Corequisite: Middle Grades MAE 4363 or Secondary Mathematics EDG 3343.

MAE 4220 - Algebra I for ESE/Math Cert Majors (3 credits)

This course is one of four courses designed to prepare students for teaching middle grades Math and Exceptional Student Education (ESE). Concepts include integers; rational numbers; variables; polynomials and factoring; linear equations; integer exponents; square roots of monomial expressions; and real numbers.

ESE teaching strategies and state certification preparation are also presented.

Prerequisite: Student must have have Florida Exceptional Student Education certification.

MAE 4221 - Algebra 2 for ESE/Math Cert Majors (3 credits)

This course is one of four courses designed to prepare students for teaching middle grades Math and Exceptional Student Education (ESE). Concepts include radicals and radical equations; rational exponents; rational and irrational expressions; systems of linear equations and inequalities; and functions.

ESE teaching strategies and state certification preparation are also presented.

Prerequisite: Florida ESE certification required.

MAE 4222 - Stats/Prob for ESE/Math Cert Majors (3 credits)

This course is one of four courses designed to prepare students for teaching middle grades Math and Exceptional Student Education (ESE). Concepts include methods of random sampling and data analysis; how to organize and display data; measures of central tendency; measures of dispersion; normal distribution; correlation and regression; types of probability, events and counting methods; calculating simple and joint probability; logical and compound statements; conditional, bi-conditional and quantified statements; and Euler diagrams.

ESE teaching strategies and state certification preparation are also presented.

Prerequisite: Florida ESE certification required.

MAE 4223 - Geom/Meas for ESE/Math Cert Majors (3 credits)

This course is one of four courses designed to prepare students for teaching middle grades Math and Exceptional Student Education (ESE). Concepts include metric system conversions; weight and temperature measurements; points, lines, planes and angles; triangles and right triangles; polygons, perimeter and area; transformation; dilation; tessellation; net; and volume.

ESE teaching strategies and state certification preparation are also presented.

MAE 4363 - Middle School/Secondary School Mathematics Methods (3 credits)

This course examines the principles of effective curriculum design and assessment. It addresses the required methods, techniques, strategies, and resources for effective teaching of mathematics. It addresses specific Sunshine State

Standards, subject matter competencies, and pedagogy pertinent to the discipline and required for certification.

Prerequisite: EDF 3214, EDG 3343, Middle Grades MAE 4941, Secondary Mathematics MAE 3940. . Corequisite: Middle Grades MAE 3940 or Secondary Mathematics MAE 4941.

MAE 4815 - Elements of Algebra (4 credits)

This course demonstrates how to investigate the conceptual nature of mathematics and algebra. The students explore topics in set theory, number systems, number theory, data analysis, algebraic structures and elementary probability. Development of critical mathematical reasoning and application of theories using technology are emphasized.

Prerequisite: MAC 2311.

MAE 4932 - Seminar in Mathematics Education (3 credits)

This course emphasizes instructional strategies, planning techniques, evaluation procedures and class management skills.

Senior level status with all program requirements met, and permission of clinical education coordinator required.

Corequisite: MAE 4945.

MAE 4941 - Teaching Secondary Mathematics Practicum (2 credits)

This course is the practicum that provides the opportunities to present interactive curriculum projects to secondary school students in local area school districts. Students spend a minimum of 30 school-based hours in the secondary school classroom. Project presentations are coordinated with in-service secondary school teachers and their curriculum schedules and needs.

This course addresses specific Sunshine State Standards, subject matter competencies, and pedagogy pertinent to the discipline and required for certification. This course is for education majors and those who will be obtaining teacher certification in grades 5-9 or 6-12.

Prerequisite: EDF 2005, EDF 3214, nine (9) hours of math content courses. . Corequisite: Middle Grades EDG 3343 or Secondary Mathematics MAE 4363.

MAE 4945 - Student Teaching in Mathematics (10 credits)

This course requires a teacher candidate to demonstrate pre-professional competencies during a 16 week, full-time internship in a public school approved by the department. Contact hours: a minimum of 35 hours per week for 15 weeks.

Senior level status with all program requirements met, and permission of clinical education coordinator required.

Corequisite: MAE 4932.

MAN - BUSINESS ADMINISTRATION

MAN 2021 - Principles of Management (3 credits)

This course introduces management theories and emphasizes the development of realistic management skills. The course focuses on the functions of management, planning, organizing, staffing, leading, and controlling, and seeking to integrate the theories of major management leaders.

MAN 2300 - Introduction to Human Resource Management (3 credits)

This course emphasizes the functions of a modern Personnel/Human Resources Department, and helps students gain the knowledge and interpersonal skills needed to succeed in this setting. Content includes sound hiring and termination decisions, understanding of applicable federal and state employment legislation, labor relations, employee discipline, performance appraisals, as well as wages and benefits.

MAN 3063 - Organizational Ethics and Values (3 credits)

This course examines ethical business behavior. Characteristics of an ethical manager and organization are explored. Focus is on social responsibility, from a local, regional and global perspective.

MAN 3240 - Organizational Behavior (3 credits)

This course explores individual and group behavior in organizations. Students develop an understanding of how organizations can be managed more effectively. Course content includes motivation, group dynamics, conflict resolution, goal setting and rewards, job design, work stress, power/politics, and organizational change and development.

MAN 3303 - Management Concepts (3 credits)

This course reviews the basic concepts, principles, and techniques of business leadership. Emphasis is on developing a solid foundation while centering in the real themes, demands, and opportunities of an evolving and dynamic business workplace. This course incorporates basic leadership skill development as it relates to the core aspects of the management practice.

MAN 3802 - Strategies and Technology Entrepreneurship (3 credits)

This course provides a broad overview of the principles, theories, and practice of entrepreneurship, together with an understanding of the key tasks, skills, and attitudes required. Opportunity recognition and evaluation are emphasized.

MAN 4046 - Perspective in Leadership (3 credits)

This course explores the theories of leadership and team dynamics. Focus is on the effective leadership of organizations for high performance, recognition and resolution of conflict, and member satisfaction. It also addresses the process of team development, successful motivation and communication techniques, and the attitudes, behaviors and effective interaction of leaders and team members.

MAN 4442 - International Business (3 credits)

This course is an overview of the principle aspects of conducting international business. Domestic and international business characteristics are compared, and international political and legal environments are studied. Topics include international trade theory, foreign exchange, export and import strategies, negotiations and diplomacy, and human resource management in the global marketplace.

MAN 4940 - Business Internship (6 credits)

This course provides students with an opportunity to gain valuable practical experience under the guidance of a professional in the work setting, as well as a professor in the academic setting. The internship is a unique window into the operations of businesses and organizations, which help students apply classroom learning to the workplace and expand their professional skills. Permission to registered required.

Internships are on an "as available basis."

Prerequisite: GEB 3213, MAR 4613, and permission of Department Chair.

MAN 4970 - Business Thesis (6 credits)

This course provides students with an opportunity to practice, develop, and demonstrate their ability to apply theory and method in order to research unstructured problems relevant to activities in business administration. Permission to register required.

Prerequisite: GEB 3213, MAR 4613, and permission of Department Chair.

MAN - ORGANIZATIONAL MANAGEMENT

MAN 3303 - Management Concepts (3 credits)

This course reviews the basic concepts, principles, and techniques of business leadership. Emphasis is on developing a solid foundation while centering in the real themes, demands, and opportunities of an evolving and dynamic business workplace. This course incorporates basic leadership skill development as it relates to the core aspects of the management practice.

MAN 4162 - Customer Relations for Managers (3 credits)

This course emphasizes relationship building for all customers of an organization. The impact of culture and diversity on business relationships, successful negotiation strategies, and promotion of the organization through media relations are discussed.

MAN 4301 - Human Resource Management (3 credits)

This course examines the functions of human resource management including recruitment, selection, benefits and compensation, performance evaluation, development of employees, and formulation of human resource procedures. The strategic role of human resources and current issues is also discussed.

MAN 4504 - Operations Management (3 credits)

This course presents the operational decision-making management techniques to improve the processes and productivity in organizations. Topics discussed are quality and outcomes, efficiency, forecasting, work-flow processes, inventory control, design of goods and services, waiting lines, and critical path. Managing a project from beginning to end, including how to identify needs, and define, assign, and track items is addressed.

MAN 4900 - Capstone Project in Organizational Management (6 credits)

This course focuses on the integration of knowledge, skills and abilities learned in the Organizational Management program through a Capstone project. Permission to register required.

Prerequisite: BUL 3130, GEB 3213, GEB 4891, ISM 3011, MAN 3240, MAN 3303, MAN 4301, MAN 4162, MAN 4504, MAR 3023, select one: GEB 4930, MAN

4442, MAR 4613. Corequisite: Pre/corequisite: ACG 3024, FIN 3400.

MAP - MATHEMATICS

MAP 2302 - Differential Equations (3 credits)

This course includes solutions of first order differential equations and applications, solutions of second order linear differential equations and applications, series solutions, numerical methods, and the Laplace transform.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. and A.S. Degree.

Prerequisite: MAC 2312.

MAR - BUSINESS ADMINISTRATION

MAR 2011 - Principles of Marketing (3 credits)

This course presents basic marketing concepts by focusing on the market mix, target marketing, primary marketing functions, and implementation of marketing strategies in a modern organization.

MAR 2101 - Social Media Marketing (3 credits)

This course emphasizes researching current social media techniques and their application to the business marketing environment. Current social media advertising platforms are examined and reviewed with techniques and insights for extracting business value out of social media. Review of data analytics including ROI (Return on Investment) are applied to social media tools. Research of current social media techniques for business applications is utilized. The evaluation of current social media platforms for effective and appropriate use of specific demographic audiences is developed. Students develop a business image management strategy.

MAR 3023 - Marketing Management (3 credits)

This course presents an overview of the marketing process including: a strategic marketing framework, marketing research, consumer behavior and analysis, organizational buying behavior, competitor analysis, communication and advertising strategy, channels of distribution, pricing strategies, sales promotion, customer relationship management, services marketing, global marketing strategies and new product development.

MAR 4613 - Marketing Research (3 credits)

This course address the issues, methods and strategies associated with the collection, management, analysis and dissemination of information for domestic and global marketing decisions. The core focus is on primary (quantitative and qualitative) and secondary research methodologies, including problem identification, methodology design, sampling planning, questionnaire design, and field work.

Prerequisite: MAR 3023.

MAS - MATHEMATICS

MAS 3105 - Applied Linear Algebra (4 credits)

This course provides a thorough treatment of linear algebra using a matrix-oriented approach, theory, and application projects. Major topics include matrices, systems of linear equations, linear transformations, determinants and their properties, eigenvectors and eigenvalues, vector spaces and subspaces, inner product spaces, orthogonality, similarity, and diagonalization. This course includes both theory and computational skills.

For math majors, this course serves as a transition from a study of techniques to more conceptual math. For engineering and science majors, this course serves as a foundation in linear algebra.

Prerequisite: MAC 2312.

MAS 4203 - Number Theory (3 credits)

This course shows students how to explore relationships and formulate conjectures in the areas of divisibility, congruence, Diophantine equations, the Euclidean algorithm, and number-theoretic functions. Formal proofs are developed to support these conjectures. Other topics include the Fundamental Theorem of Arithmetic and classical theorems of number theory.

Development of mathematical thinking is emphasized.

Prerequisite: MAC 2313, MHF 3202.

MAT - MATHEMATICS

MAT 0028 - Developmental Math II (N) (3 credits)

This course prepares students for MAT-1033 (p. 253). Topics include properties of integers and rational numbers, integer exponents, simple linear equations and inequalities, operations on polynomials including beginning techniques of factoring, introduction to graphing, and introduction to operations on rational expressions.

Credit not applied toward degree.

MAT 0055 - Elementary Algebra Modules (N) (1 credit)

This modularized laboratory course strengthens the necessary algebraic skills needed to master the material and achieve college readiness in mathematics.

Credit does not apply toward degree.

MAT 1033 - Intermediate Algebra (3 credits)

This course covers the following topics: factoring, algebraic fractions, radical and rational equations, complex numbers, quadratic equations, rational equations, linear equations, and inequalities in two variables and their graphs, systems of linear equations and inequalities, and introduction to functions.

Prerequisite: MAT 0028 with a grade of "C" or higher, or MAT 0055 with grade of "S", or placement scores.

MAT 1100 - Quantitative Reasoning (3 credits)

This course includes learning job skills such as working with spreadsheets, working in a collaborative environment, and applying practical math skills in daily decision making. This course develops mathematical maturity and self-efficacy through critical thinking skills, problem solving strategies, and communicating mathematically. This course builds the foundation for topics which include algebra, set theory, logic, geometry, probability, and statistics.

MAT 3904 - Secondary Math through Tutoring (1 credit)

This course presents the general math skills needed for successfully tutoring in an academic setting, general methods of tutoring, and the tutoring techniques needed in specific courses. Teacher-tutor seminars, teacher-tutor conferences, and formal instruction supplement the extensive tutoring experiences.

Completion of nine (9) hours of math content courses or permission of instructor required.

Prerequisite: EDF 3214 & 9 hours of math content courses.

MAT 3905 - Middle Grades Math Through Tutoring (3 credits)

This course explores the general math skills needed for successfully tutoring in an academic setting, general methods of tutoring, and the tutoring techniques needed in specific courses. Teacher-tutor seminars, teacher-tutor conferences, and formal instruction supplement the extensive tutoring experiences.

Completion of nine (9) hours of math content courses or permission of instructor required.

Prerequisite: EDF 3214.

MCB - BIOLOGY

MCB 2010 - Microbiology for Health Sciences (3 credits)

This course is a survey of the structure, physiology, genetics, and control of microorganisms, including an overview of the medical importance of viruses, bacteria, protozoans, and multicellular parasites. Host-parasite interactions, including specific and nonspecific immunity are also examined.

Prerequisite: BSC 1020 and BSC 1020L or BSC 2010 and BSC 2010L . Corequisite: MCB 2010L.

MCB 2010L - Microbiology Lab for Health Sciences (1 credit)

This is the lab component for MCB-2010 (p. 253). Lab experiences include the following topic areas of viruses, bacteria, protozoans, and multicellular parasites.

Prerequisite: BSC 1020 and BSC 1020L or BSC 2010 and BSC 2010L. Corequisite: Prerequisite/corequisite: MCB 2010.

MCB 3023 - General Microbiology (3 credits)

This course is an introduction to the biology of microorganisms. Concepts include the structure, physiology, and ecology of bacteria, protists, viruses, and fungi.

Prerequisite: BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, CHM 2210, CHM 2210L with a grade of C or higher. . Corequisite: MCB 3023L.

MCB 3023L - General Microbiology Laboratory (1 credit)

This course is the laboratory component for MCB-3023 (p. 253). Lab experiences include the structure, physiology, and ecology of bacteria, protists, viruses, and fungi.

Prerequisite: BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, CHM 2210, CHM 2210L with a grade of C or higher. Corequisite: MCB 3023.

MEA - MEDICAL ASSISTING

V000

MEA 0200C - Medical Assisting Clinical Procedures I (N) (155 hours)

This course focuses on infection control, vital signs, physical examination, specialty exams, as well as diet therapy. Patient communication techniques and professional attributes are discussed. Procedures are demonstrated by the instructor, practiced by the student, and performed by the student for the practical grade.

Corequisite: Pre/corequisite: HSC 0003 .

MEA 0201C - Medical Assisting Clinical Procedures II (N) (150 hours)

This course covers in-depth training of first aid; proper bandaging techniques, and exam procedures and

treatments; assistance and set up for minor surgery including identification, recognition and care of needed instrumentation; autoclaving and sterilization, sterile fielding, and removal of sutures/staples/casts.

Topics such as patient rehabilitation, pharmacology, and administration of medications are reviewed and demonstrated on simulated patients. This course introduces specialty procedures used in pulmonology, neurology, urology, pediatrics, orthopedics, ophthalmology and otolaryngology.

Prerequisite: MEA 0200C; Pre/corequisite: MEA 0234.

MEA 0231 - Anatomy, Physiology and Medical Language (N) (90 hours)

This course provides the student with a general overview of the anatomy and physiology of the human body and assists in understanding how the human body works. It also explores the language of health care, medical terminology, as well as the ability to read and comprehend fundamental terminology used in a variety of medical records and reports.

MEA 0234 - Pathophysiology and Disease (N) (75 hours)

This course presents an overview of the disease process, infectious diseases, neoplasms, and congenital diseases. Each common disease/disorder within a body system is described using etiology, signs and symptoms, diagnostic procedures, treatment, prognosis, and prevention.

Prerequisite: MEA 0200C, HSC 0003. Corequisite: MEA 0201C, MEA 0254C, MEA 0258, HCP 0720C, MEA 0334.

MEA 0242 - Introduction to Pharmacology (N) (90 hours)

This course discusses general pharmacological concepts and principles in the management of patient care. Effective administration of therapeutic drugs, indications and contraindications are discussed, including the effects of medications on body systems. Drug classifications and their principal actions are reviewed. Dosage calculation is emphasized.

Corequisite: MEA 0200C.

MEA 0254C - Medical Office Laboratory (N) (75 hours)

This course provides didactic and laboratory instruction and practice in specimen collection and preparation, microscopy, hematology, urinalysis, and basic office bacteriology, including use of laboratory instruments.

MEA 0258 - Diagnostic Imaging in Medical Offices (N) (30 hours)

This course provides an overview of radiologic imaging including radiography, MRI, ultrasound, fluoroscopy, nuclear medicine, and CT. Students receive instruction on patient preparation, safety procedures, and information for each of the diagnostic modalities. Subject covered include fundamentals of x-ray production, basic knowledge of the equipment used in radiography, radiation protection, film handling, film processing and the basic positioning of the chest; and extremities and spine radiography.

Prerequisite: . Corequisite: Pre/corequisite: MEA 0234.

MEA 0334 - Medical Office Procedures (N) (75 hours)

This course focuses on medical insurance, diagnostic and procedural coding, banking procedures, billing and collection procedures, payroll procedures, as well as medical transcription. The student will also be able to analyze and employ third party guidelines for reimbursement and understand the legal concepts affecting billing and medical records.

Prerequisite: MEA 0200C. Corequisite: MEA 0201C, MEA 0254C, MEA 0258, HCP 0720C, MEA 0234.

MEA 0500 - Medical Office Receptionist (N) (75 hours)

This course familiarizes the student with the basic clerical skills necessary to the operation of a medical office.

MEA 0800 - Medical Assisting Practicum (N) (200 hours)

This course presents a general overview of the operation of a medical practice. Students are assigned to a physician's office or clinic for a total of two hundred (200) hours to observe and, under supervision, perform basic administrative, laboratory, and clinical duties.

Conference meetings are arranged between the student and the internship director. Completion of Medical Assisting Program and permission of instructor is required.

Prerequisite: HCP 0720C, HCP 0750C, HSC 0003, MEA 0200C, MEA 0201C, MEA 0231, MEA 0234, MEA 0242, MEA 0254C, MEA 0258, MEA 0334, MEA 0500 .

MEA 0952 - Medical Assisting Seminar (N) (53 hours)

This course examines the fundamentals of Medical Assisting through group discussion and individual conferences on clinical experiences during internship for workplace readiness. Study techniques and preparation for students planning to write the American Association of Medical Assistants (AAMA) certification examination are also presented.

Prerequisite: MEA 0201C, MEA 0254C, MEA 0258, HCP 0720C; and MEA 0334 or OTA 0613.

MET - PHYSICAL SCIENCES

MET 1001 - Weather and Climate (3 credits)

This course examines basic weather patterns and climatic situations.

MGF - MATHEMATICS

MGF 2106 - Survey in Mathematics (3 credits)

This course includes logic, geometry, probability and counting principles, descriptive statistics, sets and Venn diagrams, reasoning patterns, and a history of mathematics. The purpose of the course is to present the utility of mathematics to students who do not intend to take other mathematics courses.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. and A.S. Degree.

NOTE: Students cannot take MGF2106 and MGF2107 in the same semester.

Prerequisite: MAT 1033 or MAT 1100 with a grade of "C" or higher, or placement scores.

MGF 2107 - Explorations in Mathematics (3 credits)

This course includes topics from financial mathematics, linear and exponential growth, decay numbers and number systems, elementary number theory, right triangle trigonometry, and a history of mathematics. The purpose of the course is to present the utility of mathematics to students who do not intend to take other mathematics courses.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. and A.S. Degree.

NOTE: Students cannot take MGF2106 and MGF2107 in the same semester.

Prerequisite: MAT 1033 or MAT 1100 with a grade of "C" or higher, or placement scores.

MHF - MATHEMATICS

MHF 3202 - Sets & Logic (3 credits)

This course covers the use of language in mathematics, set theory, functions, relations, and logic, with additional topics at the discretion of the professor (e.g. Boolean algebras, symmetries of the plane, wallpaper patters). Examples of sets, operations on sets, set algebra, Venn diagrams, truth tables, tautologies, applications to mathematical arguments and mathematical induction are studied.

Prerequisite: MAC 2311 with a grade of "C" or higher.

MHF 4404 - History of Mathematics (3 credits)

This course is designed as a Capstone course for those students who are majoring in secondary mathematics education.

It consists of readings in the history and philosophy of mathematics and in current issues involving mathematics and society. Contributions from mathematicians such as Archimedes, Descartes, Fermat, Newton, Leibnitz, Euler and Gauss are discussed. Emphasis is given to how mathematics relates across disciplines as well as mathematical connections within the discipline. Fundamental ideas of high school mathematics are examined from an advanced standpoint.

This course addresses specific state educational standards, subject matter competencies, and pedagogy pertinent to the discipline and required for certification.

Prerequisite: MAC 2311.

MHS - HUMAN SERVICES

MHS 3460 - Crisis Intervention (3 credits)

This course examines and identifies the stages of crisis response, types of crises, and techniques of crisis intervention. Focus includes examination of the psychological and physical responses to crisis situations, identification of at risk individuals, and prevention of crises.

Prerequisite: HUS 1001, HUS 2302.

MKA - BUSINESS ADMINISTRATION AND MANAGEMENT

MKA 1303 - Mid-Management Seminar I (4 credits)

This course examines alternating topics which allow students immediate application of the subject at work. Topics vary and include communication, customer relation policies; international business; financial analysis and others.

MKA 2021 - Salesmanship (3 credits)

This course emphasizes the development of effective sales qualifying, presentation, and follow-up skills fundamental to success in any career in today's complex marketplace.

MKA 2161 - Customer Relations (1 credit)

This course increases awareness of quality customer service and develops an appreciation for its vital importance in today's marketing businesses. The content includes customer service techniques, customer communication skills, dealing with challenging customers,

and the development and implementation of a quality customer service philosophy.

MLT - MEDICAL LABORATORY TECHNOLOGY

MLT 1040C - Introduction to Medical Technology (3 credits)

This course focuses on introductory medical laboratory principles and skills common to all laboratory departments including hematology, clinical chemistry, microbiology, serology and immunology and blood banking or immunohematology. It also provides a general overview on those techniques, procedures, and issues pertaining to the proper collection of blood and body fluid specimens for routine clinical laboratory testing.

Corequisite: MLT 1362.

MLT 1199 - Introduction to Molecular Diagnostics (1 credit)

This course presents an introduction to the molecular mechanisms of human diseases and a survey of diagnosis through cytogenetic and nucleic acid molecular technology, basic and clinical techniques of DNA-based diagnostic methods, and the issues related to those methods.

Corequisite: MLT 2625, MLT 2625L.

MLT 1230 - Urinalysis and Body Fluids (2 credits)

The course studies the principles of kidney function, chemical and microscopic examination of urine, and special urinalysis screening tests are included. This class studies cerebrospinal fluid, gastric body fluids, gastric analysis, fecal analysis, and miscellaneous body fluids.

Prerequisite: MLT 1362.

MLT 1230L - Urinalysis and Body Fluids Laboratory (1 credit)

The course introduces the laboratory concepts of urinalysis and body fluids which include the chemical, physical and microscopic characteristic of urine. It also includes the studies of cerebrospinal fluid, gastric fluid, fecal analysis and other miscellaneous body fluids.

Prerequisite: MLT 1362. Corequisite: MLT 1230.

MLT 1330 - Hemostasis (2 credits)

This course introduces the student to the basics of laboratory testing in hemostasis including specimen processing. Plasma coagulation components and associated disorders are covered.

Corequisite: MLT 1362, MLT 1362L.

MLT 1362 - Hematology (4 credits)

This course introduces basic hematology. Included is the study of normal blood cell maturation, blood cell disorders, and recognition of normal and abnormal blood cells.

