

## TABLE OF CONTENTS



## CATALOG 2023 - 2024

**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

Indian River State College (IRSC) is a public, comprehensive college with a statewide and national reputation for excellence. Since its inception in 1959, the College has grown to occupy more than 60 buildings on more than 800 acres with campuses in Indian River, Martin, Okeechobee and St. Lucie counties. IRSC offers more than 100 programs leading to Bachelor's degrees, Associate degrees, technical certificates and applied technology diplomas, transforming the lives of nearly 22,000 students each year.

IRSC has polished its statewide and national reputation by embracing a simple philosophy: offer the best quality education at the most affordable price possible. The College is open-access, meaning anyone who has earned a high school diploma or equivalency will be admitted. The entire faculty, staff, and administration are wholly dedicated to one thing: student success.

Courses are offered in-person, online and as hybrid sessions utilizing state-of-the-art technology. Schedules accommodate full-time, part-time and continuing education students. IRSC also provides local high school students with opportunities to earn college credits—and even Associate degrees—with Dual Enrollment.

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. Architectural modifications exist for the disabled, and classes are offered in English as a Second Language to ensure that all students have equal opportunities for success at IRSC.

Dedicated to improving the community by providing the quality education and skills residents need to succeed, 87% of IRSC students are employed or continue their education journeys shortly after graduation.

IRSC is among the most affordable higher educational institutions in the nation. The College awards more than \$44 million to students yearly through financial aid and scholarship programs. The IRSC Promise Program, powered by the IRSC Foundation, further assures that eligible high school graduates in our service district can ignite their intellectual awakening here tuition-free. For details, visit [promise.irsc.edu](http://promise.irsc.edu).

IRSC is the region's comprehensive educational provider, state-designated career and technical center, and cultural hub. The College is committed to advancing the educational, cultural, workforce and continuing

development of the Treasure Coast and Okeechobee regions.

### Accreditation

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

Questions about the accreditation of Indian River State College may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges

at 1866 Southern Lane, Decatur, GA 30033-4097, by calling (404) 679-4500, or by using information available on SACSCOC's website ([www.sacscoc.org](http://www.sacscoc.org)).

#### **additional program accreditations include:**

The program in Dental Hygiene is accredited by the Commission on Dental Accreditation.

The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at Phone 312-440-4653 or at 211 East Chicago Ave., Chicago, IL 60611  
<https://coda.ada.org/>

The Indian River State College EMS Program is accredited by the

Commission on Accreditation of Allied Health Education Programs ([www.caahep.org](http://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

9355 113th Street North #7709, Seminole, FL 33775 • 727-210-2350 • [www.caahep.org](http://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](http://www.coaemsp.org))

Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM)

200 East Randolph St., Suite 5100, Chicago, IL 60601 • Phone 312-235-3255

Commission on Accreditation of Allied Health Education Programs (CAAHEP)

9355 113th Street North #7709, Seminole, FL 33775 • 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](mailto:info@naacls.org)

Website: <http://www.naacls.org>.

The IRSC Medical Assisting program is accredited by the Commission 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, 9355 113th Street North #7709, Seminole, FL 33775 • 727-210-2350

The Associate Degree nursing program at Indian River State College at the Pruitt Campus located in Port St. Lucie, Florida, is accredited by the Accreditation Commission for Education in Nursing (ACEN) 3390 Peachtree Road NE, Suite 1400 Atlanta, GA 30326 (404) 975-5000.

The most recent accreditation decision made by the ACEN Board of Commissioners for the Associate Degree nursing program is Continuing Accreditation.

The R.N.-B.S.N. nursing program at Indian River State College at the Pruitt Campus located in Port St. Lucie, Florida, is accredited by the Accreditation Commission for Education in Nursing (ACEN)

3390 Peachtree Road NE, Suite 1400 Atlanta, GA 30326 (404) 975-5000.

The most recent accreditation decision made by the ACEN Board of Commissioners for the RN-BSN nursing program is Continuing Accreditation

View the public information disclosed by the ACEN regarding this program at

<http://www.acenursing.us/accreditedprograms/programSearch.htm>

The Pharmacy Technician Program is accredited by the American Society of Health System Pharmacists ([ashp.org](http://www.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)

3030 Potomac Ave., Suite 100, Alexandria, VA 22305-3085 • Phone 703-706-3245

• email: [accreditation@apta.org](mailto:accreditation@apta.org)

website: <http://www.capteonline.org>.