Admission into the MLT Program is required.

Corequisite: MLT 1040C.

MLT 1362L - Hematology Lab (1 credit)

This course provides laboratory training in MLT skills related to hematology. The emphasis is on appropriate collection, handling, processing, and testing of specimens in the area of hematology. Recognition of technical problems and selected abnormalities are also presented.

Corequisite: MLT 1362, MLT 1040C.

MLT 1440C - Parasitology and Mycology (2 credits)

This course studies the general characteristics, classifications and etiology of medically important parasites and fungi.

Corequisite: MLT 2400, MLT 2400L.

MLT 1500C - Immunology and Serology (4 credits)

This course examines the formation, structure, and action of antigen-antibody reactions with performance of sero-diagnostic tests procedure. The course is a combination of lecture and laboratory testing.

Prerequisite: MLT 1525, MLT 1525L.

MLT 1525 - Immunohematology (Blood Bank) (4 credits)

This course studies immunohematology principles and standard techniques used in blood banking: ABO, RH typing antibody screening, and compatibility testing. The emphasis is on appropriate collection, handling, and testing of specimens in the area of blood banking. Technical problems, identification of antibodies, and blood component preparation and storage are studied.

Prerequisite: MLT 1362. Corequisite: MLT 1525L.

MLT 1525L - Immunohematology Lab (1 credit)

This course provides laboratory training in MLT skills related to immunohematology principles and standard techniques used in blood banking: ABO, RH typing antibody screening, and compatibility testing. The emphasis is on appropriate collection, handling, and testing of specimens in the area of blood banking. Recognition of technical problems, identification of antibodies, and blood component preparation/storage are also covered.

Prerequisite: MLT 1362. Corequisite: MLT 1525.

MLT 2033 - Medical Laboratory Career Orientation (1 credit)

This course focuses on the responsibilities and ethics of MLT, review of publications, job skills, licensure information, human relations, and unusual case studies.

MLT 2400 - Medical Microbiology (4 credits)

This course presents the general characteristics and classification of clinically important bacteria. Instruction in the theory, practical application, and pathogenesis of clinical microbiology, including collection, setup, identification, susceptibility testing and reporting procedures are also discussed.

Corequisite: MLT 2400L, MLT 1440C.

MLT 2400L - Medical Microbiology Lab (1 credit)

This course provides laboratory training in MLT skills related to clinical microbiology. The emphasis is on specific techniques and instruments, identification factors that affect procedures and results, confirmation of results and monitoring quality control programs, and correction of error.

Prerequisite: MLT 1500C. Corequisite: MLT 2400.

MLT 2625 - Clinical Chemistry (5 credits)

This course examines the theory and principles of chemical analysis of blood and body fluids with emphasis on automated procedures and specialized techniques.

Corequisite: MLT 2625L.

MLT 2625L - Clinical Chemistry Lab (1 credit)

This course examines the principles of chemical analysis of blood and body fluids with emphasis on basic manual procedures, including automated procedures and specialized techniques.

Corequisite: MLT 2625.

MLT 2807L - Immunohematology Clinical Practicum (3 credits)

This course focuses on the theory, practical application and technical performance of immunohematological, and serological procedures relating to disease. Experience is gained by analyzing normal and abnormal specimens in clinical facilities. Practical application of safety and quality control procedures related to the department is also covered.

Prerequisite: MLT 1525, MLT 1525L, MLT 1500C.

MLT 2809L - Hematology Clinical Practicum (3 credits)

This course focuses on the theory, practical application and technical performance of hematological, and coagulation procedures and urinalysis and body fluid procedures related to disease. Experience is gained in analyzing normal and abnormal specimens in clinical facilities. Practical application of safety and quality control procedures related to the department is also covered.

Prerequisite: MLT 1362, MLT 1362L, MLT 1230, MLT 1230L.

MLT 2810L - Clinical Chemistry Practicum (3 credits)

This course examines the theory, practical application and technical performance of clinical chemistry laboratory procedures. Experience is gained in analyzing normal and abnormal specimens in clinical facilities. Practical application of safety and quality control procedures related to the department is also covered.

Prerequisite: MLT 2625, MLT 2625L.

MLT 2811L - Microbiology Clinical Practicum (3 credits)

This course focuses on the theory, practical application and technical performance of microbiological, parasitology and mycology procedures related to disease. Experience is gained by analyzing normal and abnormal specimens in clinical facilities. Practical application of safety and quality control procedures related to the department is also covered.

Prerequisite: MLT 2400, MLT 2400L, MLT 1440C.

MLT 2930 - Medical Lab Technology Review I (1 credit)

This course provides a comprehensive review of knowledge and competencies required for career entry at the technician level of certification. Using information from the list of objectives for each previous course and clinical, components of competencies. Students are required to achieve a 76% or better on examination in

Clinical Chemistry, Urinalysis, and Body Fluids, Immunology, Microbiology including Parasitology, Microbiology and Virology. This course is meant to provide a transition from the student role to a graduate role.

Prerequisite: MLT 2625, MLT 2625L. Corequisite: MLT 2810L, MLT 2811L, MLT 2807L, MLT 2809L.

MLT 2931 - MLT Review for the State Exam (1 credit)

This course provides a comprehensive review of knowledge and competencies required for career entry at the technician level of certification. Using information from the list of objectives for each previous course and clinical, components of competencies used for the certification examination are emphasized.

Students are required to achieve a 76% or better on examinations in Hematology, Immunohematology, Clinical Chemistry, Urinalysis, and Body Fluids, Immunology, Microbiology including Parasitology, Mycology and Virology. This course is meant to provide a transition from the student role to a graduate role.

Prerequisite: MLT 2930. Corequisite: MLT 2807L. MLT 2809L, MLT 2810L, MLT 2811L.

MMC - BROADCAST COMMUNICATIONS/JOURNALISM - PUBLIC RELATIONS

MMC 1000 - Survey of Mass Communication (3 credits)

This course is an introduction to the various media of mass communication with special emphasis on the roles and responsibilities to society and the public served.

MMC 2100 - Writing for Mass Communications I (3 credits)

This course focuses on producing copy for mass media, addressing the shifting modes of communication in the digital information age, exploring the divergence of newspapers, magazines, radio, television, public relations, advertising etc. to the internet/social media. It considers a wide variety of story forms like photojournalism, podcasts, cartooning, long form journalism, editorial essays, PSAs, etc with an emphasis on the value of ethics and empathy in gathering and portraying information.

Prerequisite: ENC 1101.

MNA - BUSINESS ADMINISTRATION AND MANAGEMENT

MNA 1330 - Instructor Effectiveness Training (1 - 3 credits)

This course enables college teachers of occupational programs and those who train employees in industry to more effectively plan, deliver, and evaluate their classes. It focuses on the development of appropriate learning materials, effective teaching methods and appropriate testing procedures.

MNA 1821 - Electronic Commerce (3 credits)

This course presents the concepts, tools, and strategies for understanding and exploiting opportunities associated with electronic commerce. Topics cover online ordering, interacting with firms and governments, and how businesses are organized and compete in the global marketplace. This course develops a strategic understanding of the new electronic marketplace based on fundamental economics of the digital economy.

Student must possess basic computer skills and knowledge of Internet.

MNA 2100 - Interpersonal Relations in Business (3 credits)

This course helps business management students build their awareness of the major interpersonal challenges facing modern managers. Through theory and experimental activities, the student develops skills in leadership, communications, and motivation.

MNA 2345 - Supervision (3 credits)

This course is primarily for practicing or aspiring supervisors who hold first-line or middle-level management positions. Topics include goal setting, giving effective praise/reprimands, and practical, low-cost methods of motivation.

MNA 2932 - Professional Development (.5 - 5 credits)

This course is custom-designed, each time offered, to enable participating students to develop and refine skills necessary to be an effective leader in an identified employment setting. The course focuses on developing an understanding and recognition of skills such as effective communications techniques, interpersonal relations concepts, decision-making, motivation, as well as time and stress management, most required in the targeted setting.

MTB - ELECTRONIC ENGINEERING TECHNOLOGY

MTB 1321 - Technical Mathematics I (3 credits)

This course covers basic algebra topics as applied in the field of electronic engineering technology.

Prerequisite: MAT 0028 or placement into college-level mathematics.

MTB 1322 - Technical Mathematics II (3 credits)

This course focuses on right triangle trigonometry, circular functions, graphs or trig functions, trig identities, exponents and logarithms, complex numbers, and their application to real world problems.

Prerequisite: MTB 1321.

MTG - MATHEMATICS

MTG 2204 - Elementary Geometry (3 credits)

This course presents the content of elementary geometry. Topics include lines and angle relationships, properties of parallel lines, congruency and similarity in triangles, types of quadrilaterals, area, volumes, and properties of circles. Methods of proof using logic principles and compass and straight-edge construction are emphasized throughout.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. and A.S. Degree.

Prerequisite: MAT 1033 with a grade of "C" or higher, or placement scores.

MTG 3212 - Modern Geometries (3 credits)

This course provides axiomatic treatment of topics in Euclidean geometry, Non-Euclidean geometry, and various subcategories of geometry, such as hyperbolic, projective, and fractal geometries.

Prerequisite: MAC 2312.

MUL - MUSIC

MUL 2010 - Survey of Music Literature (3 credits)

This course examines the history, structure, and development of music through the survey and study of representative musical literature. Musical genres from the Middle Ages to contemporary music are presented. Students demonstrate college-level writing skills through multiple assignments.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

Prerequisite: student must score into college-level English and reading on placement test.

MUL 2012 - Survey of Music Literature - Musical Theater (3 credits)

This course examines the history and styles of musical theater genres through the survey and study of representative musical theater literature. Musical genres from the 19th century to contemporary musical theater are presented.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

Prerequisite: student must score into college-level English and reading on placement test.

MUN - MUSIC

MUN 2012 - Instrumental Ensemble (1 credit)

This course is designed to give college level students the opportunity to perform various genres of String, Wind and Percussion chamber music literature. Note: All participants are required to perform on a wind or percussion instrument.

MUN 2130 - Symphonic Band (1 credit)

This course provides for the study and practice of performance techniques and skills, analyzes music from representative musical genres, and culminates in an IRSC OnStage concert performance.

MUN 2140 - Wind Ensemble (1 credit)

This course allows the student to engage in a highly skilled level of study of wind literature important to contemporary performing practices.

MUN 2290 - Theatre Orchestra (1 credit)

This course provides performance experience in the instrumental ensemble used for musical theatre. The students in this course comprise the orchestra for the IRSC OnStage musical.

MUN 2310 - College Chorale (1 credit)

This course examines choral literature from all musical eras and presents appropriate vocal technique for performance application. This course culminates in an IRSC OnStage concert performance.

MUN 2311 - Advanced College Chorale (1 credit)

This course relates the application of proper vocal technique to the study of a wide variety of choral literature and culminates in a concert performance.

Permission of instructor/audition is required.

Prerequisite: MUN 2310.

MUN 2372 - Cabaret (1 credit)

This course includes performance applications and opportunities for vocal music theories and skills enhancement exercises. Students demonstrate effective and appropriate vocal performance skills for varying genres and styles of popular music.

Permission of instructor required.

MUN 2710 - Stage/Jazz Band (1 credit)

This course presents the study, analysis, and performance criteria for the jazz musical genre. This course culminates in an IRSC OnStage concert performance.

MUN 2720 - Vocal Ensemble Company (1 credit)

This course presents the study, analysis, and vocal performance criteria for popular and jazz music. This course culminates in the IRSC OnStage musical production.

MUN 2722 - Advanced Vocal 'Company' (1 credit)

This course provides performance applications and opportunities for vocal music theories and skills enhancement exercises. The students demonstrate effective and appropriate vocal performance skills for varying genres and styles of popular music.

Permission of instructor required.

Prerequisite: MUN 2720.

MUO - MUSIC

MUO 1002 - Musical Theater Lab I (2 credits)

This course introduces the fundamentals of singing in musical theater productions, including proper vocal technique (respiration, projection, phonation) in combination with acting and movement. Students are required to research and report upon musical theater literature and performance styles.

Permission of instructor required.

- 2000

MUO 2020 - Music Theatre (1 credit)

This course provides performance training and experience in acting, voice, dance, and technical theatre through the rehearsal and performance of a Main Stage musical production.

Audition required.

MUT - MUSIC

MUT 1001 - Fundamentals of Theory (3 credits)

This course introduces the basic music fundamentals including notation, rhythm, scales and chords, and intervals. This course is open to all students on campus and serves as an elective in the Performing & Visual Arts.

MUT 1111 - Theory of Music I (3 credits)

This course improves performance and compositional skills by providing an understanding of musical concepts, techniques, and symbols.

Prerequisite: Ability to read music or successful completion of MUT 1001 required.

MUT 1112 - Theory of Music II (3 credits)

This course enables the student to write music, which effectively demonstrates an understanding of theoretical terms, symbols, or concepts, and be able to solve specific, compositional problems.

Prerequisite: MUT 1111.

MUT 1221 - Introduction to Sightsinging (2 credits)

This course presents melodic and rhythmic principles. Students gain experience through hands-on preparation of musical exercises.

MUT 1222 - Introduction to Sightsinging II (2 credits)

This course teaches sightreading and sightsinging. Musical constructs (intervals, scales, rhythms, chords) are drilled. Students read melodies at sight as well as notate dictated melodies, harmonies, and rhythms.

Permission of instructor required.

Prerequisite: MUT 1221.

MUT 1241 - Sightsinging and Ear Training I & II (1 credit)

This course emphasizes aural recognition of the structural components of music. Students are required to notate aural dictation and sing melodies at sight.

Prerequisite: two (2) semesters of MUT 1221.

MUT 1242 - Sightsinging and Ear Training II (1 credit)

This course teaches sight reading and sightsinging. Advanced concepts of intervals, scales, rhythms, and harmonies are drilled. Students read melodies at sight as well as notate dictated melodies, harmonies, and rhythms.

Prerequisite: MUT 1221, MUT 1222.

MUT 2116 - Theory of Music III (3 credits)

This course focuses on the analysis of advanced structural materials and designs of music with emphasis on 19th century concepts and part-writing.

Prerequisite: MUT 1112.

MUT 2117 - Theory of Music IV (3 credits)

The course is a study of advanced structural materials of music with emphasis on 20th century styles and compositional systems.

Prerequisite: MUT 2116.

MUY- HUMANITIES

MUY 2100 - Humanities: Music and Music Therapy (3 credits)

This course provides educational resources for the general student population and community participants on the fundamentals of music history, careers in music and an overview of therapeutic advances in music therapy in order

to create an in depth awareness of available resources and a better understanding of music in society.

Students demonstrate college-level writing skills through multiple assignments and are required to give oral presentations of a specific music or music therapy related topic.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

Prerequisite: student must score into college-level English and reading on placement test.

MVB - MUSIC - APPLIED

MVB 2223 - Secondary Applied Trombone

MVB 2321 - Principal Applied Trumpet

MVB 2322 - Principal Applied French Horn

MVB 2323 - Principal Applied Trombone

MVB 2324 - Principal Applied Baritone Horn

- Principal Applied Tuba

MVK - MUSIC

MVK 1111 - Class Piano I and II (2 credits)

This course is designed for music majors as a fundamental class in keyboard techniques. Emphasis is on specific skills such as sight-reading, transposition, and harmonization.

MVK 2121 - Class Piano III and IV (2 credits)

This course is a continuation of MVK-1111 (p. 261).

Prerequisite: MVK 1111.

MVK 2321 - Principal Applied Piano

MVP - MUSIC - APPLIED

MVP 2321 - Principal Applied Percussion

MVS - MUSIC

MVS 2324 - Principal Applied String Bass

MVS 2326 - Principal Applied Guitar

MVV - MUSIC

MVV 1111 - Class Voice I & II (1 credit)

Students are instructed in the fundamentals of vocal technique. Course includes presentation of basic music reading principles and performance application.

MVV 2221 - Secondary Applied Voice

MVV 2321 - Principal Applied Voice

MVW - MUSIC - APPLIED

MVW 2321 - Principal Applied Flute

MVW 2323 - Principal Applied Clarinet

MVW 2324 - Principal Applied Bassoon

MVW 2325 - Principal Applied Saxophone

NSP - NURSING - SPECIAL TOPIC COURSES

P000

NSP P933 - Intravenous Therapy for Practical Nurses (N) (varying clock hours)

This course introduces intravenous therapy to licensed practical nurses. It contains the education and training requirements necessary to qualify the LPN to administer I.V. fluids as stated in Florida Board of Nursing Rules.

Student must be GPN, GN, RN or LPN.

NUR - NURSING - ASSOCIATE DEGREE NURSING

NUR 1021C - Intro to Nursing Concepts 1 (10 credits)

This course introduces the novice student to concepts within the domain of nursing, health, situation, and person. Included is an across the lifespan introduction to concepts discussed throughout the nursing program. Upon completion, students will be able to provide safe, basic nursing care incorporating the concepts identified in the course.

Prerequisite: BSC 2093, BSC 2093L, with a grade of "C" or higher; pre/corequisite: MCB 2010, MCB 2010L, BSC 2094, BSC 2094L, all with a grade of "C" or higher.

NUR 1034C - Health-Illness-Concepts 2 (11 credits)

This course further develops the concepts within the domains of nursing, health, situation, and person. Students learn the concepts and skills necessary to provide basic nursing care and health maintenance in a variety of settings. Focus is on basic physiological and psychological integrity of clients throughout the lifespan across cultures.

Prerequisite: NUR 1021C, MCB 2010, MCB 2010L, BSC 2094, BSC 2094L, all with a grade of "C" or higher.

NUR 2035C - Health-Illness Concepts 3 (10 credits)

This course expands the knowledge, skills, and attitude to safely care for clients with alterations in health that require

clinical decision making. Emphasis is placed on the concepts of psychosocial integrity and physiological adaptation. Clinical experiences are provided with clients across the lifespan.

Prerequisite: NUR 1034C with a grade of "C" or higher.

NUR 2205C - Nursing and Complex Health Concepts 4 (11 credits)

This course assimilates the knowledge, attitude and skills to safely care for clients with multi-contextual problems. Emphasis is placed on the concepts of perfusion, quality and safety, managing care, and professional behaviors. Clinical experiences will be provided with clients across the lifespan.

Prerequisite: NUR 2035C with a grade of "C" or higher.

- NUR-2930

NUR 2930 - Special Topics in Nursing (0.5 - 5 credits)

This course reflects current topics of interest. Topics may vary from semester to semester.

NUR - BACHELOR OF SCIENCE NURSING

NUR 3065C - Nursing Assessment (3 credits)

This course teaches the holistic assessment of individuals. This course advances students' knowledge and skills in history taking, risk appraisal, health promotion, psychosocial, cultural, developmental, and functional assessment, and physical examination techniques. The emphasis for this course is on diagnostic reasoning skills in assessing variations from normal and applying the nursing process. The lab provides the practical experience of nursing assessment.

NUR 3125 - Pathophysiology (3 credits)

This course teaches an advanced study of pathophysiology and symptomatology across the lifespan due to alterations in selected human biological systems. The focus is on alterations in physiological functions as manifestations of disease. Emphasis is on relating signs, symptoms, and laboratory findings of common alterations and understanding nursing interventions to promote adaptation.

NUR 3145 - Pharmacology (3 credits)

This course teaches pharmacotherapeutics, pharmacodynamics, and pharmacokinetics as they relate to the nursing practice. The nursing processes are utilized in the study of various drug classifications.

NUR 3164 - Nursing Research and Informatics (3 credits)

This course teaches the relationship of nursing research and the utilization of evidence-based practice. This course explores the research process as a foundation for acquiring skills needed to access, critically appraise, and synthesize research literature. Information technology is also examined in this course. Concepts in health care informatics, trends, and innovative strategies and applications are introduced.

Prerequisite: MAC 1105, STA 2023.

NUR 3826 - Ethical and Legal Issues in Health Care (3 credits)

This course teaches the ethical and legal rights and responsibilities of the professional nurse in a changing health environment. The emphasis of this course is to determine the nurse's individual accountability within the legal scope of practice and to clarify individual accountability for ethical nursing practice.

NUR 3846 - Nursing Theory (3 credits)

This course explores the development of professional nursing and nursing theory. Students apply grand, middle-range, and practice theories to their personal nursing practice. Students also review nursing theories and identify with one whose principles can be applied to their practice.

NUR 4636C - Community Health Nursing (4 credits)

This course teaches community and public health nursing in relation to disaster preparedness, epidemiology, culture and environment. The focus of this course is on nursing care designed to prevent and/or reduce risk of disease and injury and promotion of health and wellness in diverse populations across the age spectrum. Clinical experiences are provided in community-based sites in a variety of settings.

Prerequisite: NUR 3164, NUR 3846.

NUR 4655 - Nursing in a Diverse Culture (3 credits)

This course teaches the knowledge, skills, and behaviors needed to provide culturally competent nursing care to people from diverse cultural groups. This course analyzes the health-related practices, values, and beliefs among cultural groups as they influence nursing practice.

NUR 4827 - Leadership and Management in Professional Nursing (3 credits)

This course teaches principles of nursing leadership and management with an emphasis on decision-making, priority setting, delegating, communicating,teach building, and managing fiscal and human resources. The focus is on

preparation of the professional nurse for leadership responsibilities in collaboration with the interdisciplinary healthcare environment. Leadership experiences are provided in a variety of clinical settings.

Prerequisite: NUR 3846, NUR 3164, NUR 4837, NUR 4636C . Corequisite: Pre/corequisite: NUR 3826, NUR 4655.

NUR 4837 - Health Care Policy and Economics (3 credits)

This course teaches the present realities of the health care industry, the stages of public policy development, and how economics influences health care. The focus is on paradigm shifts and trends impacting health care today. The students are prepared to proactively plan and function in a constantly changing health care environment. The application of policy development and activism is included.

OCA - OFFICE ADMINISTRATION CAREERS

OCA 0312 - Office Communications I (N) (75 hours)

This course provides a basic overview of written communication used in today's business environment. Emphasis is placed on developing proficiency with fundamental language and writing skills and computer applications of keyboarding and word processing. These skills are used as communication tools for enhancing personal and workplace proficiency in an information based society.

Prerequisite: OTA 0032.

OCA 0313 - Office Communications II (N) (75 hours)

This course builds on OCA-0312 (p. 263) and provides a more advanced overview of written communication. Emphasis is placed on developing additional language and writing skills with the use of advanced computer applications and enhancements. These skills may be used as communication tools for acquiring employment and increasing professional opportunities.

Prerequisite: OCA 0312.

OCB - BIOLOGY

OCB 1000 - Introduction to Marine Biology (3 credits)

This course is for non-science majors. It explores the natural history of marine organisms, their taxonomic relationships and their interactions with each other. The evolutionary processes of various marine organisms and the scheme of biological classification are introduced. The fundamentals of marine biological science are provided with special emphasis placed upon observable major marine phyla in the local area and the interrelationships between individual organisms within these phyla and how they relate to world wide marine environments.

OCB 1000L - Introduction to Marine Biology Lab (1 credit)

This course, the lab component for OCB-1000 (p. 263), is an introductory lab and field survey of local marine waters as they relate to marine species and their environments worldwide. Emphasis is placed on the major marine phyla in the local area and the interrelationships between those phyla and their environments.

Field trips to local marine areas are required, including marine biodiversity studies, invertebrate anatomy and physiology, and an all-day field trip to Sea World.

Prerequisite: Pre/corequisite: OCB 1000.

OCB 1630 - Marine Ecology (3 credits)

This course introduces non-science majors to the fundamentals of marine ecology as a foundation for understanding marine ecosystems and explores population and community ecology within major marine ecosystems. The course is based on the geological history of the Atlantic shoreline, how marine communities developed and changed and how marine invaders dominated and competed with local flora and fauna to form current ecosystems.

OCB 1630L - Marine Ecology Lab (1 credit)

This course, the lab component for OCB-1630 (p. 263), includes two all-day field trips to survey local flora and fauna by exploring the nearshore environment such as estuaries, intertidal zone, mangrove, seagrass and beach plant communities, and progresses to address an understanding of ecology and biodiversity of the marine environment.

At the Fort Pierce Inlet, students explore intertidal communities, study mud flats, sand flats, rocky intertidal and dune communities. During an all-day kayak field trip to Sebastian Inlet, the diversity, adaptations and survival strategies of marine life in various nearshore communities such as mangrove and seagrass communities is also explored.

While in the field students learn how to collect organisms for further physiological studies in the laboratory.

Corequisite: OCB 1630.

OCB 2010 - Marine Biology (3 credits)

This course is an investigation of physical, chemical, geologic and biological components of marine ecosystems and related marine research. Students obtain a general knowledge of the oceans, learn how scientists conduct marine research and explore environmental issues from a global and local perspectives.

Prerequisite: BSC 2010, BSC 2010L, BSC 2011, BSC 2011L.

OCB 2930 - Special Topics in Marine Science (3 - 4 credits)

This course centers around topics of current interest in marine science, or of special interest to students or instructors. The focus may vary from semester to semester and may include areas such as aquaculture, ocean engineering, and marine biotechnology.

OCB 3017 - Marine Environmental Science (3 credits)

This course is designed to provide an overview of the basic sub-disciplines of marine environments including the science, governance, and human interactions with marine ecosystems around the State of Florida.

Prerequisite: OCB 2010.

OCE - BIOLOGY

OCE 2001 - Introduction to Oceanography (3 credits)

This course introduces non-science majors to the fundamentals, principles and procedures of physical, geological, chemical and biological oceanography. This multi-disciplinary approach to understanding oceanographic processes and ecosystems discusses the origins of oceanography, physical and chemical features of seawater and ocean sediments. It explores ocean basins, plate tectonics and oceanic climate; discovers the waves, tides and ocean currents and life in the oceanic ecosystem, and introduces the oceanic lifestyles of plankton, benthos and nekton.

ORH-LANDSCAPE AND HORTICULTURE

ORH 1105 - Florida Native Landscaping (3 credits)

This course shows students how to identify and best utilize native plants currently used in Florida landscapes. Other topics include nomenclature, botanical code, and basic landscape design principles.

ORH 1231 - Lawn Care Maintenance (3 credits)

This course reviews the standard techniques and practices of lawn care maintenance, including identification of local turf grasses, selection and use of equipment, identification of insects and diseases, fertilizers, and herbicides.

ORH 1510 - Plant Identification (3 credits)

This course introduces basic principles of plant identification.

ORH 1842 - Landscape Installation and Maintenance (3 credits)

This course examines current methods on how to install and maintain trees, palms, shrubs and ground covers in the Florida landscape. Students also prepare, estimate and establish landscape maintenance contracts.

ORH 2220 - Turfgrass Management (3 credits)

This course is a detailed study of turfgrass varieties, their establishment, maintenance, and renovations used by successful turfgrass managers.

ORH 2601 - Retail Nursery Operations (3 credits)

This course discusses the principles of retail nursery operations.

ORH 2941 - Landscape Field Training (3 - 6 credits)

This course focuses on landscape operations through on-the-job supervised training at selected sites. Permission of the instructor is required.

OTA - OFFICE ADMINISTRATION CAREERS

OTA 0001 - Office Support Technology I (N) (75 hours)

This course includes intermediate typing, filing, communications, ten-key calculator touch, transcription, word processing, and office etiquette skills. It also provides supplemental training for persons previously or currently employed.

Prerequisite: OTA 0006.

OTA 0002 - Office Support Technology II (N) (75 hours)

This course prepares students for employment as general office clerks, typists, file clerks, office systems clerks, government record clerks, and clerical office trainees. It also provides supplemental training for persons previously or currently employed in these occupations.

Prerequisite: OTA 0001.

OTA 0005 - Office Skills Training I (N) (75 hours)

This course includes basic typing, filing, communications, ten-key calculator touch, transcription, word processing,

and office etiquette skills. This course also provides supplemental training for persons previously or currently employed.

OTA 0006 - Office Skills Training II (N) (75 hours)

This course prepares students for employment as general office clerks, typists, file clerks, office systems clerks, government record clerks, and clerical office trainees. It also provides supplemental training for persons previously or currently employed in these occupations.

Prerequisite: OTA 0005.

OTA 0031 - Computer Applications I (N) (75 hours)

This course demonstrates how to operate computers. Instruction includes the review of program instructions, determination of procedures for a specific run, readying equipment for operation, manipulation and monitoring of controls during operation, trouble-shooting, and on/off operations.

Prerequisite: OTA 0002.

OTA 0032 - Computer Applications II (N) (75 hours)

This course demonstrates how to operate computers. Instruction includes the review of program instructions, determination of procedures for a specific run, readying equipment for operation, manipulation and monitoring of controls during operation, trouble-shooting, and on/off operations.

Prerequisite: OTA 0031.

OTA 0100 - Data Entry I (N) (75 hours)

This course provides a foundation for all business education programs and includes the following areas: keyboarding, math, communication, human relations, consumer economics, and job application procedures. It is is also an introduction to computers and their usefulness in the business world.

Prerequisite: OTA 0032.

OTA 0425 - Date Entry II (N) (75 hours)

This course provides additional information in computer usage and develops entry-level skills for computer-related occupations using database, spreadsheet, and text editing.

Prerequisite: OTA 0100.

OTA 0470 - Legal Technology I (N) (75 hours)

This course focuses on office duties and procedures specific to the legal environment. It promotes application of higher level legal office procedures, tasks, legal terminology and communication skills.

Prerequisite: OTA 0032.

OTA 0472 - Legal Technology II (N) (75 hours)

This course expands the competencies learned in OTA-0470 (p. 265). Students perform higher level thinking and decision-making and use technology as a resource to efficiently perform systematic procedural tasks and to produce quality work in a professional manner. Students transcribe legal documents from machine dictation.

Prerequisite: OTA 0470.

OTA 0612 - Medical Office Technology I (N) (75 hours)

This course prepares students to perform secretarial duties utilizing knowledge of medical terminology and medical office procedures. Instruction also includes transcription of reports, such as case histories, and the use of legal and insurance forms.

Prerequisite: OTA 0032.

OTA 0613 - Medical Office Technology II (N) (75 hours)

This course gives additional instruction in secretarial duties utilizing knowledge of medical terminology and medical office procedures. Instruction also includes transcription of reports, such as case histories, patient billing, and the use of legal and insurance forms.

Prerequisite: OTA 0612.

OTA 0948 - Business Cooperative Education I - OJT (N) (150 hours)

This course provides the on-the-job training component to more effectively prepare students for employment in the occupation chosen by the student. The course provides an optional simulation work-experience to prepare students for employment in the workplace.

Prerequisite: OCA 0313.

OTA 0949 - Business Cooperative Education II - OJT (N) (150 hours)

This course provides the on-the-job training component to more effectively prepare students for employment in business occupations. On-the-job experiences develop occupational competencies required in the occupation chosen by the students for employment in the workplace.

Prerequisite: OTA 0948.

PAD - PUBLIC ADMINISTRATION

PAD 3003 - Intro to Public Administration (3 credits)

This course examines the role of public administration and public policy at the local, state, and federal levels, and

explores the history, principles, constraints, and practical concepts of public administration. It also introduces the formulation and implementation of public policy and explores the difference between public agencies and other organizations.

PAD 3034 - Policy Development and Implementation (3 credits)

This course discusses the importance of a working knowledge of public-sector policymaking and the analysis of public policy problems in order to understand how public policy is formulated, decided upon, and implemented. It focuses on the impact that the political, economic, cultural and bureaucratic context has on the policymaking process and outcomes. Emphasis is on agenda setting, program design, and implementation.

Prerequisite: PAD 3003.

PAD 3104 - Organizational Behavior and Administration (3 credits)

This course examines complex public sector organizations, the behavioral aspects of administrative processes, social and structural factors affecting administrative practice, and the role of the public administrator.

PAD 3223 - Public Budgeting and Finance (3 credits)

This course focuses on the institutions and analytical tools associated with the need for revenue generation coupled with the allocation and management of resources at all levels of government through hands-on budgeting skills and communication of analysis to decision makers. Students become familiar with the techniques and practices of budget preparation and documentation including how to develop and present a government budget. In addition, students gain an appreciation of the political and policy implications of budget decisions.

Prerequisite: PAD 3003.

PAD 3330 - Urban and Regional Planning (3 credits)

This course examines the principles of urban and regional planning practices. Emphasis is placed on social, economic and housing planning and the relationship between conceptual frameworks, research perspectives, practical and political considerations, and public policy.

PAD 3431 - Leadership (3 credits)

This course examines leadership styles and techniques of people in all levels of government including executive, legislative, administrative and the community in general. Through assessing personal strengths and weaknesses as leaders, students determine a strategy for individual development.

PAD 4046 - Values, Ethics, and Conflict Resolution (3 credits)

This course examines values, ethics, and conflict resolution in the context of public service. It emphasizes perspectives on values and ethical systems and the influence of ethics on public administration, organizational and individual behavior, and process.

Prerequisite: Pre/corequisite: PAD 3003.

PAD 4320 - Program Evaluation in Public Management (3 credits)

This course addresses public sector policy and program evaluation through examination of methodological considerations for design, data collection, analysis, and dissemination. The course emphasizes the history of evaluation, the social indicators movement, the politics of program evaluation, goal identification, performance measurement, methods of analysis, participants in the evaluation process, and the problems with partisanship.

Prerequisite: PAD 3003, PAD 3034, PAD 3223.
Corequisite: Pre/corequisite: PAD 4332.

PAD 4332 - Strategic Planning (3 credits)

This course develops a working knowledge of planning in the public sector through five types of planning modules: basic strategic planning, issue-based or goal-based strategic planning, the alignment model, scenario planning, and organic or self-organizing planning.

PAD 4414 - Public Personnel Management (3 credits)

This course introduces students to the field of public personnel management. Topics discussed include job design and analysis, performance management, planning, staffing, training and development, compensation and incentive systems, merit and civil service, employee and labor relations, managing a diverse workforce, and volunteer management.

PAD 4442 - Public Relations for Public Managers (3 credits)

This course addresses the value and importance of public relations in the public sector and explores how public managers handle media and community relations. The course focuses on effective techniques of information dissemination, which increase public knowledge and address public concerns.

PAD 4603 - Administrative Law for Public Administrators (3 credits)

This course examines administrative agencies with an emphasis on their authority to make and enforce rules, investigate infractions, and respond to alleged violations. Particular focus is placed on the role of public

administrators in creating and implementing administrative laws. Students use research skills to examine the constantly changing rules promulgated by administrative agencies.

Prerequisite: Pre/corequisite: PAD 3003.

PAD 4806 - State and Local Government Administration (3 credits)

This course studies the structures, functions, policy processes, funding sources and administrative practices of state and local governments. It compares and contrasts the distinctions and analyzes their strengths and weaknesses.

PAD 4879 - Capstone in Public Administration (3 credits)

In this course students integrate public administration knowledge, skills and tools developed in previous public administration courses. It emphasizes critical analysis of current topics and trends through a major project and presentation within public service.

Permission of Dean required.

Prerequisite: Permission of Dean required.

PCB - BIOLOGY

PCB 1030 - Introduction to Ecology (3 credits)

This course provides a survey of the interrelationships between living organisms and their physical environment, including an overview of animal and plant physiology, chemical cycles, and the various ecosystems on earth. Present day ecological problems are discussed, along with ecological aspects of humans and implications for the future.

Prerequisite: student must score into college-level reading on placement test.

PCB 3063 - Introduction to Genetics (3 credits)

This course introduces fundamental principles of transmission, population, and molecular genetics of prokaryotes, eukaryotes, and viruses.

Prerequisite: BSC 2010, BSC 2010L, CHM 2210, CHM 2210L with a grade of C or higher. Corequisite: PCB 3063L.

PCB 3063L - Introduction to Genetics Laboratory (1 credit)

This course demonstrates fundamental principles and applications involving transmission, population, and molecular genetics of prokaryotes, eukaryotes, and viruses.This course, the laboratory component of PCB-3063 (p. 267), demonstrates fundamental principles and applications involving heredity, genetic variation and molecular genetics of prokaryotic and eukaryotic organisms.

Prerequisite: BSC 2010, BSC 2010L, CHM 2210, CHM 2210L with a grade of C or higher. Corequisite: PCB 3063.

PCB 3674 - Evolutionary Biology (3 credits)

This course is an introduction to modern evolutionary theory. Population genetics, adaptation, speciation theory, phylogeny, human evolution and other related topics are discussed.

Prerequisite: BSC 2010, BSC 2010L, BSC 2011, BSC 2011L with a grade of "C" or higher.

PCB 4023 - Cell Biology and Physiology (3 credits)

This course studies how different biochemical, metabolic, and molecular pathways of the cell work together to produce the functions associated with cell movement, response to hormones, growth, and protein synthesis and modification.

Prerequisite: BSC 2011, BSC 2011L, BCH 4053, BCH 4053L, BSC 3064, BSC 3464L, with a grade of "C" or higher. Corequisite: PCB 4023L.

PCB 4023L - Cell Biology & Physiology Laboratory (1 credit)

This course is the laboratory component of PCB4023 (p. 267) and studies how different biochemical, metabolic, and molecular pathways of the cell work together to produce the functions associated with cell movement, response to hormones, growth, and protein synthesis and modification.

Prerequisite: BSC 2011, BSC 2011L, BCH 4053, BCH 4053L, BSC 3464, BSC 3464L with a "C" or higher. Corequisite: PCB 4023.

PCB 4024 - Molecular Biology (3 credits)

This course provides a detailed overview of molecular biology. Course content focuses on transcription, translation and DNA replication in prokaryotes and eukaryotes. The features that control and influence these cellular activities are examined in detail.

Prerequisite: BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, CHM 2210, CHM 2210L, PCB 3063, PCB 3063L, with a grade of "C" or higher.

PCB 4043 - General Ecology (3 credits)

This course provides an introduction to ecological processes and concepts of natural populations, communities and ecosystems.

Prerequisite: BSC 2010, BSC 2010L, BSC 2011, BSC 2011L all with a grade of C or higher. Corequisite: PCB 4043L required for Science Education students.

PCB 4043L - General Ecology Laboratory (1 credit)

This course demonstrates fundamental skills, sampling methods and data analysis used in ecological studies of natural populations, communities and ecosystems. This course is designed primarily to meet requirements of Science Education majors.

Prerequisite: BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, all with grade of "C" or higher. Corequisite: PCB 4043.

PCB 4233 - Immunology (3 credits)

This course examines the tissues, cells, and biochemical components of the immune system and the role of immune responses in diagnosis and prevention of disease.

Prerequisite: MCB 3023, MCB 3023L, BCH 4053, BCH 4053L, PCB 3063, PCB 3063L, all with a grade of "C" or higher.

PCB 4701 - Human Physiology (3 credits)

This course is a systematic examination of physiological mechanisms of various organ systems in the human body. Emphasis is on transport mechanisms, renal function, hormones, respiration, cardiac function, muscle physiology, digestion, and immune systems. Normal and abnormal functioning of body processes and associated disorders and diseases are discussed.

Prerequisite: ZOO 3733, ZOO 3733L. BCH 4053, BCH 4053L, all with "C" or higher.

PCB 4701L - Human Physiology (1 credit)

This is the lab component for Human Physiology lecture PCB 4701 to provide hands on experience in data collection and analysis of physiological mechanisms of various organ systems including sensory testing, cardiovascular function, reflexes and respiratory function.

Prerequisite: ZOO 3733, ZOO 3733L, BCH 4053, BCH 4053L, all with "C" or higher.

PEL - PHYSICAL EDUCATION RECREATION WELLNESS

PEL 2211 - Softball I (1 credit)

This course presents rules, safety, strategy and basic skills of softball.

PEL 2212 - Softball II (1 credit)

This course presents specialized instruction with emphasis on advanced skills, techniques and strategies of softball.

PEL 2214 - Softball III (1 credit)

This course presents team skills and rules; strategy and teamwork are the main emphasis.

PEL 2215 - Softball IV (1 credit)

This course presents rules, safety, strategy and skills of varsity softball.

PEL 2216 - Baseball I (1 credit)

This course presents rules, safety, strategy and basic skills of baseball.

PEL 2217 - Baseball II (1 credit)

This course presents rules, safety, strategy and intermediate skills of baseball.

PEL 2219 - Baseball III (1 credit)

This course focuses on learning baseball skills and molding these into a team structure.

PEL 2221 - Baseball IV (1 credit)

This course is a high intensity, drill oriented program designed to increase skill ability and endurance levels of individuals interested in baseball.

PEL 2321 - Volleyball I (1 credit)

This course presents basic skills, rules, and strategies of volleyball.

PEL 2322 - Volleyball II (1 credit)

This course presents strategy and intermediate skills.

PEL 2324 - Volleyball III (1 credit)

This course instruction includes fundamentals as well as advanced techniques and is geared toward the collegiate volleyball level.

PEL 2325 - Volleyball IV (1 credit)

This course focuses on learning volleyball skills and molding these into a team structure.

2621 - Basketball I (1 credit)

This course presents rules, strategy, safety and basic skills of basketball.

PEL 2622 - Basketball II (1 credit)

This course presents rules, strategy, advanced skills and tournament play.

PEL 2624 - Basketball IV (1 credit)

This course is a high intensity, drill oriented program designed to increase skill ability and endurance levels of individuals interested in basketball.

PEL 2623 - Basketball III (1 credit)

This course requires basketball skills and athletic ability to meet a highly competitive degree of play at the collegiate level. The focus is on learning basketball skills and molding these into a team structure.

PEN - PHYSICAL EDUCATION/RECREATION/WELLNESS

PEN 2121 - Swimming I (1 credit)

This course presents the basic techniques of personal water safety, survival, and propulsion.

PEN 2122 - Swimming II (1 credit)

This course presents techniques for execution of the standard recreational swimming strokes and dives. Emphasis is on technique and endurance.

PEN 2123 - Swimming III (1 credit)

This course presents advanced skill in the execution of standard recreational and competition swimming strokes and water survival techniques. Emphasis is on perfection of sport and endurance.

PEN 2124 - Swimming IV (1 credit)

This course emphasizes fundamental and advanced skills, techniques of participation, strategy, teamwork, cardiovascular endurance training, and rules of competitive swimming.

PEO - PHYSICAL EDUCATION/RECREATION/WELLNESS

PEO 2013 - Sports Officiating (3 credits)

This course includes the theory and practice of officiating football, basketball, and baseball.

PET - PHYSICAL EDUCATION/RECREATION/WELLNESS

PET 1762 - Fundamentals of Specific Sports (3 credits)

This course focuses on the practical coaching fundamentals of basketball, tennis, swimming, baseball, volleyball, soccer, and football.

PET 2622 - Care and Prevention of Athletic Injuries (3 credits)

This course provides the knowledge and ability to make educated decisions regarding the most appropriate course of action when confronted with an injured athlete. The focus is on recognition of serious, life-threatening conditions as well as less serious injuries that must be referred to a medical doctor.

PET 2760 - Principles of Coaching (3 credits)

This course explores the knowledge of the characteristics, principles, ethics, and theories related to coaching sports in the educational and recreational settings. Emphasis is placed on preparing coaches to train athletes to achieve maximum levels of performance.

PGY - PHOTOGRAPHY

PGY 1800 - Principles of Digital Photography (3 credits)

This course reviews digital photography techniques and theory, including imaging software, camera types, and their application to contemporary photography work. Students explore current issues and trends relative to digital photography and develop an appreciation for digital imaging as a visual art form. An understanding of perception, structure and composition is the primary goal in each project. Students demonstrate their skills in the creation and manipulation of digital photographic images from visual execution to digital darkroom.

PGY 1801 - Introduction to Digital Photography (1 credit)

This course explains how to create and edit digital images. Techniques that enhance or alter existing images are covered. Use and maintenance of new equipment and technologies are also studied, along with special effects. The course also covers how to import, export, print and publish photographs on the Web.

PHI - HUMANITIES-PHILOSOPHY

PHI 1002 - Philosophical Practice (3 credits)

This course explores the application of philosophical theories and concepts to confronting problems of everyday living. It shows how such philosophical theories as those of Nietzsche, Sartre, Plato, Aristotle, Aquinas, Spinoza, Descartes, Kant, and many other classical thinkers can

provide useful antidotes to overcoming commonplace irrational thinking errors that frequently lead to behavioral and emotional problems.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

Prerequisite: student must score into college-level English and reading on placement test.

PHI 1010 - Introduction to Philosophy (3 credits)

This course examines traditional philosophical problems arising in epistemology, religion, ethics, political theory, metaphysics, and the philosophy of mind. Emphasis is on theoretical understanding, argument evaluation, and explication. Students demonstrate college-level writing skills through multiple assignments.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

Prerequisite: student must score into college-level English and reading on placement test.

PHI 1103 - Critical and Creative Thinking (3 credits)

This course is an introduction to logic, which stresses practice and application. The course provides practice in recognizing and avoiding inaccurate or fallacious thinking and promotes correct and creative thinking. Theory and theoretical principles are kept to a minimum. Students demonstrate college-level writing skills through multiple assignments.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

Prerequisite: student must score into college-level English and reading on placement test.

PHI 1113 - Reason and Emotion (3 credits)

This course examines the nature of reason and its relationship to human emotion and action, and provides a philosophical overview of different types of emotion and reasoning. Topics discussed include philosophical views of what a human emotion is, emotional reasoning, illogical thinking, and types of logical refutation.

Prerequisite: students must score into college-level reading on placement test. .

PHI 1624 - Philosophy and Popular Culture (3 credits)

This course addresses many of the major themes in philosophy through an examination of everyday living. In particular, it uses popular culture as a medium through which the relevance of philosophy to modern life can be understood. One part of each unit involves detailed examination of different cultural artifacts. Areas to be examined include music, film, and technology. Weekly sections relate these areas to more detailed concerns in areas of philosophy such as ethics, aesthetics, epistemology, metaphysics, and logic. The course culminates in a project that applies philosophy to a topic in popular culture of the student's choosing.

PHI 1635 - Ethical Issues in Health Care (3 credits)

This course focuses on ethical analysis and decision-making in health care. It addresses moral and legal aspects of confidentiality and informed consent, codes of ethics, end of life decisions, living wills, euthanasia, assisted suicide, resource allocation, reproductive ethics, and abortion.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

PHI 1801 - Philosophy of Art (3 credits)

This course provides an introduction to aesthetics. Students study a variety of historically significant contemporary philosophies of art, including these central issues: the definition of art, beauty, aesthetic experience, meaning and interpretation, creativity, art and other values, and critical judgment. The course employs a case-based approach in which students consider real and fictional puzzles that present theoretical and practical challenges to the views discussed. Students demonstrate college-level writing skills through multiple assignments.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

Prerequisite: student must score into college-level English and reading on placement test.

PHI 1930 - Eastern Philosophies (3 credits)

This course examines the history, practices, and basic tenets of the three major Eastern philosophies. This course addresses the interesting exchange of ideas between Jewish, Christian, and Buddhist leaders and their philosophies.

PHI 2100 - Introduction to Logic (3 credits)

This course studies formal, deductive logic including the logic of syllogism and truth functions. Emphasis is placed on developing techniques for distinguishing valid arguments from invalid ones, such as hypothetical and categorical arguments, natural deduction, and truth table construction.

Prerequisite: student must score into college-level English and reading on placement test.

PHI 2620 - Environmental Ethics (3 credits)

This course explores standard theoretical and practical issues in environmental ethics, the historical roots of environmental problems, and the philosophical ground of environmental thought, including non-western approaches. Theories covered include the nature of intrinsic value, the value of natural objects, the rights of animals, the value of endangered species, and the obligations we have to future generations. Practical problems discussed include climate change, overpopulation, food shortage, pollution, globalization, environmental justice, and maintaining a sustainable, ecologically responsible society.

Prerequisite: student must score into college-level English and reading on placement test.

PHI 2630 - Introduction to Ethics (3 credits)

This course discusses ethical theories and methods of analysis and applies these to contemporary ethical problems such as those of human cloning, euthanasia, capital punishment, welfare and social justice, job discrimination, animal rights, and environmental ethics. Students demonstrate college-level writing skills through multiple assignments.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

Prerequisite: student must score into college level English and reading on placement test. .

PHP - PHILOSOPHY

PHP 1791 - Existentialism (3 credits)

This course introduces students to the philosophical and literary movement known as "Existentialism" that came to prominence in post-WWII France. It examines questions concerning human freedom and responsibility, the problem of self-deception, and the meaning of existence. These questions include the following: Are we free? Do we bear responsibility not only for our own lives, but for the lives of others and the world in which we live? Do we create meaning and value? Do we desire to be God? Why do we deceive ourselves? How can we live more authentically?

Prerequisite: student must score into college-level reading on placement test.

PHT - PHYSICAL THERAPIST ASSISTANT

PHT 1020 - Principles of Practice I (2 credits)

This course provides the student with a foundation in patient interaction skills including written and oral communication skills as it applies to patient care. Transfers, assistive devices, gait training, and vital signs are presented in addition to basic patient handling techniques, documentation, and the role of the PTA in healthcare.