If needing to contact the program/institution directly, please call 772-462-7771 or email [wmcnall@irsc.edu](mailto:wmcnall@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

264 Precision Blvd., Telford, TN 37690 • 817-283-2835  
<http://www.coarc.com> • Program #200380

The Surgical Services (Technology) Program is accredited by the Commission on Accreditation of Allied Health Education Programs ([www.caahep.org](http://www.caahep.org)) upon the recommendation of the

Accreditation Review Council on Education in Surgical Technology and Surgical Assisting ARC/STSA ([arcstsa.org](http://www.arcstsa.org))

19751 East Mainstreet, Suite #339, Parker, CO 80138 • Phone 303-694-9262

Commission on Accreditation of Allied Health Education Programs (CAAHEP)

9355 113th Street North #7709, Seminole, FL 33775 • 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**

Massey Campus

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 S.W. 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

*Indian River State College has a nine-member District  
Board of Trustees appointed by the Governor of the State  
of Florida that represents Indian River, Martin,*

*Okeechobee, and St. Lucie counties. Appointments for Indian River and Okeechobee counties are pending.*

Anthony D. George Jr., J.D. Chair, Martin County	Christa Luna Vice Chair, Okeechobee County
---	---

Susan R. Caron St. Lucie County	José L. Conrado Indian River County
------------------------------------	--

Vicki H. Davis Martin County	Melissa D. Kindell, D.D.S. Okeechobee County
---------------------------------	---

Milo Thornton Indian River County	J. Brantley Schirard Jr. St. Lucie County
--------------------------------------	--

Timothy E. Moore, Ph.D.  
Secretary to the Board of  
Trustees

## Quick Facts

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

Serving nearly 22,000 students annually, IRSC offers Bachelor Degree programs, Associate in Arts Degree programs for university transfer, Associate in Science/Associate in Applied Science degrees for career education, Career and Technical Education programs for quick workforce training, Adult Education and programs for professional development, and personal and cultural enrichment.

- IRSC is among the most affordable 4-year public institutions in the nation. The College is among the lowest 10% for net price and lowest 10% for tuition cost.
- 91% of IRSC students graduate without any debt. (U.S. News & World Report, 2019).
- Indian River State College students have free access to Adobe Creative Cloud, Bloomberg Terminals, the Microsoft Office Suite, Wolfram Technology and other state-of-the-art tools and resources.
- 9 out of 10 IRSC students are continuing their education or are employed shortly after graduation.
- 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.

- IRSC students can choose from over 70+ student clubs which combine fun, community outreach and service learning.
- The IRSC student-to-faculty ratio is 25 to 1.
- In addition to in-person learning, IRSC provides online hundreds of online classes each semester, more than a dozen full degree programs, and virtual student services.
- More than 83,400 degrees and certificates have been awarded throughout the College's 62-year history.
- Since the College began offering Bachelor's Degrees in 2008, over 8,100 students have earned a four-year degree from IRSC.

## History

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

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.

Over the years, the College added campuses in Vero Beach (Mueller Campus), Stuart (Chastain Campus), Okeechobee (Dixon Hendry Campus), and Port St. Lucie (Pruitt Campus), and several educational centers, including the Blackburn Educational Building (Fort Pierce).

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 Charlie 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 Bachelor's programs to meet both regional and statewide employment needs.

In 2013, IRSC created IRSC Online to provide students with affordable, flexible, quality online learning opportunities that fit into their lives. Since its inception, IRSC's online offerings have grown to include more than a dozen web-based degrees and hundreds of individual web-based courses.

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.

An era of unprecedented growth followed the introduction of IRSC's fourth President in 2020. From breaking ground on the Eastman Advanced Workforce Training Complex—Florida's most technologically advanced workforce training facility—to securing the single largest donation in IRSC history—\$45 million from philanthropist MacKenzie Scott—to setting in motion innovative programs that make an IRSC education broadly accessible, the College redoubled its focus on its true north: mission, students and community.