Prerequisite: HSC 2531, MAT 1033 or higher, PHY 1020 or higher. Corequisite: PHT 1020L, PHT 1121, PHT 1121L, PHT 1213, PHT 1213L.

PHT 1020L - Principles of Practice I Lab (2 credits)

In this course the students practice patient skills including transfers, assistive devices, gait training, and vital signs as presented in PHT 1020.

Prerequisite: HSC 2531, MAT 1033 or higher, PHY 1020 or higher. Corequisite: PHT 1020, PHT 1121, PHT 1121L, PHT 1213, PHT 1213L.

PHT 1080 - Principle of Practice II (2 credits)

This course examines the role of the physical therapist assistant in the health care delivery system. Legal aspects of the PTA practice and the code of ethics are discussed. Introduction to the acute care setting, integumentary assessment, and wound care management are presented.

Prerequisite: PHT 1020, PHT 1020L, PHT 1121, PHT 1121L, PHT 1213, PHT 1213L. Corequisite: PHT 1080L, PHT 1132, PHT 1132L.

PHT 1080L - Principles of Practice II Lab (1 credit)

In this course students practice the acute care setting interventions, integumentary assessment, and wound care management as presented in PHT 1080.

Prerequisite: PHT 1020, PHT 1020L, PHT 1121, PHT 1121L, PHT 1213, PHT 1213L. Corequisite: PHT 1080, PHT 1132, PHT 1132L.

PHT 1121 - Functional Anatomy and Kinesiology (3 credits)

This course is an introduction to the application of anatomy for human movement, providing a foundation that provides the student with biomechanics, manual muscle testing, muscle length testing, and goniometry. Origins, insertions, nerve innervation, and actions of muscles are presented. Aspects of normal functional gait and posture as it relates to function are discusses.

Prerequisite: HSC 2531, MAT 1033 or higher, PHY 1020 or higher. Corequisite: PHT 1121L, PHT 1020, PHT 1020L, PHT 1213, PHT 1213L.

PHT 1121L - Functional Anatomy and Kinesiology Lab (2 credits)

In this course student practice patient skills including palpation, goniometry, muscle testing, muscle length testing, gait analysis, and posture assessment as presented in PHT 1101.

Prerequisite: HSC 2531, MAT 1033 or higher, PHY 1020 or higher. Corequisite: PHT 1020, PHT 1020L, PHT 1121, PHT 1213, PHT 1213L.

PHT 1132 - Musculoskeletal PT (3 credits)

This course is an introduction to the principles of examination of the musculoskeletal patient. Pathologies, principles of joint mobilization, and exercise as it applies to the orthopedic patient are presented.

Prerequisite: PHT 1020, PHT 1020L, PHT 1121, PHT 1121L, PHT 1213, PHT 1213L. Corequisite: PHT 1080, PHT 1080L, PHT 1132L.

PHT 1132L - Musculoskeletal PT Lab (2 credits)

In this course student practice interventions including joint mobilization and exercise for the orthopedic patient as presented in PHT 1132.

Prerequisite: PHT 1020, PHT 1020L, PHT 1121, PHT 1121L, PHT 1213, PHT 1213L. Corequisite: PHT 1080, PHT 1080L, PHT 1132.

PHT 1213 - Foundations of Therapeutic Exercise (3 credits)

Basic concepts of mobility and exercise for prevention and restoration of function are presented. Principles of strength and endurance training, flexibility, balance and aquatics are explored. his course provides the student with a foundation in therapeutic exercises.

Prerequisite: HSC 2531, MAT 1033 or higher, PHY 1020 or higher. Corequisite: PHT 1020, PHT 1020L, PHT 1121, PHT 1121L, PHT 1213L.

PHT 1213L - Foundations of Therapeutic Exercise Lab (2 credits)

In this course students practice the applications and techniques of the principles of therapeutic exercise including principles of strength and endurance training, flexibility, balance, and aquatic as presented in PHT 1213 (p. 272).

Prerequisite: HSC 2531, MAT 1033 or higher, PHY 1020 or higher. Corequisite: PHT 1020, PHT 1020L, PHT 1121, PHT 1121L, PHT 1213.

PHT 2210 - Principles of Practice III (3 credits)

Principles and practical application of thermal, mechanical, electromagnetic, and other energies in physical therapy are presented. This course provides competency in the use of therapeutic modalities.

Prerequisite: PHT 1080, PHT 1080L, PHT 1132, PHT 1132L. Corequisite: PHT 2210L.

PHT 2210L - Principles of Practice III Lab (3 credits)

In this course student practice interventions including the application of thermal, mechanical, electromagnetic, and other energies in physical therapy as presented in PHT 2210.

Prerequisite: PHT 1080, PHT 1080L, PHT 1132, PHT 1132L. Corequisite: PHT 2210.

PHT 2255 - Neuromuscular PT (3 credits)

This course provides the students with foundations and interventions for patients with neuromuscular disorders. Therapeutic exercise as it applies to the neurological patient is discusses.

Prerequisite: PHT 2210, PHT 2210L. Corequisite: PHT 2810, PHT 2255L.

PHT 2255L - Neuromuscular PT Lab (2 credits)

Students practice interventions for patients with neuromuscular disorders pertaining to activities of daily living, functional activities and therapeutic exercise as presented in PHT 2255.

Prerequisite: PHT 2210, PHT 2210L. Corequisite: PHT 2255, PHT 2810.

PHT 2289 - Cardiopulmonary & Systemic PT (3 credits)

This course covers pathologies and interventions for the cardiopulmonary, lymphatic and circulatory systems. Prosthetics and limb management, and exercise as it relates to these pathologies are discussed.

Prerequisite: PHT 2255, PHT 2255L PHT 2810. Corequisite: PHT 2289L, PHT 2820.

PHT 2289L - Cardiopulmonary & Systemic PT Lab (2 credits)

In this course students practice interventions for the patient with cardiopulmonary, lymphatic and other systemic diseases as presented in PHT 2289.

Prerequisite: PHT 2255, PHT 2255L, PHT 2810. Corequisite: PHT 2289, PHT 2820.

PHT 2810 - PTA Clinic I (5 credits)

This course entails the first assignment in clinical education. Each student is assigned to a clinical facility and performs intermediate physical therapy treatment techniques. Scheduled class meetings are included to advise students as they complete their group research projects. A clinical journal and case study report are also required.

Prerequisite: PHT 2210, PHT 2210L and pre/corequisite: PHT 2255, PHT 2255L.

PHT 2820 - PTA Clinical II (5 credits)

This course entails the second and final assignment in clinical education. Each student is assigned to a clinical facility and performs advanced skills in critical thinking in approaching patient treatment and procedures. Scheduled class meetings are included to review the progression of a research project that is finalized at the end of the semester. A clinical journal and case study report are also required.

Prerequisite: PHT 2255, PHT 2255L, PHT 2810. Pre/corequisite: PHT 2289, PHT 2289L.

PHY - PHYSICS

PHY 1020 - Principles of Physics (3 credits)

This course is both a classic and technical physics course. It emphasizes both physical principles and physics applications in today's world. The student learns the scientific method of problem solving, as well as developing critical thinking and reasoning skills. Topics include, but are not limited to measurement, problem solving, motion, force, work, energy, simple machines, rotational motion, matter, fluids, temperature and heat, gas laws, wave dynamics, electricity, magnetism, and optics.

Prerequisite: MAT 1033 or placement scores.

PHY 2048 - Physics with Calculus I (3 credits)

This course is a calculus-based course covering Newtonian mechanics, including motion, vectors, Newton's laws, work and conservation of energy, systems of particles, collisions, equilibrium, oscillations, and waves.

Prerequisite: MAC 2311 or higher with a grade of "C" or higher; student must test into college-level reading on placement test. Corequisite: PHY 2048L.

PHY 2048L - Physics with Calculus I Lab (1 credit)

This is the lab component for PHY-2048 (p. 273). Lab experiences include the areas of Newtonian mechanics, including motion, vectors, Newton's laws, work and conservation of energy, systems of particles, collisions, equilibrium oscillations, and waves.

Prerequisite: MAC 2311 with a grade of "C" or higher; student must score into college-level reading on placement test. Corequisite: PHY 2048.

PHY 2049 - Physics with Calculus II (3 credits)

This course is a continuation of PHY-2048 (p. 273) including Coulomb's Law, electric fields and potentials, capacitance, currents and circuit, Ampere's Law, Faraday's Law, inductance, Maxwell's equations, electromagnetic waves, ray optics, interference, and diffraction.

Prerequisite: PHY 2048, PHY 2048L, MAC2312 or higher, all with a grade of "C" or higher. Corequisite: PHY 2049L .

PHY 2049L - Physics with Calculus II Lab (1 credit)

This is the lab component for PHY-2049 (p. 273). Lab experiences include Coulomb's Law, electric fields and potentials, capacitance, currents and circuits, Ampere's Law, Faraday's Law, inductance, Maxwell's equations, electromagnetic waves, ray optics, interference, and diffraction.

Prerequisite: PHY 2048, PHY 2048L, MAC 2312, all with grade of "C" or higher. Corequisite: PHY 2049.

PHY 2053 - College Physics I (3 credits)

This course, designed for science majors, covers structure and properties of matter; kinematics, dynamics and statics; momentum and energy; rotation, elasticity, vibration; fluids, temperature and expansion; heat transfer, thermal behavior of gases, wave motion, and sound.

Prerequisite: MAC 1114 or MAC 1147 or MAC 2311, with grade of "C" or higher; student must score into college-level reading on placement test. Corequisite: PHY 2053L.

PHY 2053L - College Physics I Lab (1 credit)

This is the lab component for PHY-2053 (p. 273). Lab experiences include structure and properties of matter, kinematics, dynamics and statics, momentum and energy, rotation, elasticity, vibration, fluids, temperature and expansion; heat transfer and thermal behavior of gases, wave motion, and sound.

Prerequisite: MAC 1114 or MAC 1147 or MAC 2311,with grade "C" or higher; student must test into college-level reading on placement test. . Corequisite: PHY 2053 .

PHY 2054 - College Physics II (3 credits)

This is a continuation of PHY-2053 (p. 273). Topics include electric charge, fields and circuits; electromagnetism, and applied electricity; geometrical wave, and applied optics; electrons and photons; atoms, and nuclei.

Prerequisite: PHY 2053, PHY 2053L, and MAC 1114 or MAC 1147 or MAC 2311, all with grade of "C" or higher. Corequisite: PHY 2054L.

PHY 2054L - College Physics II Lab (1 credit)

This is the lab component for PHY-2054 (p. 274). Topics include electric charge, fields and circuits; electromagnetism, applied electricity; geometrical, wave, and applied optics; electrons and photons; atoms, and nuclei.

Prerequisite: PHY 2053, PHY 2053L, and MAC 1114 or MAC 1147 or MAC 2311, with grade of "C" or higher. Corequisite: PHY 2054.

PLA - PARALEGAL STUDIES/LEGAL ASSISTING

PLA 1104 - Legal Research and Writing I (3 credits)

This course provides an introduction to legal research. Students use treatises, encyclopedias, digests, reporters, statutes, and Shepard's Citations to analyze legal problems and write legal memoranda.

PLA 1610 - Real Estate and Property Law (3 credits)

This course familiarizes students with the law of real property. Ownership of real property, real estate transactions, easements, encumbrances, real estate contracts, and real estate closings are reviewed. Additionally, students examine deeds, mortgages, leases, and contracts.

PLA 1763 - Law Office Management (3 credits)

This course explains to students the fundamentals of maintaining files, hiring personnel, purchasing equipment, and other tasks related to the management of a law office. Students also discuss and analyze ethical problems.

PLA 1931 - Special Topics in Law (1 credit)

This course outlines contemporary issues and problems in the legal field. It focuses on the latest developments in domestic relations, estate planning, litigation, bankruptcy, contracts, and criminal justice.

PLA 2003 - Introduction to Paralegal Studies (3 credits)

This course provides an overview of the training and purpose of legal assistants and examines the roles of lawyers and legal assistants in modern society. In addition, it defines the ethical and professional practice standards applicable to attorneys and legal assistants, and surveys various fields of law.

PLA 2058 - Survey of Law (3 credits)

This course provides an understanding of various areas of law: criminal, contracts, torts, constitutional law, estates, and corporations. Students are exposed to the legal system, providing a foundation for subsequent legal courses.

PLA 2114 - Legal Research and Writing II (3 credits)

This course provides students with the advanced research and writing skills needed in the legal assistant profession, including drafting legal memoranda, case briefs, trial briefs, and appellate briefs.

Prerequisite: PLA 1104.

PLA 2117 - Advanced Legal Writing (3 credits)

This course provides intensive training in drafting and editing complex legal documents including memoranda of points and authority, trial briefs, and appellate briefs.

Prerequisite: PLA 2114.

PLA 2203 - Civil Litigation I (3 credits)

This course provides students with skills and knowledge to aid the trial attorney in preparing for civil litigation in Florida and Federal courts. Topics include the Federal Rules of Civil Procedure, the Florida Rules of Civil Procedure, drafting of pleadings and motions, jurisdiction, and alternatives to litigation.

PLA 2223 - Civil Litigation II (3 credits)

This course presents the topics of discovery, pretrial preparation, trial practice, and appellate procedure (Federal and Florida). Students obtains skills in drafting motions and discovery documents.

Prerequisite: PLA 2203.

PLA 2273 - Torts (3 credits)

This course presents the principles of tort law, including an examination of personal injury, intentional torts, negligence, and products liability.

PLA 2423 - Contracts (3 credits)

This course provides an overview of contract law with emphasis on understanding the rights and duties of parties

entering into contracts. Topics include the elements of contracts, enforcement of contracts, third party contracts, termination of contracts, and remedies for breach of contracts.

PLA 2433 - Corporate and Business Law (3 credits)

This course examines the legal functions of corporations, general partnerships, limited partnerships, sole proprietorships, and limited liability companies. Students learn the creation, management, duration, liability, and taxation of business organizations.

PLA 2460 - Bankruptcy Law (3 credits)

This course examines the principles, purposes, and procedures for filing bankruptcies under current bankruptcy laws.

PLA 2483 - Administrative Law (3 credits)

This course examines administrative agency functions in the federal government. Topics include formal rulemaking, informal rulemaking, investigations, reporting, administrative hearings, and the Freedom of Information Act.

PLA 2600 - Estate Planning and Probate Administration (3 credits)

This course examines wills, trusts, estates, and probate administration. Students are introduced to various types of probate proceedings, intestate succession, organization of probate documents, and drafting of trusts and wills.

PLA 2800 - Family Law (3 credits)

This course familiarizes students with the fundamental principles and rules relating to family law including a study of marriage, child custody, adoption, child and spousal support provisions, separation agreements, property disposition, and dissolutions of marriage.

PLA 2949 - Internship in Paralegal Studies (4 credits)

This course is a cooperative education course that reinforces the educational and professional growth of students through experience in the student's chosen career. The student and instructor determine a training plan, with the instructor evaluating the student's performance by communication with the student's supervisor.

Permission of instructor required.

Prerequisite: PLA 1104.

PMA - AGRICULTURE PRODUCTION TECHNOLOGY

PMA 2211 - Insects and Diseases of Ornamental Plants (3 credits)

This course teaches an overview of the major insects and diseases and nutritional disorders that affect the ornamental plant industry.

PMT - WELDING

PMT 0101 - Welding Symbols & Blueprints (N) (90 hours)

This course introduces the student to weld symbol interpretation in accordance with American Welding Society (AWS) standards. Welding details with symbols layout provide a systematic approach to blueprint reading. Fundamentals of drawing elements, scales, layouts, and title blocks are included.

Prerequisite: PMT 0121 with a grade of "C" or higher.

PMT 0104 - Fundamentals of Metallurgy (N) (60 hours)

This course explains principles of metallurgy. Emphasis is placed on metallurgical terms for metal structures common to the science of materials. Understanding the distinctions among metallic properties of strength, hardness, and ductility provides insight for managing desirable material properties. Differences between ferrous and nonferrous metals are covered in simple definitions, diagrams, and charts highlighting standard industry terms and practices related to metal.

Prerequisite: PMT 0101 with a grade of "C" or higher.

PMT 0105 - Intro to Blueprint Reading (N) (15 hours)

This course introduces the student to blueprint reading and interpreting various symbols and notations used on drawings.

PMT 0108 - Introduction to Welding (N) (150 hours)

This course builds foundational skills needed in the welding industry. Safety is emphasized along with applied physics, math, work place and communications skills. Cutting and gouging techniques as well as equipment setup using oxyfuel, carbon arc, and plasma cutting are covered. Safe practices in the preparation of the work area, proper use of tools and equipment along with handling of materials and highly pressurized gases are emphasized.

PMT 0121 - Shielded Metal Arc Welding Principles (N) (150 hours)

This course addresses principles related to Shielded Metal Arc Welding (SMAW) including SMAW power supplies, electrode holders, equipment set-up, joint configuration, layout, electrode, selection, electrode manipulation, arc control, finished bead characteristics, and safety.

Prerequisite: PMT 0108 with a grade of "C" or higher.

PMT 0122L - Shielded Metal Arc Welding -Advanced (N) (120 hours)

This course emphasizes advanced bead placement and weld bead profiles recognized by the American Welding Society (AWS) standard AWS D1.1. This advanced course stresses root, stringer, and weave bead patterns. Emphasis is placed on proper weld joint preparation, weld joint set-up, and recognizing weld bead discontinuities.

Prerequisite: PMT 0104 with a grade of "C" or higher.

PMT 0131 - Gas Tungsten Arc Welding Principles (N) (140 hours)

This course provides students with the fundamentals of gas tungsten arc welding (GTAW). Emphasis is placed on power sources, controls, polarity settings, and high frequency usage concepts. Lectures focus on GTAW torch components, setup, and safety.

Prerequisite: PMT 0122L with a grade of "C" or higher.

PMT 0134 - Gas Metal Arc Welding (N) (120 hours)

This course introduces terminology and procedures related to Gas Metal Arc Welding (GMAW, "MIG"), including power source configurations, hardware, equipment, set-up, and consumable gum components. Students are presented with practical applications related to shielding gas flow, weld bead characteristics, and weld bead geometry needed for certifications in fillet and groove weld fabrication.

Prerequisite: PMT 0138L with a grade of "C" or higher.

PMT 0138L - Gas Tungsten Arc Welding Advanced (N) (120 hours)

This course provides students with advanced instruction in a lab setting for Gas Tungsten Arc Welding (GTAW) practical skills needed to obtain certifications on ferrous and nonferrous base materials. Emphasis is placed on developing consistency in weld bead geometry and weld bead placement, along with proper set-up and finishing of GTAW welds.

Prerequisite: PMT 0131 with a grade of "C" or higher.

PMT 0161 - Pipe Welding (N) (90 hours)

This course provides students with basic pipe joint fit-up and weld bead placement for grooved butt welds. Emphasis is placed on vertical E6010 root with E7018 hot, fill and cap to completion. This course provides students with basic pipe end prep and joint fit-up techniques, along with weld bead placement for grooved butt welds. Emphasis is placed on uphill E6010 root pass with E7018, hot, fill and cap on 6" SCH180 carbon steel.

Prerequisite: PMT 0122L, PMT 0131, PMT 0134, PMT 0138L. Corequisite: pre/corequisite: PMT 0164, PMT 0165, PMT 0168.

PMT 0164 - Welding Fabrication Fundamentals (N) (70 hours)

This course introduces general drawing fundamentals, drawing construction, sketching, and drawing view placement, along with fabrication techniques, fabrication set-up, fixtures, jigs, and templates. Fabrication fundamentals, including tack and fit-up technique, using squares, plumb-bobs, levels, rulers, and machine elements, are also introduced.

Prerequisite: PMT 0134 with a grade of "C" or higher.

PMT 0165 - Pipe Welding - Advanced (N) (90 hours)

This course provides students with advanced filler materials (F group) combinations needed to obtain advanced welding process certification. The use of Shielded Metal Arc Welding (SMAW or "Stick"), Gas Metal Arc Welding (GMAW or "MIG"), and Gas Tungsten Arc Welding (GTAW or "TIG") combined processes on low carbon and corrosion-resistant steel (stainless steel) is emphasized. This course is geared toward 5G and 6G welding positions.

Prerequisite: PMT 0101, PMT 0104, PMT 0108, PMT 0121, PMT 0122L, PMT 0131, PMT 0134, PMT 0138L. Corequisite: pre/corequisite: PMT 0161, PMT 0164, PMT 0168.

PMT 0168 - Welding Certification Prep (N) (30 hours)

This course provides instruction for students working toward certification in plate, pipe, and tubing for multiple combinations of filler materials, base materials, and positions in accordance with American Welding Society (AWS) standard D1.1, American Petroleum Institute (API) code 1104, and American Society of Mechanical Engineers (ASME) welding codes.

Prerequisite: PMT 0101, PMT 0104, PMT 0108, PMT 0121, PMT 0122L, PMT 0131, PMT 0134, PMT 0138L. Corequisite: pre/corequisite: PMT 0161, PMT 0164, PMT 0165.

PMT 0870 - Apprenticeship - Welding OJT (N) (667 hours)

This course uses on-site training of skills and theoretical concepts introduced in the classroom components of the

Welding Apprenticeship. On-the-Job Training (OJT) provides relevant learning experiences not always available in the classroom setting, along with career-related experience, and workplace competencies expected by employers of the welding industry.

PMT 0930 - Special Topics in Welding (N) (30-150 hours)

Topics address recently identified current issues, skills, knowledge, and/or attitutes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

POS - POLITICAL SCIENCE

POS 1041 - American Government (3 credits)

This course is an introductory course on the essentials of American National Government. This course gives students a basic understanding of the structure of the federal government with emphasis placed on particular concepts, which include but are not limited to the United States Constitution, Federalism, Civil Liberties & Civil Rights, Congress, Presidency, Judiciary and Political Parties.

The purpose of this course therefore is to explore the scope of American Government and Politics. Individuals cannot be well informed about live in the United States of be a fully functioning citizen without having some understanding of politics and government in the United States. This course fulfills the State of Florida Civics Literacy Requirement.

Prerequisite: Student must score into college-level English and reading on placement test.

PPE - HUMAN SERVICES

PPE 2001 - Person and Personality Development (3 credits)

This course explores the major theories of personality development. The major theorists include Freud, Erikson, Jung, Adler, Laing, Fromm, Maslow, Skinner, Rogers, and Ellis. Objectives include exploration of the ways the approaches explain anxiety, creativity, happiness, and love.

PRN - NURSING - PRACTICAL NURSING

PRN 0004C - Practical Nursing Fundamentals (N) (500 hours)

This course introduces the student to theoretical, clinical, and lab concepts of health care operations, nurse assisting and practical nursing. Fundamental concepts such as describing basic health needs, recognizing the roles of the nurse, defining the nursing process and applying basic nursing principles and skills are emphasized.

PRN 0373C - Practical Nursing Medical Surgical I (N) (350 hours)

This course provides the practical nursing student with the theoretical and clinical foundation to support clinical application of nursing care utilizing nursing principles. Students apply knowledge, skills, and attitudes attained in PRN0004 (p. 277) to demonstrate care for the client in multiple settings. Skills for data collection are employed to assist with client care. Clinical experiences are provided with clients across the lifespan.

Prerequisite: PRN 0004C.

PRN 0374C - Practical Nursing Medical Surgical II (N) (350 hours)

This course prepares the practical nursing student with the theoretical foundations to support clinical application of nursing care utilizing nursing principles. Students apply concepts related to education and incorporation of community resources to promote wellness. Emphasis is on organized client care functions. Clinical experiences are provided with clients across the lifespan.

Prerequisite: PRN 0373C.

PRN 0933C - Transition to Graduate Practical Nurse (N) (150 hours)

This final classroom and clinical course focuses on the transition from student to graduate, employability skills, professional practice issues, and the role of the LPN in the Health Care Team. This course promotes integration of knowledge, attitudes, and skills necessary to implement safe care of clients with multi-contextual problems. Emphasis is placed on nursing care of the adult client utilizing nursing principles.

Prerequisite: PRN 0374C.

PSC - PHYSICAL SCIENCES

PSC 1121 - Survey of Physical Science (3 credits)

This course provides non-science majors with an introduction to the various scientific disciplines that collectively seek to understand the physical universe. Students learn an appreciation for the scientific method and use case studies of common events to learn the fundamental laws of nature.

Prerequisite: Student must test into college-level reading on placement test.

PSY - PSYCHOLOGY

PSY 2012 - Introduction to Psychology (3 credits)

This course is a basic introduction to the psychological study of human behavior and thought. The primary focus of the course is to understand human behavior from a variety of psychological perspectives. Topics covered include research methodology, biopsychology, sensation, perception, consciousness, learning, memory, cognition, intelligence, personality, abnormal behavior, and application of psychotherapies.

Prerequisite: Student must score into college-level English and reading on placement test.

PTN - PHARMACY TECHNOLOGY

PTN 0000 - Pharmacy Technician Orientation (N) (60 hours)

This course provides an introduction to the pharmacy technician profession including the job description of a pharmacy technician, licensure requirements and work environments. Topics covered are legal and ethical issues, job skills and duties, verbal and written communication skills, professional resources, safety techniques, supply and inventory techniques and use of related software.

Prerequisite: Admission to the Pharmacy Technician Program. Pre/corequisite: HSC 0003, HSC 0530C, HSC 0540.

PTN 0015 - Pharmaceutical Calculations (N) (75 hours)

This course reviews topics related to pharmaceutical mathematics including reading, interpreting, and solving calculation problems encountered in the preparation and distribution of drugs. Conversion of measurements within the apothecary, avoirdupois, and metric systems with emphasis on the metric system of weight and volume are covered. Ratio, proportion, percentage, dilution and concentration, milliquivalent units, intravenous flow rates, and dosage problems are presented.

Prerequisite: HSC 0003, HSC 0530C, HSC 0540, PTN 0000.

PTN 0023 - General Pharmacology (N) (90 hours)

This course discusses drugs, abbreviations, classifications, dosages, physiologic responses and routes of administration.

Prerequisite: HSC 0003, HSC 0530C, HSC 0540, PTN 0000.

PTN 0030 - Introduction to Community Pharmacy (N) (210 hours)

This course reviews the clinical experiences encountered in the retail environment. Students apply the concepts learned in classroom/lab setting in the workplace. Specific attention is directed to the ambulatory care setting.

Prerequisite: PTN 0032L, PTN 0033L, PTN 0023, PTN 0015 .

PTN 0031 - Introduction to Institutional Pharmacy (N) (210 hours)

This course reviews the clinical experiences encountered in the inpatient, acute care setting. Experiences include continued training of Practicum I objectives as they relate to the acute care setting (hospital pharmacy) in addition to intravenous fluid therapy, chemotherapy drugs, and assisting with dispensing of medication in in-patient and nontraditional settings (mail order, nursing home, home care).

Prerequisite: PTN 0032L, PTN 0033L, PTN 0023, PTN 0015.

PTN 0032L - Pharmacy Operations I (N) (80 hours)

This course reviews the concepts and skills necessary to interpret, prepare, label, and maintain records of physician's medication orders and prescriptions in a retail pharmacy setting. Individuals are trained in the methods of supply and inventory control and data entry. Topics include customer service and advisement, count and pour techniques, drug selection and preparation, over-the-counter maintenance, data input and editing, and quality assurance procedures. The use of pharmacological software utilized in retail is integrated throughout the course.

Prerequisite: HSC 0003, HSC 0530C, HSC 0540, PTN 0000.

PTN 0033L - Pharmacy Operations II (N) (80 hours)

This course focuses on the mastery of skills to include sterile procedures and aseptic techniques in parenteral compounding, proper use of equipment (autoinjections, pumps), preparation of sterile products (intravenous, irrigation, ophthalmic, total parenteral nutrition, and chemotherapy drugs), and safe handling of antineoplastic drugs.

Prerequisite: HSC 0003, HSC 0530C, HSC 0540, PTN 0000.

PTN 0050 - On-the-Job Learning for the Pharmacy Technician Apprentice 1 (N) (320 hours)

This course implements the theoretical concepts introduced in the classroom components of the Pharmacy Technician Apprenticeship program through on-the-job learning.

PTN 0051 - On-the-Job Learning for the Pharmacy Technician Apprentice 2 (N) (840 hours)

This course implements the theoretical concepts introduced in the classroom components of the Pharmacy Technician Apprenticeship program through on-the-job learning.

PTN 0091 - Pharmacy Technician Apprenticeship (N) (204 hours)

The course prepares pharmacy technician students to sit for the National Pharmacy Technician Certification Examination. Course participants receive a comprehensive review based on the certification exam content identified by the Pharmacy Technician Certification Board. The student utilizes resources offered through a variety of practice activities as well as their apprenticeship resources.

Corequisite: PTN 0051.

PTN 0092 - Clinical Experience for the Phamacy Technician Aprentice (N) (165 hours)

Students apply the concepts learned in classroom/lab setting in the workplace. Specific attention is directed to the community pharmacy or institutional setting during the student's apprenticeship.

PTN 0093 - Pharmacy Technician Review Course (N) (68 hours)

This course prepares pharmacy technician students to sit for the National Pharmacy Technician Certification Examination. Course participants receive a comprehensive review based on the certification exam content identified by the Pharmacy Technician Certification Board.

Prerequisite: PTN 0032L, PTN 0033L, PTN 0023, PTN 0015.

QMB - BUSINESS ADMINISTRATION AND MANAGEMENT

QMB 1001 - Mathematics of Business (3 credits)

This course seeks to develop those mathematical concepts required for success in a variety of business careers, including payroll calculations, markups and markdowns, discounts, commissions, and profit calculations.

QMB 3250 - Statistics for Business Decisions (3 credits)

This course shows how to use statistics to make informed business decisions implementing the necessary tools for basic quantitative analysis. Students learn quantitative measure such as regression analysis for business applications.

Prerequisite: ACG 2071, STA 2023, and MAC 2233 or MAC 2311.

REA - READING

REA 1205 - Advanced College Reading I (3 credits)

This course focuses on vocabulary knowledge, test-taking techniques, rapid reading, rate flexibility, and critical reading skills. Expected outcomes are to show improvement in all areas listed above and to demonstrate analytical thinking skills such as determining valid arguments, drawing logical conclusions and inferences, detecting bias and prejudice, and finding the author's purpose and tone.

REA 1933 - Reading for Cultural Literacy (3 credits)

This course promotes the value of diversity through familiarity with culturally diverse literature. Literal, critical, and affective skills in reading comprehension are enhanced through the study of selections reflecting diverse cultures. Emphasis is on critical thinking skills such as author's tone, intent, attitude, logical inferences, and illogical fallacies.

Prerequisite: Student must score into college-level English and reading on placement test.

RED - READING

RED 3009 - Early and Emergent Literacy (3 credits)

This course familiarizes students with early literacy development and conditions promoting total literacy from birth through lower elementary grades. All aspects of literacy are explored: reading, writing, listening and speaking.

Minimum of 20 hours field experience is required.

Corequisite: Pre/corequisite: EDF 2005, EDF 3214.

RED 3360 - Teaching Reading in Middle/Secondary Schools (3 credits)

This course promotes the effective teaching of literacy skills across the curriculum. The major emphasis of this course is placed on current theories, research-based strategies and materials used in content area literacy instruction. Lecture, discussions, simulated teaching and field work constitute different course activities.

Corequisite: Pre/corequisite: EDF 2005.

RED 4348 - Literacy Development K-12 (3 credits)

This course provides an understanding of reading instruction through the elementary, middle, and secondary school levels. It presents learning to read as a continuous process that impacts all academic success.

An additional 12 hours of field experience is a required.

Prerequisite: RED 3009.

RED 4519C - Diagnostic and Instructional Interventions in Reading (3 credits)

This course introduces formal and informal methods and materials used to identify reading strengths and weaknesses of students. Topics include assessments of all aspects of reading, including comprehension, word recognition, phonics and cognitive strategies. The main emphasis is diagnosis of reading problems, administration of assessments, evaluation of results and planning instructional interventions to remediate reading difficulties.

Prerequisite: Pre/corequisite: RED 4348 or RED 3360.

RED 4654 - Differentiated Instruction Foundations and Applications (3 credits)

This course exposes students to issues related to differentiated reading instruction. It discusses knowledge and skills concerning differentiated instructional theory, classroom applications, and evaluation techniques used in differentiated instruction.

Prerequisite: RED 3009, RED 3360 or RED 4348, RED 4519C.

RED 4854 - Reading Practicum (3 credits)

This course is a structured field experience course designed to give practice in developmental reading techniques appropriate to elementary/middle-secondary students. Experiences are provided in diagnosis, instructional planning for remediation, on-going evaluation of reading progress, communication with parents, and the use of authentic literature.

Prerequisite: RED 3009, RED 4519C, RED 4654, and RED 3360 or RED 4348 .

REE - REAL ESTATE

REE 1040 - Real Estate Principles and Practices I (4 credits)

This course reviews the theoretical, practical and legal aspects of the field of real estate. Material is presented in a manner to assist in preparation for the course and state licensing examinations.

REE 1180 - Real Estate Residential Appraisal ABI (6.5 credits)

This course reviews the proper way to complete an appraisal on a single-family residential property, focusing on the completion of the uniform residential appraisal report form. Successful completion of this course satisfies the educational requirements for a state-licensed real estate appraiser.

REL - HUMANITIES

REL 1121 - Religion and American Public Life (3 credits)

This course explores the contentious place of religion in American public life. What roles do religious organizations and religious motivations play in the public arenas of electoral politics, policy-making, schools, courts, social service delivery, media, and marketplace? What roles ought they to play? In a pluralistic society, how are Americans to balance diverse moral positions with our shared civic life? Engaging the insights of sociologists of religion, legal scholars, ethicists, political theorists, and cultural critics this course refines the language with which we address such broad questions. Students apply those insights to focused critical analyses of issues they choose.

REL 1300 - Introduction to World Religions (3 credits)

This course provides a comparative survey of the philosophical ideas, historical routes, and social implications of world religions, both East and West, including Judaism, Christianity, Islam, Hinduism, Taoism, Confucianism, and Buddhism. The course also examines the institutional practices of these various religions. Students demonstrate college-level writing skills through multiple assignments.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

Prerequisite: Student must score into college-level English and reading on placement test.

RET - RESPIRATORY CARE

RET 1007 - Cardiopulmonary Pharmacology (2 credits)

This course is an introduction to general pharmacological classifications of medications including dosage calculations along with an indepth study of drugs administered by respiratory care practitioners.

Corequisite: RET 1024, RET 1274, RET 1485.

RET 1024 - Introduction to Respiratory Care (3 credits)

This course is an introduction to the field of Respiratory Therapy including terminology, patient care techniques, CPR, and professional ethics. A lab setting is utilized to reinforce lecture and enable the student to develop the necessary skills prior to performance in a clinical rotation.

RET 1274 - Respiratory Therapy Theory I (3 credits)

This course presents the theory of medical gas, humidity, and aerosol therapy along with the equipment associated with their administration. A lab setting is utilized to reinforce lecture and enable the student to develop the skills necessary to perform in a clinical setting.

Corequisite: RET 1007, RET 1024, RET 1485.

RET 1485 - Cardiopulmonary Anatomy and Physiology (3 credits)

This course offers an indepth study of the anatomy, physiology, and pathology of the pulmonary and cardiovascular systems and their application to the basics of pulmonary disease.

Corequisite: RET 1007, RET 1024, RET 1274.

RET 2241 - Introduction to ACLS for Respiratory Care (1 credit)

This course reviews Advanced Cardiac Life Support (ACLS) based on the American Heart Association standards. It prepares students for the ACLS certification examination. This course is for Respiratory Therapy Care students and licensed respiratory care professionals.

RET 2264 - Mechanical Ventilation with Lab (3 credits)

This course reviews the theory of operation, application, and evaluation of mechanical ventilators. A lab setting is utilized to reinforce lecture and enable the student to develop the skills necessary to function competently in a clinic.

Prerequisite: RET 2442. Corequisite: RET 2834.

RET 2275 - Respiratory Care Theory II with Lab (3 credits)

This course discusses the theory and application of positive pressure breathing, chest physiotherapy, airway care, and adjunctive breathing therapies, and their role in the treatment of general medical, surgical, and pulmonary patients. A lab setting is utilized for mastery of skills prior to clinic.

Prerequisite: RET 1274. Corequisite: RET 2503, RET 2832.

RET 2280 - Critical Respiratory Care (3 credits)

This course reviews advanced theories and modalities of respiratory care including hemodynamic monitoring, EKG interpretation, pulmonary and cardiac diagnostic procedures, sleep studies, cardiopulmonary rehabilitation and home care. Students identify, assist, interpret and recommend related procedures and modalities for the management of the cardiopulmonary patient.

Prerequisite: RET 2833. Corequisite: RET 2834, RET 2264.

RET 2414C - Pulmonary Function Studies with Lab (3 credits)

This course is an indepth study of diagnostic techniques in the field of pulmonary function, which includes spirometry, lung volumes, static and dynamic mechanics, ventilation, and distribution of gases. A lab setting is utilized to reinforce lecture and enable the student to develop the skills necessary to perform in a clinical setting.

Corequisite: Prerequisite/corequisite: MAT 1033, RET 2442, RET 2833.

RET 2442 - Respiratory Therapy Theory III with Lab (3 credits)

This course is a study of artificial airway management, theories associated with blood gas analysis, noninvasive patient monitoring techniques, along with an introduction to mechanical ventilation. A lab setting is utilized to reinforce lecture and enable the student to develop the skills necessary to perform in a clinical setting.

Prerequisite: RET 2275. Corequisite: RET 2833.

RET 2503 - Cardiopulmonary Diseases (2 credits)

This course is an in-depth study of cardiopulmonary diseases including etiology, diagnosis, and treatment.

Prerequisite: RET 1485. Corequisite: RET 2275, RET 2832.

RET 2714 - Pediatric/Neonatal Respiratory Care (3 credits)

This course provides an in-depth understanding of the significant anatomic, physiologic, and pharmacologic concepts as they relate to the pediatric and neonatal patients. It covers disease entities and resuscitation methods specific to neonates and pediatrics.

Prerequisite: RET 2264. Corequisite: RET 2835.

RET 2832 - Respiratory Therapy Clinic I (5 credits)

This course provides supervised observation and clinical practice of oxygen and aerosol therapy. Associate procedures are presented in RET-1024 (p. 281) and RET-1274 (p. 281). Clinic meets two days per week (16 hours).

Prerequisite: RET 1024, RET 1274. Corequisite: RET 2275, RET 2503.

RET 2833 - Respiratory Therapy Clinic II (2 credits)

This course provides supervised observation and clinical practice of IPPB, CPT, and airway management as presented in RET-2275 (p. 281) and RET-2442 (p. 281).

Prerequisite: RET 2275. Corequisite: RET 2442.

RET 2834 - Respiratory Therapy Clinic III (5 credits)

This course provides supervised observation and clinical practice of diagnostic techniques utilized in the evaluation of pulmonary function, including arterial punctures and analysis. Students are also oriented to the Intensive Care Unit.

Prerequisite: RET 2414C. Corequisite: RET 2264.

RET 2835 - Respiratory Therapy Clinic IV (7 credits)

This course provides supervised observation and clinical practice of mechanical ventilation on adult and pediatric/neonatal patients. Clinic meets an average of 20 hours per week.

Prerequisite: RET 2264, RET 2280, RET 2834 . Corequisite: RET 2714, RET 2934.

RET 2934 - Professional Development in Respiratory Care (2 credits)

This course prepares students for employment in the field of Respiratory Care. Employability skills, registry preparation, and computer literacy are discussed.

Prerequisite: RET 2264, RET 2280, RET 2834. Corequisite: RET 2714, RET 2835.

RMI - INSURANCE

RMI 1090 - Customer Service Representative (3 credits)

This course focuses on the knowledge and skills necessary to be proficient in understanding property and casualty, legal, operational, and customer-focused practices. Upon successful completion of this course, students are awarded a Customer Services Representatives State License.

RMI 2500 - Individual Life and Health Insurance (3 credits)

The role of life and health insurance in meeting economic security needs, types of individual and special life annuity contracts, individual health insurance contracts including disability and medical expense insurance as related to premiums, reserves, non-forfeiture values, surplus, and dividends are covered.

RMI 2600 - Property and Casualty Insurance (12 credits)

This is a course for students interested in obtaining a state of Florida Property and Casualty sales license. This is the state required "220" pre-licensing class. Topics include auto, fire, liability, property, workman's compensation, security bonds, and other casualty insurance topics.

RTE - RADIOGRAPHY

RTE 1000 - Introduction to Radiologic Sciences (3 credits)

This course provides an overview of the radiologic sciences. Topics include a history of the profession, patient care practices, and cultural, ethical, and legal issues.

RTE 1111 - Patient Care for Radiologic Sciences (3 credits)

This course presents both conceptual and experiential approaches to the topic of patient care in imaging technology. This 6-week learning experience is designed to encourage life-long learning through mastery of the varied elements of quality and effective patient care. The course places special emphasis on developing familiarity with

patient assessment and communication, patient care and safety, infection control, trauma and mobile imaging, and alternative medical treatments. After such mastery has been accomplished the student is able to apply knowledge of these elements to a variety of real-world scenarios, particularly those involving radiologic technology.

Prerequisite: RTE 1000. Corequisite: RTE 1111L.

RTE 1111L - Patient Care Lab for Imaging Sciences (1 credit)

Routine and emergency patient care procedures are simulated allowing the student to apply cognitive learning to practical situations. Demonstration of infection control procedures utilizing standard precautions, as well as simulations of procedures specific to the radiographer's scope of practice are also included.

Prerequisite: RTE 1000. Corequisite: RTE 1111.

RTE 1418 - Radiographic Imaging I (3 credits)

This course provides an overview of the production and properties of x-radiation, primary exposure factors as they relate to the formation of radiographic technique, the properties and characteristics of imaging media, and the primary factors of radiographic quality.

Prerequisite: MAT 1033, RTE 1000. Corequisite: RTE 1513, RTE 1513L, RTE 1824.

RTE 1457 - Radiographic Imaging II (3 credits)

This course provides indepth analysis of the principles of radiographic exposure as they apply to density, detail, contrast, magnification, and distortion. The Inverse Square Law and its application is also included.

Prerequisite: RTE 1418. Corequisite: RTE 1457L, RTE 1523, RTE 1523L, RTE 1834.

RTE 1457L - Radiographic Imaging II Lab (1 credit)

This course provides an opportunity to use problem-solving techniques to evaluate and correct the radiophaphic image. Specific units covered include conventional tomographic principles, film sensitometry, automatic film processing, and radiologic applications of digital imaging including digital imaging equipment, archiving, storage, and radiology information systems. Increased emphasis is placed on image evaluation and problem-solving in the clinical environment.

Prerequisite: RTE 1418. Corequisite: RTE 1457, RTE 1523, RTE 1523L, RTE 1834.

RTE 1503 - Radiographic Procedures I (3 credits)

This course provides the Radiography student with the instruction in radiographic examinations of the chest. An introduction of medical terminology, radiographic terminology, and the fundamentals of patient care are included.

Prerequisite: Pre/corequisite: RTE 1000. Corequisite: RTE 1804.

RTE 1513 - Radiographic Procedures II (3 credits)

This course provides the Radiography student with instruction in radiographic examinations of the chest, abdomen, and upper and lower extremities. Special emphasis of radiographic anatomy, surface landmarks, positioning, technique, pathology, and critique of images are made.

Prerequisite: RTE 1503. Corequisite: RTE 1513L, RTE 1824.

RTE 1513L - Radiographic Procedures II Lab (1 credit)

This course provides lab instruction in radiographic examinations of the upper and lower extremities, gastrointestinal systems, and the biliary system.

Prerequisite: RTE 1503. Corequisite: RTE 1513, RTE 1824.

RTE 1523 - Radiographic Procedures III (3 credits)

This course is a continuation of study in radiographic anatomy, positioning, pathology, and image evaluation with emphasis in procedures of the gastrointestinal system, biliary system, genitourinary system, bony thorax, and spine. This course includes discussion of patient care and medical terminology related to course topics. This course also includes the composition, use, and effects of contrast medium on the human body.

Prerequisite: RTE 1513, RTE 1513L. Corequisite: RTE 1523L, RTE 1834.

RTE 1523L - Radiographic Procedures III Lab (1 credit)

This course provides the Radiography student with lab instruction in radiographic examinations of the gastrointestinal system, bony thorax, and spine.

Corequisite: RTE 1523, RTE 1834.

RTE 1804 - Radiographic Clinical Education I (1 credit)

This course provides the student with practical application in a supervised setting of the theory covered in RTE-1503

(p. 283). The student rotates through selected areas of the Radiology Department in order to gain first hand experience in film filing, film processing, and transportation of patients. The student observes, assists, and performs basic radiographic procedures (chest and abdomen) under the supervision of a clinical instructor.

RTE 1814 - Radiographic Clinical Education II (1 credit)

This course is a continuation of RTE-1804 (p. 283) with students performing radiographic examinations under direct supervision in the clinical education centers. Emphasis is placed on chest imaging and methods of patient care.

Prerequisite: RTE 1804.

RTE 1824 - Radiographic Clinical Education III (3 credits)

This course is a continuation of RTE-1814 (p. 284) with students performing radiographic procedures under direct supervision in the clinical education centers. Emphasis is placed on examinations of the chest, abdomen, and upper and lower extremities.

Prerequisite: RTE 1814. Corequisite: RTE 1418, RTE 1513, RTE 1513L .

RTE 1834 - Radiographic Clinical Education IV (3 credits)

This course is a continuation of RTE-1824 (p. 284) with students performing procedures taught in previous clinical courses. Emphasis is placed on radiographic examinations of the gastrointestinal system, biliary system, bony thorax, and spine.

Prerequisite: RTE 1824. Corequisite: RTE 1523, RTE 1523L.

RTE 2061 - Radiographic Seminar (3 credits)

This course prepares students for the ARRT certification examination. Emphasis is placed on review, test-taking skills, and practice ARRT examinations. The course also addresses career planning activities, which include resume writing and interviewing skills. Continuing education and careers in radiologic specialty areas are also discussed.

Corequisite: RTE 2874.

RTE 2385 - Radiation Safety and Protection (2 credits)

This course includes discussion of the mechanisms of protection from the harmful effects of ionizing radiation as this applies to radiation workers, patients, and the public at large. The genetic and somatic effects of ionizing radiation are also discussed.

Prerequisite: RTE 1457, RTE 1457L.

RTE 2533 - Radiographic Procedures IV (2 credits)

This course provides continued study in radiographic anatomy, positioning, pathology, and film critique with emphasis on the skull, including sinuses, mastoids, facial bones, and orbits. This course includes discussion of patient care and medical terminology related to course topics.

Prerequisite: RTE 1523, RTE 1523L. Corequisite: RTE 2533L.

RTE 2533L - Radiographic Procedures IV Lab (1 credit)

This course provides lab instruction in radiographic examinations of the skull.

Prerequisite: RTE 1523, RTE 1523L. Corequisite: RTE 2533.

RTE 2553 - Radiographic Procedures V (2 credits)

This course provides continued study in radiographic procedures. Topics include mobile and surgical imaging, mammography, bone densitometry, and pharmacology.

Prerequisite: RTE 2533, RTE 2533L. Corequisite: RTE 2553L.

RTE 2553L - Radiographic Procedures V Lab (1 credit)

This course provides practice in performing various types of imaging procedures in trauma situations. Tomographic procedures are also addressed.

Prerequisite: RTE 2533, RTE 2533L. Corequisite: RTE 2553.

RTE 2785 - Advanced Pathophysiology (2 credits)

This course introduces theories of disease causation and the pathophysiologic disorders that compromise healthy systems. Etiology, pathophysiologic responses, clinical manifestations, radiographic appearance and management of alterations in body systems are presented.

Prerequisite: RTE 2854.

RTE 2844 - Radiographic Clinical Education V (1 credit)

This course is a continuation of RTE-1834 (p. 284) with students perfecting positioning skills with indirect supervision. Emphasis is placed on radiographic procedures in advanced radiographic modalities and fluoroscopic procedures.

Prerequisite: RTE 1834.

RTE 2854 - Radiographic Clinical Education VI (1 credit)

This course is a continuation of RTE-2844 (p. 285) with students perfecting positioning skills with indirect supervision. Emphasis is placed on examinations of the skull, facial bones, sinuses, and special radiographic procedures.

Prerequisite: RTE 2844. Corequisite: RTE 2533, RTE 2533L.

RTE 2864 - Radiographic Clinical Education VII (3 credits)

This course is a continuation of RTE-2854 (p. 285) with students perfecting positioning skills with indirect supervision. Clinical rotations include special procedures, myelography, and CT scanning.