IRSC's commitment to student achievement continues to strengthen. In 2021, it became an Adobe Creative Campus, putting the brand-building Adobe Creative suite of applications in the hands of students and employees absolutely free. Free access to Wolfram Technology applications and Bloomberg Terminal soon followed. Also, in 2021, the College was awarded a \$4,961,238 Hispanic-Serving Institutions STEM and Articulation Program grant—the largest federally funded competitive grant in the College's history—to increase the number of Hispanic and low-income students who attain degrees in Science, Technology, Engineering, and Mathematics (STEM) programs.

In 2021, IRSC was one of only 16 institutions awarded a grant from the U.S. Department of Education to establish a Center of Excellence for Veteran Student Success, which opened on the Pruitt Campus in January 2022.

Focused on transforming lives and rapidly transitioning to meet the needs of our students and service district, IRSC made headlines in March 2022 when it introduced the IRSC Promise. The program for eligible in-district high school graduates is powered by the IRSC Foundation. Promise students study at IRSC full-time, tuition-free, to pursue their Associate degrees.

Projects for completion in 2023 include a new baseball and softball complex; a 50,000-square-foot School of Nursing expansion that will double the number of program graduates; the 62,000-square-foot Eastman Advanced Workforce Training Complex; and a new Child Development Center.

IRSC has a reputation for quality that inspires nearly 22,000 students to enroll in classes each year. IRSC stands out as an institution of higher learning dedicated to serving its surrounding area's educational, career training and cultural needs. 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.

Governed by a District Board of Trustees representative of its service 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

Dear Student,

It is my great privilege to welcome you to Indian River State College. Whether it is your very first semester or your last, I challenge each of you this year to consider what your story will be at IRSC and beyond.

It is an exciting time at the College. We are eager to welcome you on campus to experience expanded face-to-face classroom learning, performing arts and planetarium shows, club activities, student engagement, athletic events, and areas to gather or study with friends. Our online students will find a wide range of online courses, student services and social opportunities designed to make the most of your college experience.



IRSC is here not only to foster your learning and help you reach your goals but to help you grow as an individual, personally and professionally. Take time to enjoy this special time in your life and celebrate every accomplishment. Learn from your mistakes, but never let them deter you from your dreams. At IRSC, you are surrounded by countless people who are committed to your success. I encourage you to reach out, meet them, and engage with as many other students, faculty and staff as possible.

Keep moving forward toward your goals, and don't ever stop learning. Your story will always be more exciting if you do!

Very respectfully,

Timothy E. Moore, 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](http://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.

Click on this link for interactive Campus Maps:  
<https://maps.irsc.edu/?id=1979#!ct/58125?s/>.

### Massey Campus Fort Pierce

Fifty-six buildings on 362 beautifully landscaped acres compose IRSC's Massey Campus in the coastal city of Fort Pierce. Reflecting the diversity of IRSC students and their interests, the Massey 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 Massey 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" healthcare 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 Massey Campus are additional 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.

Click on link for interactive Campus Maps:  
 Google Map Location

## IRSC Student Success Center Google Map Location Main Campus Buildings w/Legend Map (Fort Pierce)

*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 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, assessment center, and Student Engagement Center.

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. Also you will find the Tutoring Center in this building.

The William and Helen Thomas Career Technology building is home to the Adult Education Programs which includes GED® and English as a Second Language (ESL).

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. The Clark Advanced Learning Center, a national model charter high school, offers high school sophomores, juniors and seniors the ability to earn both high school and college credits at no cost.

Click on link for interactive Campus Maps:  
Google Map Location  
Chastain Campus Buildings w/Legend Map (Stuart)

*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.

## Indiantown Education Center

The Indiantown Education Center brings educational opportunities offered by IRSC to the residents, businesses and organizations of western Martin County.

## Stuart Square Site

The IRSC Institute of Cosmetology and Barbering is located at Stuart Square, just a few miles north of the Chastain Campus. The Institute provides practical education and career training in the fields of cosmetology and aesthetics 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.