Prerequisite: RTE 2854. Corequisite: RTE 2553, RTE 2553L.

RTE 2874 - Radiographic Clinical Education VIII (3 credits)

This course is a continuation of RTE-2864 (p. 285) with students practicing positioning skills with indirect supervision. Emphasis is placed on completion of required clinical competencies.

Prerequisite: RTE 2864.

SBM - BUSINESS ADMINISTRATION AND MANAGEMENT

SBM 1000 - Entrepreneurship (3 credits)

This course focuses on research and development of the various elements of a business plan, including financing, marketing, and bookkeeping.

SCE - EDUCATION

SCE 3360 - Middle School/Secondary Science Methods (3 credits)

This course presents principles of effective curriculum design and assessment. It addresses the required instructional methods, techniques, strategies, and resources for effective science teaching in grades 5-12. This course accompanies the Middle School/Secondary Science Practicum which provides students with opportunities to present their interactive curriculum projects to middle and high school students in local area school districts.

This course addresses specific Sunshine State Standards subject matter competencies, and pedagogy pertinent to the discipline required for certification.

Prerequisite: EDF 2005, EDG 3343, EDF 3214, Middle Grades SCE 4942, Secondary Biology SCE 3940, nine (9) hours of science content courses. . Corequisite: Middle Grades SCE 3940 or Secondary Biology SCE 4942.

SCE 3905 - Science through Tutoring (3 credits)

This course focuses on the general science skills needed for successfully tutoring in an academic setting, general methods of tutoring, and the tutoring techniques needed in specific courses. Teacher-tutor seminars, teacher-tutor conferences, and formal instruction supplement the extensive tutoring experiences.

Prerequisite: EDF 3214, nine (9) hours of science content courses, or permission of instructor.

SCE 3940 - Teaching Middle School Science Practicum (1 credit)

This course provides the opportunities to present interactive curriculum projects to middle school students in local area school districts. Students spend a minimum of 30 school-based hours in the middle school classroom. Project presentations are coordinated with in-service middle school teachers and their curriculum schedules and needs.

This course addresses specific Sunshine State Standards, subject matter competencies, and pedagogy pertinent to the discipline and required for certification. Students who are majoring in science education and who will be obtaining teacher certification in grades 5-9 or 6-12 are eligible for this class.

Prerequisite: EDF 2005, EDF 3214, nine (9) hours of science content courses. . Corequisite: Middle Grades SCE 3360 or Secondary Biology EDG 3343.

SCE 4941 - Student Teaching in Science (10 credits)

This course prepares a teacher candidate to demonstrate pre-professional competencies during a 12 week, full-time internship in a public school approved by the department.

Contact hours: a minimum of 35 hours per week for 12 weeks.

Prerequisite: Senior level status, all program requirements complete, and permission of clinical education coordinator. . Corequisite: SCE 4943.

SCE 4942 - Teaching Secondary Science Practicum (1 credit)

This course focuses on how to present interactive curriculum projects to secondary school students in local area school districts. Students spend a minimum of 30 school-based hours in the secondary school classroom. Project presentations are coordinated with in-service secondary school teachers and their curriculum schedules and needs.

This course addresses specific Sunshine State Standards, subject matter competencies, and pedagogy pertinent to the discipline and required for certification. Students who are majoring in science education and who will be obtaining teacher certification in grades 5-9 or 6-12 are eligible.

Prerequisite: EDF 2005, EDF 3214; Secondary Biology EDG 3343, nine (9) hours of science content courses. . Corequisite: Middle Grades EDG 3343 or Secondary Biology SCE 3360.

SCE 4943 - Seminar in Science Teaching (3 credits)

This course demonstrates how to design instructional strategies, planning techniques, evaluation procedures and class management skills for science courses in the secondary school environment.

Prerequisite: Senior status, all program requirements complete, and permission of clinical education coordinator. . Corequisite: SCE 4941.

SLS - BUSINESS ADMINISTRATION AND MANAGEMENT

SLS 1261 - Essentials of Contemporary Leadership (3 credits)

This course refines leadership skills and attitudes. The focus is on personality traits, behavioral change, and goal-setting techniques. Topics include motivation, communications, empathy, trust, team building, and human relations.

SLS 1267 - Team Building and Problem Solving (3 credits)

This course emphasizes team building and advanced communication skills. Working both individually and in groups students study how to interact more productively with others, to listen more deeply for the real problems rather than surface issues. Students also practice balancing advocacy and inquiry in order to help others understand their reasoning and to work more productively towards group consensus. Students are also exposed to a variety of managerial models and demonstrate knowledge of the most appropriate model for a given situation.

SLS 1421 - Personal and Career Development (3 credits)

This course is a survey of factors influencing the modern person today such as career choices, adjustment for changes in lifestyles, combining homemaking with career, human relations, and advancement into leadership positions.

SLS 1931 - Professional Skills Enhancement (.5 - 5 credits)

This course emphasizes activities and materials that are responsive to the individual needs of the students in order to enhance specific professional skills.

SLS - COLLEGE ORIENTATION

SLS 1101 - Student Success (3 credits)

The course provides extensive instruction in study skills and strategies, helps students develop a positive attitude toward learning, and offers an orientation to the College.

SLS 1501 - College Study Skills (1 credit)

This course focuses on how to improve study skills that are necessary for academic success at the college level.

SLS - PSYCHOLOGY

SLS 0341 - Practical Employability Skills (N) (VARIABLE HOURS)

This course focuses on students employability skills. The content includes how to obtain personal and occupational information necessary in choosing a career, how to prepare for the job hunt, how to get leads on jobs, and how to contact potential employers. Writing of résumés, completing applications, and checking payroll deductions are covered, as well as handling of promotions, resignation, job loss, and career changes.

SLS 0390 - Employability Skills I (N) (225 hours)

This course discusses how to determine realistic employment goals and identify potential careers available in the community. The content deals with comparing personal strengths and weaknesses, including physical and cognitive abilities, to specific job requirements and demonstrating employability skills appropriate to the workplace.

Corequisite: Recommended: SLS 0936.

SLS 0391 - Employability Skills II (N) (225 hours)

This course discusses how to manage interpersonal relationships. The content includes the importance of participating as a team player, portraying a positive attitude in the workplace, and maintaining a positive relationship with a supervisor.

Corequisite: Recommended: SLS 0936.

SLS 0460 - Specialized Career Education, Basic 1 (N) (150 hours)

This course is about personal and career exploration. Students are required to identify and describe personal skills, interest, values, experiences, personality traits, and academic abilities. Students review and discuss career and employment opportunities and determine realistic employment goals; explain individual rights and responsibilities in the workplace, as well as describe the rights, responsibilities ad benefits of employment.

SLS 0461 - Specialized Career Education, Basic 2 (N) (150 hours)

This course introduces the importance and management of interpersonal relationships, job seeking and employability skills. Students learn to participate as a member of teach, demonstrate positive work attitudes and characteristics of a good employee, maintain positive relationships with co-workers and supervisors; identify steps of the job application process, prepare a resume, and proper dress and grooming for employment. There is an introduction to work tools, equipment, systems and materials.

SLS 0462 - Specialized Career Education, Basic 3 (N) (150 hours)

The course shows how to be a successful employee and request work-related reasonable accommodations. The course includes an introduction to appropriate oral and written communication and workplace and industry-related math skills.

SLS 0463 - Specialized Career Education, Advanced 1 (N) (150 hours)

This course reinforces the ability to explain and request reasonable job related accommodations; listen to, follow and provide directions in a workplace setting. The course emphasizes employability skills, and familiarization and use of information technology.

SLS 0464 - Specialized Career Education, Advanced 2 (N) (150 hours)

This course introduces workplace organization; and the roles within teams, work units, departments, organizations and the larger environment. Students work on identifying and demonstrating positive human relations and leadership skills; critical thinking skills, creativity and innovation for problem solving.

SLS 0933 - Special Topics in Work Skills (N) (15 - 300 hours)

This course demonstrates how to develop realistic employment goals as well as identify potential careers available in the community. Interpersonal skills on the job, understanding the workplace culture and comparing the differences in workplace settings through site visits and classroom lectures are emphasized. Course content covers specific skills and the tools, technology and supplies needed to complete specific jobs for occupations such as housekeeping, laundry, retail, culinary, assembly and landscaping/horticulture.

An on-the-job component teaches workplace applications of the theoretical concepts introduced in the classroom components.

SLS 0936 - On-the-Job Training/Vocational Education (N) (75 hours)

This course builds upon the applied concepts introduced in the classroom components of the Vocational Education for Students with Disabilities program through on-the-job training.

Recommended: this course should be taken with other program courses.

SLS 0944 - Specialized Career Education, Internship (N) (150 hours)

This course offers an on-the-job training component, whereby students are either placed in a job shadowing opportunity to work one-on-one with an instructor to prepare for employment.

SLS 2940 - Service Learning and Civic Engagement (3 credits)

This course presents democratic principles of civic engagement and service in the venue of planned Service Learning activities. Students engage in supervised career-exploration and discipline-related activities in the community service setting. Seminar and reflection activities are employed to assess experiences and to examine how organizations within the community address the problems, issues and concerns of the community.

Prerequisite: Student must score into college-level English, reading, and math on placement test; have completed nine college-level credits; have a 2.0 overall GPA and instructor approval.

SLS 2941 - Pre-Med Career Shadowing and Scientific Research Service Learning (1.5 credits)

This course presents democratic principles of civic engagement and service in the venue of planned service-learning activities. Students engage in supervised health sciences career-exploration and laboratory research activity in the community service setting. Seminar and reflection activities are employed to assess experiences and to examine how organizations within the community address the problems, issues and concerns of the community.

Prerequisite: Student must score into college-level English, reading, and math on placement test; have completed nine college-level credits; have a 2.0 overall GPA and instructor approval.

SLS 2942 - Service Learning and Peer Mentoring (3 credits)

This course presents democratic principles of civic engagement and service in the venue of planned service-learning activities. Students engage in supervised training in peer mentoring and in planning and executing active self-sustaining peer assistance programs. Seminar and reflection activities are employed to assess experience and to propose program enhancements.

The course also examines how organizations within the community address the problems, issues and concerns of the community as a whole.

Prerequisite: Student must score into college-level English, math and reading on placement test; have completed nine college-level credits; have a 2.0 overall GPA.

SLS 2948 - Service Learning and Professional Development (1 credit)

This course presents democratic principles of civic engagement and service in the venue of planned service-learning activities. Students engage in supervised career-exploration and discipline-related activities in the community service setting. Seminar and reflection activities are employed to assess experiences.

Prerequisite: Student must score into college-level English, reading and math on placement test; have completed nine college-level credits; have a 2.0 overall GPA.

SPC - SPEECH

SPC 1017 - Fundamentals of Speech Communication (3 credits)

This survey course examines the process of communication in a variety of contexts including interpersonal communication, small group communication, public speaking, organizational communication, mass communication, and intercultural communication. Students study and understand fundamental concepts, principles and theoretical concerns at the foundation of effective communication, and they develop the skills necessary to apply these principles in a variety of contexts.

SPC 1608 - Public Speaking (3 credits)

This course examines the nature and basic principles of speech, with emphasis on improving speaking and listening skills common to all forms of oral communication through a variety of experiences in public speaking.

Prerequisite: Student must score into college-level English and reading on placement test.

SPN - SPANISH

SPN 1120 - Elementary Spanish I (4 credits)

This course facilitates the students' acquisition of communicative competencies in the four basic skills of speaking, listening, reading and writing Spanish. This course concurrently focuses on enriching students' cultural understanding of the Spanish-speaking world. This course can be used toward the foreign language requirements for university admission.

Prerequisite: Student must score into college-level English on placement test.

SPN 1121 - Elementary Spanish II (4 credits)

This course continues the students' acquisition of communicative competencies in the four basic skills of speaking listening, reading and writing Spanish begun in SPN-1120 (p. 288), with a continuing focus on enriching

students' cultural understanding of the Spanish-speaking world. This course can be used toward the foreign language requirements for university admission.

Prerequisite: SPN 1120.

SPN 2220 - Intermediate Spanish I (4 credits)

The course continues the student's acquisition of communicative competencies in the four basic skills begun in SPN-1120 (p. 288) and SPN-1121 (p. 288), with a continuing focus on enriching students' cultural understanding of the Spanish-speaking world. This course can be used toward the foreign language requirements for university admission.

Prerequisite: SPN 1121 or its equivalent.

SPN 2221 - Intermediate Spanish II (4 credits)

This course is designed for college-level students who have had at least three years of high school Spanish. This course can be used toward the foreign language requirements for university admission.

Prerequisite: SPN 2220 or permission of instructor.

STA - MATHEMATICS

STA 2023 - Elementary Statistics I (3 credits)

This course includes measures of central tendency and variability, probability, random variables, normal and binomial distributions, confidence intervals, tests of hypotheses, correlation and simple linear regression, descriptive and inferential techniques and concepts which apply to sample data which has been gathered from a population.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. and A.S. Degree.

Prerequisite: MAT 1033 (or higher), MGF 2106, or MGF 2107 with a grade of "C" or higher, or placement scores.

STS - SURGICAL TECHNOLOGY

STS 0003 - Introduction to Surgical Technology (N) (144 hours)

This course examines the role of the surgical technologist and the surgical team. An introduction to the overall healthcare system provides a foundation for cognitive development through the program. The topics include professional behavior and growth, the surgical team, legal concepts, and asepsis/infection control. Acceptance to the Surgical Technology Program is required.

Corequisite: STS 0008, STS 0155C, STS 0040.

STS 0008 - Pharmacology for the Surgical Technologist (N) (130 hours)

This course teaches general pharmacological concepts and principles in the management of patient care. Effective administration of therapeutic drugs, indications, and contraindications are discussed, including effects of medication on body systems. Drug classifications and their principal action are reviewed. Correct drug and dose identification is emphasized, including medications handled by the surgical technologist on the sterile field. Acceptance into the Surgical Technology program is required.

Corequisite: STS 0003, STS 0155C, STS 0040.

STS 0013L - Centrl Sterile Processing Clinical (N) (410 hours)

This course focuses on the application of the principles and practice of central sterile processing and materials management through clinical observation and participation under professional
supervision in the hospital environment.

Prerequisite: HSC 0003, STS 0019C.

STS 0019C - Central Sterile Processing/Materials Mgmt (N) (150 hours)

This course is an introduction to the concepts, principles, methods, and practice of the central sterile processing technician. The topics include professional behavior and communication,
basic science and technology, infection control, and fundamentals of procurement and inventory control. Acceptance to the Central Service Technology Program is required.

Corequisite: Pre/corequisite: HSC 0003.

STS 0040 - Human Anatomy and Physiology (N) (94 hours)

This course provides instruction on the structure and function of the human body and related medical language. Emphasis is on the structure and function of body organs and systems including cellular biology and related terminology. Acceptance to the Surgical Technology program is required.

Corequisite: STS 0003, STS 0008, STS 0155C.

STS 0050 - Pathophysiology for the Surgical Technologist (N) (52 hours)

This course provides general knowledge and functions of the human body in disease and illness. The main focus topics are understanding cell structures as it correlates to disease and pathology as they relate to each body system.

Prerequisite: STS 0003, STS 0040. Corequisite: STS 0120, STS 0255L.

STS 0120 - Surgical Specialties I (N) (204 hours)

This course is an introduction to various types of surgical interventions and corresponding anatomical systems of the body. Perioperative case management, instrumentation, equipment, and procedural steps are defined and discussed with focus on the following specialties: general, obstetrics, gynecology, genitourinary, orthopedics, and plastic/reconstructive. The perioperative care of the individualized patient is included.

Prerequisite: STS 0003, STS 0155C, STS 0040 . Corequisite: STS 0255L, STS 0050.

STS 0121 - Surgical Specialties II (N) (114 hours)

This course expands to the more complex study of surgical interventions and corresponding anatomical systems of the body. Perioperative case management, instrumentation, equipment, and procedural steps are defined and discussed with focus on the following specialties: peripheral vascular, cardiothoracic, ophthalmic, otorhinolaryngologic, oral/maxillofacial, and neurosurgery. The perioperative case of the individualized patient is included.

Prerequisite: STS 0120, STS 0255L. Corequisite: STS 0256L.

STS 0155C - Surgical Techniques and Procedures (N) (144 hours)

This course teaches operating room theory and the role of the surgical technologists in the operating room and related surgical departments. The principles of asepsis and practice of sterile techniques used in the operating room is the focus of this course. Perioperative case management and the steps of the individual tasks are taught. These tasks include scrubbing, gowning, gloving, instrument identification, transport, care of specimens, sutures, needles, and sponges.

Corequisite: STS 0003, STS 0008, STS 0040.

STS 0255L - Surgical Specialties Clinical I (N) (256 hours)

This course provides instruction in the perioperative case management of a surgical patient through clinical observation and participation under professional supervision in the hospital setting.

Prerequisite: STS 0003, STS 0008, STS 0155C, STS 0040. Corequisite: STS 0050, STS 0120.

STS 0256L - Surgical Specialties Clinical II (N) (192 hours)

This course discusses the more complex perioperative case management of the surgical patient through clinical observation and participation under professional supervision in the hospital, ambulatory surgery center, and freestanding specialty surgery center settings.

Prerequisite: STS 0120, STS 0255L . Corequisite: STS 0121.

SWI - AGE GROUP SWIMMING

X000

SWI X300 - Age Group Swimming Blue Group (N) (150 clock hours)

Age group swimming blue group.

SWI X301 - Age Group Swimming Bronze Group (N) (175 clock hours)

Age group swimming bronze group.

SWI X302 - Age Group Swimming Silver Group (N) (200 clock hours)

Age group swimming silver group.

SWI X303 - Age Group Swimming Gold Group (N) (225 clock hours)

Age group swimming gold group.

SWI X304 - Master's Swim Program (N) (160 clock hours)

Master's swim program.

SWS - AGRICULTURE PRODUCTION TECHNOLOGY

SWS 1102 - Irrigation Systems I (3 credits)

This course presents the general aspects of fieldcrop, turf, and landscape irrigation.

SWS 2104 - Soils and Fertilizers (3 credits)

This course studies soil usage and fertility including fertilizing practices.

SYG - SOCIOLOGY

SYG 1250 - Multicultural Issues (3 credits)

This course presents a survey of the cultures of many United Nations member nations and explains the

interethnic conflict, cultural conflict, and self-rejection experienced by many groups around the world. The course focuses on facilitating understanding among people from different parts of the world with diverse cultural backgrounds.

SYG 1361 - Sociology of Death (3 credits)

This course examines the issues related to death and dying. Beliefs, rituals, and behaviors of a variety of cultures (past and present) are examined. Special emphasis is placed on current topics such as euthanasia, cryogenics, and other individual options.

SYG 2000 - Introduction to Sociology (3 credits)

This course is an introduction to the concepts, principles, perspectives, methods, and findings of sociology. The course seeks to integrate social reality and individual life experiences, with particular emphasis on contemporary American society.

Prerequisite: student must score into college-level English and reading on placement test.

SYG 2010 - Social Problems (3 credits)

This course examines the causes and proposed solutions of contemporary social problems: poverty, the economy, alienation, delinquency and crime, family changes, minority groups, war, health, aging, education, and population growth.

Prerequisite: Student must score into college-level English and reading on placement test.

TAX - ACCOUNTING

TAX 2000 - Income Tax (3 credits)

This course presents new tax laws, a comprehensive study of individual tax structure, and preparation of the individual return (1040). Offered Fall Semester only.

TAX 4001 - Federal Taxation (3 credits)

This course is a comprehensive introduction to the Federal Income Tax system. The primary emphasis is on tax laws pertaining to individual tax payers and the sole proprietorship business entity.

Prerequisite: ACG 3131 with a grade of C or higher.

TAX 4101 - Corporate Taxation (3 credits)

This course is a comprehensive study of taxation for corporations utilizing the Internal Revenue Code rules and regulations (with an introduction to partnerships).

Prerequisite: ACG 3131 with grade of "C" or higher.

THE - THEATRE

THE 1000 - Introduction to Theatre (Drama) (3 credits)

This course reviews the form, purpose, history and development of the theatre arts through the survey and study of representative dramatic literature. Performance is not required. Students demonstrate college-level writing skills through multiple assignments.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

Prerequisite: Student must score into college-level English and reading on placement test.

THE 2300 - Survey of Dramatic Literature (3 credits)

This course provides a historical overview of the theatre art from classic Greek to Modern Realism by presenting and discussing selected plays from significant theatrical genres. The students demonstrate college-level writing skills through multiple writing assignments.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

Prerequisite: Student must score into college-level English and reading on placement test.

TPA - THEATRE

TPA 1200 - Beginning Stagecraft (3 credits)

This course examines the basic materials, tools, procedures, and equipment used in the construction of stage scenery and properties. The students participate in the backstage technical crews of the IRSC Performing & Visual Arts mainstage productions.

TPA 1205 - Drafting for the Stage (3 credits)

This course demonstrates the fundamentals of drafting for theatre arts applications.

TPA 1211 - Stagecraft II (3 credits)

This course presents advanced scenery construction techniques, theatre rigging, properties construction, tool utilization techniques, safe work practices for stage and shop equipment. Students serve in leadership capacities in production activities.

Prerequisite: TPA 1200.

TPA 1232 - Theatre Costuming I (3 credits)

This course demonstrates basic theatrical costume construction skills and techniques.

TPA 1248 - Stage Make-up (3 credits)

This course explains the fundamental theory, application techniques, tools, and materials for theatrical production make-up.

TPA 1930 - Directing Seminar (1 credit)

This course provides an overview of the theater directing process. The seminar outlines the director's relationship with the production staff and performers and discusses the use and function of the theater components.

TPA 2220 - Introduction to Stage Lighting (3 credits)

This course provides the fundamentals of lighting for the stage, basic introduction to electricity, stage lighting instrumentation and control, and production procedures and methods.

TPA 2221 - Advanced Stage Lighting (3 credits)

This course provides advanced knowledge in stage lighting, instrumentation for the stage, and color theory.

Prerequisite: TPA 2220.

TPA 2252 - Introduction to Audio Visual Technology (3 credits)

This course demonstrates the functions, set-up, operation, and maintenance of basic audiovisual equipment for the entertainment industry. Basic equipment includes video and 35 mm slide projectors, 16mm projectors, monitors, computers, and projection screens.

TPA 2260 - Sound for the Stage (3 credits)

This course explains the theory and practice of sound reinforcement and recording for the entertainment industry.

TPA 2282 - Theatre Equipment Maintenance (2 credits)

This course provides a systematic approach to the maintenance and trouble-shooting of theatre sound, scenery shop, rigging, and lighting equipment.

Prerequisite: TPA 1200, TPA 2220, TPA 2260.

TPA 2290 - Technical Theatre (1 credit)

This course provides practice in the skills needed in stagecraft stage lighting, sound, scene design and set construction. Students participate in the technical theatre process for the Performing & Visual Arts season production.

TPP - THEATRE

TPP 1110 - Acting (3 credits)

This course examines fundamental acting principles and techniques. Students perform short scenes and improvisation exercises in class and demonstrate college-level writing skills through multiple assignments.

Prerequisite: Student must score into college-level English and reading on placement test.

TPP 1190 - Rehearsal and Performance Lab (1 credit)

This course provides for practical application of performance techniques including production of scenes and complete plays.

TPP 1533 - Stage Combat (1 credit)

Students learn the basic principles of unarmed and armed stage combat. Students analyze choreographed unarmed and armed stage fights and create simple to advanced stage fights. Students learn and practice safe stage fighting techniques.

Prerequisite: TPP 1110.

TRA - COMMERCIAL DRIVER TRAINING

TRA 0081 - Commercial Vehicle Driving (N) (160 hours)

This course reviews the broad transferable skills needed for the commercial vehicle driving industry. The course content includes loading and unloading cargo, reporting delays or accidents on the road, verifying load against shipping papers and keeping records. Instruction in human relations, leadership, communication, and employability skills, and safe, efficient work practices is also included.

TRA 0083 - On-the-Job Training Commercial Vehicle Driving (N) (160 hours)

This course reviews the broad transferable skills needed for the commercial vehicle driving industry. The instruction includes 1,000 miles of road driving under the supervision

of a qualified commercial vehicle driver prior to completion of the program. Road driving activities include experience on two-lane, four-lane, interstate, and city streets and highways. Twenty percent or more of the experience occurs at night on both wet and dry roads. Instruction in driving bob-tail, empty and loaded vehicles are given.

TSL - EDUCATION

TSL 3080 - ESOL Issues: Principles and Practices (3 credits)

This course provides an introduction to the issues, principles, and practices of teaching English to speakers of other languages. It prepares classroom teachers to provide linguistically and culturally appropriate instruction and assessment for Limited English Proficient (LEP) students. It provides the foundations of knowledge necessary to meet the instructional needs of linguistically and culturally diverse students.

TSL 3251 - Applied Linguistics (3 credits)

This course provides an introduction to the analysis and classroom application of Linguistic theories in the field of second language acquisition for LEP (Limited English Proficient) students.

This course is required for the Florida Add-On ESOL Endorsement.

TSL 3520C - Cultural Dimensions of ESOL (3 credits)

This course provides an overview of topics related to cross-cultural communication by introducing students to the cultures of different U.S. language groups with a focus on language groups found in Florida. Students develop an awareness and understanding of the complexities surrounding language, culture, and learning in order to meet the needs of linguistically and culturally diverse learners.

This course is required for the Florida Add-On ESOL Endorsement.

TSL 4081 - Second Language Acquisition and Cross-Cultural Communication (3 credits)

This course provides an introduction to the analysis and classroom application of linguistic theories in the field of second language acquisition for LEP (Limited English Proficient) students. This course also provides an overview of topics related to cross-cultural communication by introducing students to the cultures of different groups found in Florida. Students develop awareness and understanding of the complexities surrounding language, culture, and learning in order to meet the needs of linguistically and culturally diverse learners.

Prerequisite: EDF 3214.

TSL 4100 - ESOL Methods, Curriculum and Assessment (3 credits)

This course introduces knowledge and application of TESOL theories, principles, and current research in the selecting, analysis, planning, design, using and adapting, and evaluating curriculum, instructional methods, techniques and materials, and assessment instruments appropriate for LEP (Limited English Proficient) students. This course is required for the Florida Add-On ESOL Endorsement. Minimum of 20 hours of structured field experience required.

TSL 4140C - TESOL Curriculum and Materials (3 credits)

This course introduces the knowledge and application of TESOL theories, principles and current research in the analysis, planning, design and evaluation of curriculum and materials appropriate for LEP (Limited English Proficient) students.

This course is required for the Florida Add-On ESOL Endorsement.

TSL 4340 - TESOL Methods (3 credits)

This course introduces knowledge and application of Teaching English as a Second Language (TESOL) theories, principles, and current research in selecting, analyzing, planning, designing, using, adapting, and evaluating curriculum. In addition, instructional methods, techniques, materials, and assessment instruments appropriate for Limited English Proficient (LEP) students are addressed.

This course is designed for current in-service teachers seeking certification points, and/or teachers moving from temporary to professional certification, and Educator Preparation Institute (EPI) students.

Prerequisite: TSL 3251, TSL 4140C.

TSL 4441C - ESOL Testing and Evaluation (1 credit)

This course introduces the knowledge and application of TESOL theories, principles, and current research in the selection, development, and adaptation of assessment instruments/evaluation materials appropriate for LEP (Limited English Proficient) students, including the study of standardized ESOL instruments.

This course is required for the Florida Add-On ESOL Endorsement.

WOH - HISTORY

WOH 2012 - World History to 1500 (3 credits)

This course reviews the fundamentals of World History up to 1500. It examines the rise of civilizations and discusses the major events that helped shape both East and West. It is taught in a comparative manner so that students can better understand the similarities and differences between the East and the West as well as the impact that the East and the West had upon one another.

Prerequisite: Student must score into college-level English and reading on placement test.

WOH 2022 - World History Since 1500 (3 credits)

This course reviews the fundamentals of World History after 1500. It examines major events in both East and West so that students can better understand the development of world politics, economics and cultural systems. The course is taught in a comparative manner so that students can realize the impact that both East and West have had upon one another.

Prerequisite: Student must score into college-level English and reading on placement test.

WOH 2040 - World in the 20th Century (3 credits)

This course reviews the major political, economic, diplomatic, military, social and intellectual developments and events of the 20th century. It is a chronological approach to several major themes which comprise the history of the modern world: the decline of European hegemony in the course of two major wars and a world depression, a half-century of superpower hostility following the outbreak of the cold war, the transformation of global politics in light of the collapse of the U.S.S.R. and the end of the Cold War, and the rise of Islamic fundamentalism with terrorism patterns.

Prerequisite: Student must test into college-level reading on placement test.

ZOO - BIOLOGY

ZOO 3733 - Human Anatomy (3 credits)

A systematic approach is used to study the structural and functional anatomy of the human body. Tissues, organs, and internal processes of systems (i.e. circulatory, excretory, and reproductive) are examined. Normal and abnormal functioning of body processes and associated disorders and diseases are discussed.

Prerequisite: CHM 2210, CHM 2210L, BSC 2011, BSC 2011L, all with "C" or higher.

ZOO 3733L - Human Anatomy Laboratory (1 credit)

This is the lab component for Human Anatomy lecture ZOO 3733 providing visual anatomical identification, including dissections and microscopic slides. Lab topics include histology, integument, skeletal, muscular, endocrine, nervous, blood/cardiovascular, respiratory, digestive, urinary and reproductive systems.

Prerequisite: CHM 2210, CHM 2210L, BSC 2011, BSC 2011L, all with "C" or higher.

COLLEGE ORGANIZATION - ADMINISTRATION

Edwin R. Massey, President
B.S., Millsaps College
M.S., University of Southern Mississippi
Ph.D., University of Southern Mississippi

Christina T. Hart, Vice President of Enrollment & Student Services
A.A., Indian River Community College
B.S., Florida State University
M.Ed., Florida Atlantic University
Ph.D., Florida Atlantic University

Heather J. Belmont, Vice President of Academic Affairs
B.A., Ithaca College
Ph.D., University of Miami

Barry A. Keim, Vice President of Financial Services, CFO
A.A., Orlando Jr. College
B.A., Muskingum College
M.S., Rollins College

Paul R. O' Brien, Vice President of Institutional Technology, CIO
B.Ed., Queens University, Belfast
M.S., Barry University

Frank L. Watkins, Jr., Vice President of Student Affairs
A.S., Gulf Coast Community College
A.A., Gulf Coast Community College
B.S., Florida State University
M.Ed., Florida Atlantic University

Pamela Blake Welmon, Vice President of Applied Science & Technology
B.S., Penn State University
M.Ed., Penn State University
D.Ed., Penn State University

Angela Browning, Associate Vice President of Institutional Effectiveness
B.A., Presbyterian College
M.A., University of South Carolina-Columbia
Ph.D., University of Florida

Adriene B. Jefferson, Administrative Director of Northwest Center, Equity Officer/Title IX Coordinator
B.S., Florida Agricultural & Mechanical University
M.Ed., Florida Agricultural & Mechanical University

Anna Balaka Hubbard, A.R.N.P., C.N.E., Dean of Health Science
B.S.N., Penn State University
M.S.N., Florida Atlantic University
Ed.D., Florida Atlantic University
D.N.P., University of South Alabama

Donna D. Rivett, Dean of Industrial Education
B.A., Florida Atlantic University
M.Ed., Florida Atlantic University

Harvey E. Arnold, Provost - Saint Lucie County
A.A., Indian River Community College
B.A., University of West Florida
M.A., University of West Florida
Ph.D., Florida State University

Russell P. Brown, Provost - Okeechobee County
B.A., University of Central Florida
M.Ed., University of North Florida

Elizabeth A. Gaskin, Provost - Martin County
B.A., University of Kentucky
M.A., Eastern Kentucky University

Charles R. Lunceford II, Provost - Indian River County
B.M.E., University of Florida
M.M.E., Louisiana State University and A&M College

Ann L. Decker, Executive Director of the IRSC Foundation
A.A., Indian River Community College
B.S., Barry University
M.P.A., Nova Southeastern University

Evan A. Berry, Associate Dean of Public Service Education
B.S., University of Florida
M.B.A., University of Florida

Meredith B. Coughlin, Associate Dean of Enterprise Systems
B.S., University of Central Florida
M.A., University of Central Florida
Ed.D., University of Florida

Edith R. Pacacha, Associate Dean of Finance
M.B.A., Fordham University

Eileen Storck, Associate Dean Enrollment & Student Services
A.A., Indian River Community College
B.S., Palm Beach Atlantic University
M.A., University of South Florida

Kelly N. Amatucci, Assistant Dean of School of Education
B.S., Palm Beach Atlantic University
M.S., Nova Southeastern University
Ed.D., Nova Southeastern University

Kevin E. Cooper, Assistant Dean of Advanced Technology
B.S., Georgia Institute of Technology
B.A.S., Georgia Institute of Technology
M.S.E., Arizona State University
Ph.D., Arizona State University

Sean C. Donahue, P.E., Assistant Dean of Facilities & Sustainability
B.Che.E., Auburn University

M.Ed., Florida Atlantic University

Anthony B. Dribben, Assistant Dean of Mathematics and Natural Sciences
B.S., Mississippi College
Ph.D., University of Florida

Patricia A. Gagliano, R.N., Assistant Dean of Nursing
A.A., Sante Fe Community College
B.S.N., Barry University
M.S.N., Barry University
Ph.D., Barry University

Prashanth Pilly, Assistant Dean of Business Technology
M.M., University of Phoenix
Ph.D. Northcentral University

Scott Stein, Assistant Dean of Liberal Arts
B.A., University of Miami
M.S., Rosalinda Franklin University
Psy.D., Union Institute and University

Kendall E. St. Hilaire, Assistant Dean of IRSC Virtual Campus
B.A., Florida State University
M.S., Florida State University
Ed.D., University of Florida

Melissa P. Whigham, Assistant Dean of Human Resources, PHR
A.A., Indian River Community College
B.A., Florida Atlantic University
M.S., Nova Southeastern University

Scott H. Kimmelman, Athletic Director
B.S., University of Tennessee
M.Ed., Florida Atlantic University

Akos Delneky, Administrative Director of Library Services
B.A., Stetson University
M.L.I.S., University of Pittsburgh
Ed.D., Nova Southeastern University

Andrew K. Treadwell, Administrative Director of Legislative & Executive Communications
B.A., University of Florida
M.Ed., Florida Atlantic University

Debra L. Kohuth, Executive Director of Clark Advanced Learning Center
M.S., University of Scranton

Professional Staff

Leslie D. Hayes, Director of Advising Services
B.A., Florida Atlantic University
M.Ed., Florida Atlantic University

Suzanne Y. Seldes, Director of Communications and Brand Strategy
B.A., State University of New York at Stony Brook

Leonard C. Williams, Director of Career and Transfer Services
Ph.D., Capella University

Health Science Medical Directors

Donald B. Hoffman, Respiratory Care
B.S., Muhlenberg College
M.S., Yale University
Ph.D., Yale University
M.D., University of Miami

Michael Ferraro, Emergency Medical Services
B.A., St. Petersburg College
M.S., University of Connecticut
D.O., Nova Southeastern University

Instructional Department Chairs

Neila R. Bird, Academic Support Centers
B.A., Michigan State University
M.A., Michigan State University
Ph.D., Michigan State University

William H. Burklo, Applied Technologies
A.S., Northwestern College
B.A.S., Indian River State College

John A. Butler, School of Business
A.A., Palm Beach State College
B.S., Palm Beach Atlantic University
M.B.A., Saint Leo University

Jennifer Capers, School of Science
B.S., Central Michigan University
Ph.D., University of Southern Mississippi

Duane P. Chin Quee, Mathematics
M.S., Florida Institute of Technology
Ph.D., Florida Institute of Technology

Elliot D. Cohen, Humanities
B.A., Fairleigh Dickerson University
M.A., Brown University
Ph.D., Brown University

Gale S. Cohen, Human Services
B.A., Fairleigh Dickinson University
M.Ed., Florida Atlantic University
Ed.D., Nova Southeastern University

Armon A. Copeland, R.N., Practical Nursing/Patient Care Technician
A.S.N., Troy University
M.S.N., Chamberlain College of Nursing
D.N.P., Chamberlain College of Nursing

Patricia Corey-Souza, Health and Wellness
B.A, Western Illinois University
M.S., Capella University
Ph.D., Capella University

Bernice Cuscuna, Physical Therapist Assistant
M.S., The College of Staten Island

Steven Daniello, Assessment Services
B.S., Mount Mary University
M.S., Southeast Missouri State University

Richard L. Dewey, Jr., Criminal Justice
B.S., Park College
M.A., Chapman College

James D. Dinsch, Emergency Medical Services
B.S., Charter Oak College
M.S., Grand Canyon University

Marta G. Ferguson, Dental Hygiene
A.A., Brevard Community College
B.S., Medical College of Georgia
M.S., Nova Southeastern University
Ed.D., Nova Southeastern University

Donna O. Gorham, Office Administration
B.S., Florida State University

Moamer Hasanovic, Electronics Engineering Technology
M.S., Syracuse University
Ph.D., Syracuse University

James E. Howse, Accounting Technology
B.B.A., University of Florida
M.T., Florida Atlantic University

James J. Jeffers, Graphic Design Technology
M.A., New York University
M.F.A., Rutgers The State University

Michael P. Jones, Physical Sciences
B.S., Tuskegee Institute
M.S., Florida A&M University

Deborah L. Liskin, Cosmetology/Barbering
A.A., Indian River Community College
B.S., Palm Beach Atlantic College

Sarah M. Mallonee, Honors Program Coordinator
B.A., Tulane University of Louisiana
M.A., University of Florida
Ph.D, University of Florida

Rosemarie Mason, A.R.N.P., Nursing
A.S.N., Indian River State College
B.S.N., Florida Atlantic University
M.S.N., Florida Atlantic University

Samuel P. Mikhail, Social Sciences
B.S., University of Montreal
M.S., University of Montreal
Ph.D., McGillUniversity

Kim Milner, Gateway Mathematics
B.S., Troy University
M.S., Walden University
Ph.D., Old Dominion University

David V. Moberg, Performing & Visual Arts
B.A., Moorhead State University
M.F.A., University of Florida

Chrysanthos A. Panayiotou, Electronics Engineering Technology
F.T.C., City & Guilds of London Institute, England
H.N.D., Higher Technical Institute, Cyprus
M.S., University of Central Florida
Ed.D., Florida Atlantic University

Zulihana Pascual, Dental Assisting
A.A., Palm Beach State College
A.S., Palm Beach State College
B.S.D.H., St. Petersburg College
M.H.S., Nova Southeastern University

Katharine Piatcheck, Gateway English and English Composition
A.A., Palm Beach State College
B.S., Palm Beach Atlantic University
M.B.A., Saint Leo University

Tammy J. Powley, English/Communications/Modern Languages
A.A., Brevard Community College
B.A., University of Central Florida
M.A., University of Central Florida
Ph.D., University of Central Florida

Elizabeth A. Raulerson, Paralegal Studies/Legal Assisting
B.S., Auburn University
J.D., Cumberland School of Law-Samford University

Georgette Rosenfeld, R.R.T., Respiratory Care
A.S., Excelsior College
A.S., Miami Dade Community College
B.P.S., Barry University
M.Ed., University of Central Florida
Ph.D., Florida Atlantic University

Gary W. Shaver, Radiography
B.S., Fairmont State College
M.A., West Virginia University
Ed.D., Florida Atlantic University

Troy A. Shearer, School of Education/Student Success
A.A., Indian River State College
B.S., Indian River State College
M.Ed., University of Texas at Arlington

Donna J. Sizemore, Adult Education
A.A.S., Indian River Community College
A.S., Indian River Community College
A.A., Indian River Community College
B.S., University of Central Florida
M.Ed., Florida Atlantic University

Beverly C. Solesky, A.R.N.P., Nursing (BSN)
A.A., University of Florida
B.S.N., University of Florida
M.S.N., University of Florida

Ph.D., University of Florida

William L. Solomon, Human Environmental Science
A.G.S., Macomb Community College
B.B.A., Florida Atlantic University
M.A., University of South Florida

Veronica Tempone, Service Learning Program Coordinator
B.A., Auburn University
M.A.T., University of Southern Mississippi

Mia S. Tignor, Library Services
B.A., University of South Florida
M.A., University of South Florida

Michael G. Vogt, Medical Technologies
A.S., Florida Institute of Technology
A.S., Indian River State College
B.S., Barry University
M.Ed., Florida Atlantic University

Roderick J. Waller, Computer Information Technology
A.S., Aiken Technical College
A.A., Community College of the Air Force
B.S., Limestone College
M.A., Webster University

Alfred H. Williams, Fire Science
B.A., University of South Carolina
M.S., Grand Canyon University
D.B.A., Northcentral University

Robin Willoughby, Biological Sciences
B.S., Hillsdale College
B.S., Florida Institute of Technology
M.S., Florida Institute of Technology
Ph.D., Florida Institute of Technology

Robin A. Zide, School of Education
M.S., Nova Southeastern University
Ed.D., Nova Southeastern University

Counseling Faculty

Alexandra A. Anez
A.A., Indian River Community College
B.S., Florida State University
M.S., Amberton University

Alisa M. Brown
B.B.A., Florida Atlantic University
M.Ed., Trident University International

Silvia E. Bustamante
B.A., University of New Orleans
M.S., New Mexico State University

Crystal L. Chappell
B.A., University of South Florida
M.S., Amberton University

Heather Gutman
B.S., Binghamton University-SUNY
M.S., Binghamton University-SUNY

Sherise M. Hobson
B.A., State University of New York at Albany
M.S., The Sage Colleges

Ruby Jefferson
B.A., Warner Southern College
M.S., Barry University

Ashley N. McKenzie
B.A., Florida Atlantic University
M.Ed., University of South Florida

Janine Merriman
B.P.M., Florida Atlantic University
M.P.A., Nova Southeastern University

Anne C. Savastano
M.S. University of Utah
Ed.S., University of the Cumberlands
Ed.D., University of the Cumberlands

Leslie A. Simpson
A.A., Indian River Community College
B.A., Florida Atlantic University
M.S., Amberton University

Faculty

Heather Elizabeth Adams
B.S., University of Richmond
M.Ed., University of Florida
Ed.S., University of Florida
Ph.D., University of Florida

John G. Adams
B.S., University of Florida
M.B.A., Florida Atlantic University

James W. Agnew, M.D.
Ph.D., University of Oregon

Eva M. Allen
B.S.,Gardner-Webb University
M.A., Wake Forest University

Camila Alvarez
B.S.,University of Florida
M.A., Florida Atlantic University

Bodi O. Anderson
Ed.D., Northern Arizona University

Emlyn U. Anderson
B.S., University of Phoenix
M.H.A., University of Phoenix

Sharmin F. Anderson
B.S.N., State University of New York
M.S.N., Florida International University

Donna F. Arnold
A.A., Indian River Community College
B.S., Florida State University
M.B.A., Florida State University

Kendra W. Auberry
M.S., Indiana University East

Christopher A. Baechle
B.S., Florida Atlantic University
M.S., Florida Atlantic University
Ph.D., Florida Atlantic University

Angie L. Bailey
M.S., Albertus Magnus College
D.M.O.L., University of Phoenix

Suchismita Banerjee
M.S., Wright State University

Gertrude Baptiste-Plaza
M.S., Mercer College

Kyle A. Bartow
B.S., University of Miami
Ph.D., Florida Atlantic University

Toby R. Beeny
B.A., Missouri Baptist University
M.A., St. John's College
M.A., University of Missouri - St. Louis
Ph.D., University of Missouri - Columbia

Jon U. Bell
B.S., State University of New York at Plattsburgh
M.A., Teachers College-Columbia University

Molly E. Bottorff
A.A., Indian River Community College
B.A., Florida Atlantic University
M.Ed., Florida Atlantic University

Gail Boylan, R.N.
A.S.N., Excelsior University
B.S.N., South University
M.S.N., South University

Kate E. Bradford
B.A., Miami University
J.D., Stetson University College of Law

John Bray
B.S., Roger Williams University
M.A., Pace University

Thomas S. Brewer
M.A., Eastern Illinois University
Ph.D., University of Kentucky

Heather Brigance, A.R.N.P.
A.S., Indian River Community College
B.S., University of Florida
B.S.N., Kennesaw State University
M.S.N., University of Florida
D.N.P., University of Florida

Matthew L. Brooks
B.A., University of Northern Iowa
M.A., Kansas State University
Ph.D., University of South Florida

Nicholas H. Brown
B.S., Florida Agricultural and Mechanical University
M.B.A., Nova Southeastern University
D.B.A., Argosy University

Ellen L. Browning
B.S., Excelsior College
M.Ed., Old Dominion University
Ph.D., Old Dominion University

Donald W. Bryant
B.S., Massachusetts Institute of Technology
M.S., University of Central Florida
Ph.D., University of Central Florida

Julio Burgos
B.S., Interamerican University of Puerto Rico

M.A., Interamerican University of Puerto Rico

Kelly A. Caffery
M.A., SUNY-College at Buffalo
Ph.D., University of Southern Mississippi

Chad L. Calvert
B.S., Florida Atlantic University
M.S., Florida Atlantic University

Alexis M. Carlson
B.S., Boston University
M.A., University of South Florida

Ronald H. Carlson
B.S., Barry University
M.B.A., Barry University
D.B.A., Nova Southeastern University

Crystal Carlson-Myer
B.S., Middle Georgia State University
M.A., Georgia Southern University

John A. Carpenter
A.A., Valencia Community College
B.A., University of Central Florida
M.A., University of Central Florida
M.L.I.S., University of South Carolina
Ph.D., University of South Carolina

Michelle D. Carrigan
M.A., State University of New York at Albany
Ph.D., State University of New York at Albany

Megan M. Carroll
B.S., Florida State University
M.S., Florida State University

Georgiana L. Carvalho
M.S., University of Central Florida
Ph.D., University of Central Florida

Shirley A. Chandler
A.A., Indian River Community College
B.P.S., Barry University
M.S., Florida Institute of Technology

Rudy H. Cheung
Certificate, Indian River Community College
A.A.S., Indian River State College

Carl E. Clark
M.S., Nova Southeastern University
Ph.D., Florida Institute of Technology

Daphne Cooper
M.P.A., Clark Atlanta University
Ph.D., Clark Atlanta University

Patricia A. Corey-Souza, R.N.
R.N., Helene Fuld School of Nursing
B.A., Western Illinois University
M.S., Capella University
Ph.D., Capella University

Fontley R. Corrodus
B.S., Tuskegee University
M.Ed., Tuskegee University
M.A., Auburn University
Ed.S., Alabama State University
Ph.D., LaSalle University

Debra L. Crowell, A.R.N.P.
A.S.N., Palm Beach Community College
B.S.N., Barry University
M.S.N., Barry University
Ph.D., Capella University

Lanie N. Culligan
B.Ed., Troy University
M.S., Tarleton State University

Tom V. D'Elia
M.S., Youngstown State University
Ph.D., Bowling Green State University

Steven Daniello
A.A.S., Five Towns College
B.S., Mount Mary College
M.S., Southeast Missouri State College

Maria Salome E. Davis
B.S., College of the Holy Spirit
M.S., De La Salle University
D.B.A., University of Phoenix

Kris R. Demarais
A.S., Ocean County College
M.S., Nova Southeastern University

Fils Dieu-Conserve
M.S., Nova Southeastern University

Jennifer A. Doak, A.R.N.P.
A.A., University of Florida
B.S.N., Florida State University
M.S.N., Florida Atlantic University
D.N.P., University of Florida

John J. Donohue
B.A., Gettysburg College
Ph.D., Florida Atlantic University

Melissa S. Doud
M.S., Florida International University
Ph.D., Florida International University

Arnater M. Dowers
B.S., University of Southern Mississippi
M.P.H., Jackson State University

Anne L. Drabczyk
B.S., Central Michigan University
M.A., Central Michigan University
Ph.D., Walden University

Wendy L. Dwyer
B.S., Ithaca College

M.Ed., Concordia University

Patrick M. Dyer
B.S., University of Cincinnati
M.A., University of Cincinnati
Ph.D., University of Cincinnati

Larisa V. Eads
B.S., Chernivtsi State University
Ph.D., Russaian Academy of Sciences

Lisa M. Earnest
A.A., Eastern Florida State College
M.S., University of South Florida

Robert R. Farley
B.A., Villanova University
M.A., Georgetown University
M.A., University of Pennsylvania

Kornelia Fillmer
M.S., University of Florida

Bruce W. Fraser
B.A., University of California-Santa Cruz
M.A., Boston University
Ph.D., Boston University

John B. Freeman
B.A., University of Wisconsin-Madison
Ph.D., City University of New York

Kyle P. Freund
B.A., University of Florida
M.A., University of South Florida
Ph.D., McMaster University

Loretta D. Fry
A.A., Indian River Community College
A.A.S., Indian River Community College
B.A., Florida Atlantic University
M.A.T.L., University of Southern Mississippi

Barbara A. Fuller
B.A., South Carolina State University
M.A., Florida State University
Ph.D., Florida State University

Jessica L. Fulton
B.A.S., Indian River State College
M.H.S., Nova Southeastern University
D.H.Sc., Nova Southeastern University

Scott C. Fynboe
Ph.D., University of Southern Mississippi

Paul Wolfgang Ganieany
Diploma, Lincoln Park Academy
Certificate, Indian River State College

Pamela J. Giannone
A.S., Naugatuck Valley Community College
B.S., Everglades University

Randolph U. Gibson
A.A., University of Florida
B.S., University of Florida
M.F.A., Yale University

Jonathan D. Glover
Ph.D., University of Florida

Paul J. Godfrey
B.S.E., University of Central Florida
M.S.E., University of Central Florida

Sikita V. Goodrich
B.S.B.A., University of Florida
M.B.A., Clark Atlanta University

Glen R. Gramling
B.F.A., University of Central Florida
M.F.A., University of Central Florida

Rodney J. Grisham
B.S., United States Air Force Academy
M.A., University of Colorado
Ph.D., University of Colorado

Steven B. Hammer
B.A., Newman University
M.Ed., Wichita State University
Ph.D., Kent State University

Drake Harmon
A.A., Indian River State College
B.S., Florida Atlantic University
M.S., Florida Atlantic University
Ph.D., Florida Atlantic University

Teresa P. Hasenauer
B.S., Wake Forest University
M.A.T., Florida Atlantic University

Brenna Heffner
B.A., Vanderbilt University
M.A., Western Kentucky University
Ph.D., University of Louisiana at Lafayette

Walter E. Hines
B.A., West Virginia University
M.A., West Virginia University
M.F.A., University of Miami

Marvin E. Hobson
A.S., Farmingdale State College
B.A., State University of New York at Albany
M.S., State University of New York at Albany

Terri L. Holly
A.S., Indian River Community College
A.A., Indian River Community College
B.A., Warner Southern College
M.B.A., Florida Gulf Coast University

Paul A. Horton

B.S., California Polytechnic State University-San Luis Obispo
M.S., California Polytechnic State University-San Luis Obispo
Ph.D., University of California-Santa Cruz

Stephanie B. Hurst
A.A., Indian River State College
B.A.S., Indian River State College

Margaret Johnson, R.N.
Diploma, Holy Name Hospital School of Nursing
B.S.N., Dominican College of Blauvelt
M.S.N., Nova Southeastern University

Celucien L. Joseph
Ph.D., University of Texas at Dallas

Donna K. Jurenas
B.S., Illinois State University
M.Ed., University of Illinois

Mara Kallich
B.A., Stetson University
M.S., Bethune-Cookman University
M.A., Northern Arizona University

Laura C. Kauffmann
B.A., Mercer University
M.S., Nova Southeastern University
Ed.S., Nova Southeastern University

Clifford A. Kemp
B.A., Florida Atlantic University
M.S., Florida Atlantic University
M.Ed., Florida Atlantic University

Taylor Andrew Kilman
B.S., Mississippi College
M.S., Mississippi College
Ph.D., University of Southern Mississippi

Jared J. Kinggard
B.A., University of Tennessee-Knoxville
M.A., University of South Florida
Ph.D., University of South Florida

Michelle B. Kinggard
A.A., Pellissippi Community College
B.A., University of Tennessee-Knoxville
M.S., Nova Southeastern University

Steven L. Knapp
B.L.S., Barry University
M.A., Florida Atlantic University

Gary R. Koser
B.S., University of Wisconsin College
M.E., University of Florida

Christopher D. Krause
B.S., University of Delaware
Ph.D., Rutgers - Robert Wood Johnson Medical School

Lynn A. Krieger
A.A., Indian River Community College
B.S., Florida Atlantic University
M.S., Nova Southeastern University

Kim G. Laffont
B.A., University of California - Santa Barbara
M.A., National University

Tiffany E. Lewis
A.A., Indian River Community College
B.S., Florida A&M University
M.S., Nova Southeastern University

Rita C. Lindsay
B.S., State University of New York at Oneonta
M.S., Long Island University
Ph.D., Florida Institute of Technology

Robert K. Lowery
B.S., University of Miami
M.S., Florida International University
Ph.D., Florida International University

Trisha M. Maitland
M.B.A., Strayer University
Ed.D., Nova Southeastern University

Sarah M. Mallonee
B.A., Tulane University
M.A., University of Florida
Ph.D., University of Florida

Roseann Maresca, R.N.
A.S.N., Indian River Community College
B.S.N., Western Governors University
M.S.N., Western Governors University

James T. Mason
A.S., Florida Institute of Technology
A.A., Indian River Community College
B.S.B.A., University of Central Florida
M.A., University of Central Florida

Kimberlie Massnick
A.A., Indian River Community College
B.A., Florida Institute of Technology
M.S., Nova Southeastern University
Ph.D., Nova Southeastern University

Christopher S. McChesney
B.A., University of Colorado at Boulder
M.B.A., University of Colorado at Boulder
Ph.D., Northcentral University

Christine P. McDonald
B.A., Westfield State College
M.A., Western New England College

Zella L. McDuffie-Smith
B.S., Florida A&M University
M.Ed., Florida A&M University

Heather A. Michaels
B.S., University of New Haven
Ph.D., Florida State University

Deborah A. Midkiff
A.A.S., Indian River Community College
B.B.A., University of Central Florida

Deanna G. Miller
A.A., Palm Beach Community College
B.S., Florida State University
M.Ed., University of West Florida

Kim S. Miller, A.R.N.P.
A.S., Eastern Florida State College
A.A., Eastern Florida State College
B.S.N., University of Florida
M.S.N., University of Florida

Karen A. Mills
B.S., Hobart William Smith College
M.S.T., Florida Atlantic University
M.B.A., State University of New York at Albany
Ed.D., Nova Southeastern University

Monique Moleon-Mathews
B.A., University of Mississippi
M.A., University of Mississippi
Ph.D., University of Mississippi

Diane E. Morgan
M.A., University of Maryland-University College

Gloria Morrissey
M.Ed., Middle Tennessee State University

Lisa A. Mosing
B.A., Saint Olaf College
M.S., California State University
D.H.Sc., Nova Southeastern University

Karen D. Nearing
B.A., University of Georgia
M.A.T., Emory University

Angeleen M. Neely-Sardon
B.A., University of Florida
B.S., University of Florida
M.S., Florida State University

Margaret Ruth Neese, R.N.
A.S., Armstrong State University
B.S.N., University of North Florida
M.S.N., University of Hartford
Ph.D., Barry University

Christine Neubert
A.S., Indian River State College
B.S., The College of St. Scholastica
M.S., The College of St. Scholastica

Karen Ng
B.S., University of Guyana
M.S., University of Southern Mississippi
Ph.D., University of Southern Mississippi

Eng L. Ngov
A.A., State College of Florida-Manatee/Sarasota
B.S., University of Florida
M.S., Nova Southeastern University

Steven P. Nicholson
A.S., Indian River State College
A.A., Indian River State College
B.S., Indian River State College
M.S., University of Central Florida

Jennifer Hubers Norton, R.N.
B.A., Indian River State College
M.S.N., Florida Atlantic University

Ogugua N. Onyejekwe
M.S., Florida Institute of Technology
Ph.D., Florida Institute of Technology

Laura Oramas
B.A., Florida International University
M.S., Florida International University
Ph.D., Florida International University

Joseph T. Palencik
B.B.A., Kent State University
M.A., Kent State University
Ph.D., State University of New York at Buffalo

Linda T. Parry, R.N.
B.S.N., City College of New York
M.S.N., Nova Southeastern University

Cathleen J. Paton, R.N.
A.S.N., Indian River Community College
M.S.N., Florida Atlantic University

Asoka R. Peiris
B.S., University of Columbo
M.S., University of Central Florida

Mary S. Pelletier
A.S., Miami Dade Community College
B.P.S., Barry University
M.Ed., Florida Atlantic University

Jocelyn Perez
B.F.A., University of South Florida
M.F.A., Florida State University

Katharine B. Piatchek
B.A., Washington University
M.A., Georgetown University
M.A., Saint Louis University
Ph.D., Saint Louis University

Michael C. Platt
B.S., Methodist College
M.P.A., Troy State University

Patchara Pongam

B.S., Kasetsart University
M.S., University of Wisconsin
Ph.D., University of Wisconsin

Walter W. Posten, Jr.
A.A.S., Indian River Community College

Meghan D. Probstfield
B.A., University of Central Florida
M.A., University of Central Florida
Ph.D., Oklahoma State University

Oubideh Ramadan
M.D., Medical University of the Americas

Hiram H. Raulerson
B.A., Auburn University
M.A., Florida State University

Larisa V. Ray
B.S., Nizhny Novgorod
M.S., Nizhny Novgorod
Ph.D., Nizhny Novgorod

Emily Renschler
B.A., Ball State University
M.A., Ball State University

Bryan T. Reuther
M.S., Nova Southeastern University
Psy.D., Nova Southeastern University

James M. Reynolds
B.S., University of Central Florida
Ph.D., University of Central Florida

Herbert P. Ricardo
B.L.S., Barry University
M.B.A., Nova Southeastern University
Ph.D., Capella University

Daniel L. Richardson
B.A., Florida Atlantic University
M.S.T., Florida Atlantic University

Dale E. Rieth, Jr.
B.M., Indiana University
M.M., Florida State University
D.M.A., Conservatory of Music, University of Cincinnati

Joan O. Rivera
M.S., Capella University

Nikia L. Robinson
A.A., Florida A&M University
B.B.A., Florida Atlantic University
M.B.A., Ashford University
Ph.D., Northcentral University

Jodi M. Robson
B.A., Pennsylvania State University
M.Ed., Universidad Del Turabo
Ed.D., Florida Atlantic University

Ann P. Roccon
B.D., University of Florida
M.S., Florida State University
Ed.D., Florida State University

Roger E. Rosenthal
B.A., Washington University
M.S., University of South Carolina

Gerald W. Roy
M.A.T., Miami University

Peggy A. Russell
A.A., Edison College
B.S., University of Florida
M.A., Boston College
Ph.D., Florida State University

Lara Santoro, A.R.N.P.
A.A., St. Petersburg College
B.S.N., Indian River State College

Cristobal M. Sartori De Smith
Ph.D., University of Nebraska-Lincoln

Michael D. Schramm
B.S., Muskingum College
M.S., University of Central Florida

Alexander O. Shelby
Ph.D., Florida State University

Brian E. Siegle
B.A., University of North Carolina
M.A., Western Carolina University

Donald L. Skinner
A.A., Indian River Community College
B.A., University of Florida
M.A., University of Florida

Brian R. Skirvin-Leclair, A.R.N.P., R.N.
A.S.N., Quinsigamond Community College
B.S., Fitchburg State College
B.S.N., Fitchburg State College
M.S.N., Simmons College
D.N.P., Regis College

Aleksandra J. Smigelski
B.S., Florida State University
M.S., Florida Atlantic University

Cynthia A. Smith
A.S., Indian River Community College
A.A., Indian River Community College
B.S., Palm Beach Atlantic College
M.Ed., Florida Gulf Coast University

Wendy L. Smith
B.H.S., University of Florida
D.P.T., University of St. Augustine

Stephen Smith
B.S., Florida Atlantic University

M.S., Freie Universitat Berlin

Keara L. Sodano
B.A., University of North Carolina
M.Ed., Florida Atlantic University
Ph.D., Florida Atlantic University

John K. Southall
B.S., Florida A&M University
M.M.E., Florida State University
Ph.D., Florida State University

Tracy Stant
B.S., Florida International University
M.S., University of Central Florida

Leslie A. Sterrett
B.S., University of Central Florida
M.Ed., University of Central Florida

Michael H. Stiles
B.S., Indiana State University

Shanna M. Stokes, A.P.R.N.
A.S.N., Indian River State College
B.S.N., Indian River State College
M.S.N., Florida Atlantic University

Frederick Strale
B.A., Oakland University
Ph.D., Wayne State University

Timothy R. Stroth
A.A., Century College
B.S., University of Wisconsin - River Falls
M.S., University of North Dakota
M.S., University of North Dakota

William A. Tyler, III
B.S., University of Central Florida
M.S., University of South Alabama
Ph.D., University of Hawaii

Gary A. Uhazie
B.S., Michigan State University
M.L.S., Eastern Michigan University

April D. Van Camp
A.A., Indian River Community College
B.A., Palm Beach Atlantic College
M.A., University of Central Florida
Ph.D., University of Central Florida

Alexander W. Van Ovost
B.S., Catholic University, Nijmegen, Netherlands
M.S., Catholic University, Nijmegen, Netherlands
D.D.S., Catholic University, Nijmegen, Netherlands

DeVonica E. Vaught
A.S., Indian River Community College
B.A., College of Saint Scholastica
M.S., Dakota State University

Mark A. Wade
B.S., Kansas State University
M.S., Kansas State University
Ph.D., University of Nebraska- Lincoln

Dean A. Wagstaffe
B.A., Florida Atlantic University
M.A., Florida International University
Ph.D., Florida International University

Robert M. Walsh
A.A.S., Erie Community College
B.S., State University of New York at Brockport
M.S., Capella University

Linda S. Waugaman
B.F.A., Sam Houston State University
M.F.A., Texas Technological University

Marilyn J. Wells
B.A., University of South Florida
M.A., University of South Florida

John E. Wharton
M.S., University of Florida
Ph.D., University of Florida

Sara R. Whitacre
A.A., Indian River Community College
B.S., Florida State University
M.Ed., Florida Atlantic University

Teena-Louise J. White, A.R.N.P.
A.S.N., Indian River Community College
B.S.N., Barry University
M.S.N., Barry University
D.N.P., University of Florida

Deborah A. Whiting
B.S., Saint Norbert College
M.A., University of Central Florida

Helen Wiersma-Koch
Ph.D., Stanford University

Daniel C. Wigley
A.A., St. Petersburg College
B.A., University of South Florida
M.F.A., University of South Florida
Ph.D., University of South Florida

Douglas J. Wilberscheid
B.S., University of Wisconsin
M.S., Florida State University

Sophia L. Wilberscheid
A.S., Indian River Community College
A.A., Indian River Community College
B.S., University of Central Florida
M.S., Florida Institute of Technology

Brett A. Williams
B.A., Valdosta State University

M.L.I.S., Valdosta State University

Katherine Williams
B.A., West Virginia University
M.A., University of South Florida
M.S.E., Purdue University

Racquida E. Williams
B.A., University of Tampa
M.Ed., American Intercontinental University
Ed.D., Nova Southeastern University

Jeff A. Wiltzius
A.A., Seminole Community College
B.S., University of Central Florida
M.A., University of Central Florida

Susan M. Wise, R.N.
B.A., University of Miami
B.S.N., Barry University
M.B.A., Barry University
M.S.N., Barry University
Ph.D., University of South Florida

Wendy Wisniewski
B.S.N., Indian River State College

Brian K. Woodrow
A.A.S., Indian River State College

Janice Woodruff
B.A., Rollins College
M.S.Ed., Nova Southeastern University

Sarah A. Wyatt
B.A., Virginia Tech
B.S., Virginia Tech
M.S., Virginia Tech
Ph.D., Virginia Tech

Keesha J. Wynn, R.N.
B.S.N., University of Florida
M.S.N., Walden University

Cressa L. Zajac
M.Ed., Anna Maria College

Elizabeth Zeiss
A.A., Broward Community College
B.S., Florida International University
M.S., Nova Southeastern University

Kimberly D. Zgonc
M.A., University of Central Florida
Ph.D., University of Central Florida

Quan Zheng
M.S., Southern Illinois University
Ph.D., University of Georgia

Dean M. Zirwas
B.S., Western Illinois University
M.Ed., University of Central Florida

Clark Advanced Learning Center Faculty

Jennifer N. Bartow
B.S., University of Tampa
M.S., Florida Atlantic University

Barry N. Bicksler
B.Ed., Shippensburg University of Pennsylvania
M.A.T., University of Montana

Juan D. Escandon
M.A., Mississippi State University
M.A., Southern New Hampshire University

Sean Fears
M.Eng., Rensselaer Polytechnic Institute

Alexandria Gribble
A.A., Indian River State College
B.A., Florida Atlantic University
M.F.A., Academy of Art University
M.F.A., Digital Media Arts College

Anna C. Hutcheson
A.A., Indian River Community College
B.A., Florida Atlantic University
M.A., Florida Atlantic University

Tiffany L. Jones
B.A., University of Florida
M.Ed., University of Florida
Ed.S., University of Florida

Walter H. Judd
B.A., University of Central Florida
M.A., University of Florida

Sunshine Mercado
A.A., Indian River Community College
B.S., University of Florida
M.S., University of West Florida

District Board Of Trustees Emeriti

Peggy W. Berg, St. Lucie County

*Mrs. T.R. “Vee” Chambers, Martin County

Harriett K. Crago, Indian River County

*Standish L. Crews, Indian River County

*Ben F. Dixon, Okeechobee County

*Ira M. McAlpin, Jr., St. Lucie County

Linda T. Syfrett, Okeechobee County

**Deceased*

Foundation Board Of Directors Emeriti

*Alto “Bud” Adams, Jr., St. Lucie County

*Edwin Arnowitt, Martin County

H. Allen Baldree, Indian River County

*Mrs. T.R. “Vee” Chambers, Martin County

José L. Conrado, Indian River County

*Standish L. Crews, Indian River County

*Ira M. McAlpin, Jr., St. Lucie County

*Strelsa H. Schreiber, St. Lucie County

Frank "Sonny" Williamson, Jr., Okeechobee County

*Clare R. Wolf, Martin County

**Deceased*

President Emeritus

*Herman A. Heise
B.A., Thiel College
M.A., Georgetown University
Ph.D., Georgetown University
L.H.D., Florida Atlantic University

**Deceased*

Vice Presidents Emeriti

David L. Anderson
A.A., Lincoln Junior College
B.A., Florida Atlantic University
B.S., Florida A&M University
M.Ed., Florida Atlantic University
Ed.D., Florida Atlantic University

Henri Sue Bynum
B.A., University of Southern Mississippi
M.Ed., University of Southern Mississippi
Ph.D., University of Southern Mississippi

Thomas C. Deal
B.S., Appalachian State Teachers College
M.A., Appalachian State Teachers College
Ed.D., Florida Atlantic University

José L. Farinos
B.Arch., University of Miami
M.U.R.P., University of Miami

Raymond Isenburg
B.S., University of Tennessee
M.S., University of Tennessee
Ed.D., University of Tennessee

Katherine M. Johnson
A.A., Florida Junior College
B.A., University of West Florida
M.Ed., University of Montevallo
Ed.S., Florida Atlantic University
Ed.D., Florida Atlantic University

Barry A. Keim
A.A., Orlando Junior College
B.A., Muskingum College
M.S., Rollins College

Mary G. Locke
A.A., Indian River Community College
B.A., Florida Atlantic University
M.P.A., Florida Atlantic University
Ed.S., Florida Atlantic University
Ph.D., Florida Atlantic University

Charles R. Lunceford
B.M., Western Kentucky State University
M.Ed., University of Florida
Ed.D., Florida Atlantic University

S. Jack Maxwell
B.A., University of South Florida
M.A., University of South Florida
Ph.D., University of Florida

John W. Muir
A.A., St. Petersburg Junior College
B.A., University of Florida
M.A.T., University of Florida
Ph.D., University of Georgia

Associate Vice President Emeriti

Jimmie Anne Haisley
B.S., Florida State University
M.S., Florida State University

Robert W. Moses
B.S., Maryville College
M.S., University of Tennessee

Deans Emeriti

Jane P. Cebelak, R.N.
B.S., Michigan State University
M.S., University of Michigan

*Leroy C. Floyd, Sr.
B.A., Florida A&M University

M.A., Florida A&M University

Karl V. Guettler
A.A., Indian River Community College
B.A., University of South Florida
M.B.A., Florida Institute of Technology

Andre Hawkins
B.A.,University of Southern California
M.Ed., Florida Atlantic University
Ed.S., Florida Atlantic University

Linda W. Hays
A.A., Indian River Community College
B.S., Florida State University
M.Ed., Florida Atlantic University

*Gerald M. Jenkins
B.S., Mexico City College
M.A., Texas Christian University
Ph.D., University of Hawaii

*Wendell Martin
B.S., Fort Valley State College
M.S., Fort Valley State College

*Burgess A. Meadows
M.Ed., University of Maryland

Glen W. Power
B.S., Western Illinois University
M.S., University of South Carolina

Dorothy L. Vandegrift
B.A., Florida Atlantic University
M.Ed., Florida Atlantic University

**Deceased*

Provosts Emeriti

Patricia L. Alan
B.S., Youngstown State University
M.Ed., Florida Atlantic University

Lois W. Gordy
A.A., Indian River Community College
B.S., Florida State University
M.Ed., Florida Atlantic University

*Kay Mullins
B.A., Concord College
M.A., Florida Atlantic University

G. Sam Smith
A.A., Palm Beach Junior College
B.S., Florida State University
M.Ed., Florida Atlantic University
Ed.S., Florida Atlantic University

**Deceased*

Director Emeritus

*Elmer M. Stapleton
B.S., TriState College

**Deceased*

Professors Emeriti

Charles R. Croghan, Jr.
B.A., College of Wooster
M.A., New York University
M.A.Th., Union Theological Seminary
Ed.D., Columbia University and Union Theological Seminary

Vernon H. Floyd
B.S., Florida A&M University
M.S., Indiana University

Jane B. Howard
B.S., Murray State University
M.A., Murray State University

*Helen Keller
B.A., Georgia State College for Women
M.A., University of Georgia

*Louis L. Maser
B.M.A., University of Kansas
M.M.E., University of Kansas

*Elizabeth E. Mayer
B.A., University of Tennessee - Knoxville
M.A., California State University of Los Angeles
Ed.D., Florida Atlantic University

Francenia T. Mimms
A.A., Indian River Community College
B.A., Florida Atlantic University
M.S., Nova Southeastern University

*Angelita Molnar
B.A., University of Puerto Rico
M.A., Columbia University

*Margaret Paige
B.S., Bethune-Cookman University
M.S.Ed., Indiana University

Jimmie B. Vandegrift

B.A., University of Florida
M.R.C., University of Florida
M.P.A., Georgia State University

W. Frank Ward
B.S., Iowa State University
M.A., University of Illinois
Ph.D., Florida State University

Peter Webb
M.A., University of Memphis

*Anne Wilder
B.A., Mt. Holyoke College

*Ada Coats Williams
B.A., Florida Southern University
M.Ed., Florida Atlantic University

Reginald M. Woodall
B.A., University of Alabama
M.A., University of Alabama

Judith J. Wright
B.S., East Carolina University
M.A., East Carolina University
Ph.D., Georgia State University

**Deceased*

Medical Director Emeritus

*Hampton L. Schofield, Jr.
B.S., Rollins College
M.D., Medical University of South Carolina

**Deceased*

Advisory Committees 2018-2019

ACCOUNTING

AGRICULTURE PRODUCTION TECHNOLOGY

AIR CONDITIONING

AUTOMOTIVE TECHNOLOGY

BUSINESS ADMINISTRATION & MANAGEMENT

CHILD DEVELOPMENT & EDUCATION

COMPUTER SCIENCE

COSMETOLOGY

CRIMINAL JUSTICE

CULINARY INSTITUTE

DENTAL ASSISTING

DENTAL HYGIENE

DENTAL LABORATORY TECHNOLOGY

ELECTRONICS ENGINEERING TECHNOLOGY

EMERGENCY MEDICAL SERVICES

FARMWORKER JOBS & EDUCATION

FIRE SCIENCE

GOLF COURSE OPERATIONS

GRAPHIC DESIGN TECHNOLOGY

HEALTH INFORMATION MANAGEMENT

HUMAN DEVELOPMENT & RESOURCES

HUMAN SERVICES

INTERIOR DESIGN TECHNOLOGY

LANDSCAPE TECHNOLOGY

LEGAL ASSISTING

MEDICAL ASSISTING PROGRAM

MEDICAL LABORATORY TECHNOLOGY

NURSING-ASSOCIATE DEGREE/PRACTICAL NURSING

OFFICE SYSTEMS TECHNOLOGY

PHYSICAL THERAPIST ASSISTANT

RADIOGRAPHY

RESPIRATORY CARE

RESTAURANT MANAGEMENT

SURGICAL TECHNOLOGY

Index