## 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 welding.

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.

Click on link for interactive Campus Maps:  
Google Map Location  
Dixon Hendry Campus Buildings w/Legend Map (Okeechobee)

*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.

### **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 Mueller Campus also has 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.

Click on link for interactive Campus Maps:  
[Google Location Map](#)  
[Mueller Campus Buildings w/Legend Map \(Vero Beach\)](#)

### **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.

### **Pruitt Campus Port St. Lucie**

Located in rapidly growing Port St. Lucie, Florida, the IRSC Pruitt Campus offers an array of daytime, evening, and Friday/weekend college- credit classes for certifications, and 2 and 4 year degrees. As well as, 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 IRSC's Small Business Development Center (SBDC) and the Economic Development Council of St. Lucie County who collectively promote entrepreneurship, job creation, business recruitment and retention, all furthering the economic advancement of the region.

A state-of-the-art academic and public library, the Tutoring Center, which offers free individualized tutoring, and a Testing Center are available to help ensure student success. Advisors and specialists in the Student Success Center provide academic advising, registration and financial aid assistance, and offer career counseling to all students.

The Pruitt Campus is also home to the IRSC Veterans Center of Excellence, a 12,000+ sq.-ft. facility dedicated to veterans pursuing education and training with the institution. The VCE houses two full-time advisors/specialists to assist our veterans, active service members and their families. It is equipped with a professional conference venue, a student lounge and a study commons area where veteran students meet regularly.

Beginning in Fall 2023, the Pruitt Campus becomes home to the IRSC School of Nursing. A \$14 million capital expansion commenced in Spring 2022 to build a state-of-the-art simulations facility and expand capacity to double the size of the College's nursing program.

Click on link for interactive Campus Maps:  
[Google Location Map](#)  
[Pruitt Campus Buildings w/Legend Map \(Port St. Lucie\)](#)

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.

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.

### **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 Stakeholders 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 Committed to excellence.

### **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.

## IRSC ONLINE

Online sections extend opportunities to students beyond the traditional classroom.

Hundreds of courses are now available online. Through IRSC Online, students can complete select degree programs and technical certificates entirely online. These include:

- Associate in Arts Degree
- Associate in Science Degree in Business Administration
- Technical Certificate in:
  - Business Management
  - Business Operations
  - Business Specialist
  - Human Resource Administrator
- Associate in Science Degree in Computer Information Technology
- Technical Certificate in:
  - Computer Information Data Specialist
  - Information Technology Support Specialist
- Associate in Science Degree in Criminal Justice Technology
- Associate in Science Degree in Health Information Technology
- Technical Certificate in:
  - Healthcare Informatics Specialist
  - Medical Coder Biller
- Bachelor's Degrees in:
  - Business Administration
  - Criminal Justice
  - Education/ESE with ESOL Endorsement
  - Elementary Education with Reading & ESOL Endorsements
  - Healthcare Management
  - 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.

Please visit the Online Student Resources page for information on getting started in the online environment, academic resources, and technical resources that will help you throughout your time at IRSC.

Please note: One or more proctored assessments will be administered virtually. Check the course syllabus for details about the virtual proctoring format.

# ACADEMIC CALENDAR

## Fall 2023

2023 Promise Program Pledge deadline Friday, March 10, 2023

Early registration for eligible students. Please check your student dashboard for eligibility. When you register for courses, you are financially committing to pay for your courses. Wednesday, May 10, 2023

2023 Promise Program Application deadline Wednesday, May 10, 2023

Registration of Classes Begins. Payment due at the time of registration for classes. When you register for courses, you are financially committing to pay for your courses. Monday, May 15, 2023

2023 Promise Program Registration deadline Monday, July 10, 2023

Priority Deadline for Receipt of Transcripts, Residency, and Financial Aid documents Monday, July 31, 2023

## Fall Term 2023

Last Day to Register and Pay. When you register for courses, you are financially committing to pay for your courses. Wednesday, August 16– Wednesday, December 6, 2023 Tuesday, August 15, 2023

Fall term begins Wednesday, August 16, 2023

Last Day Drop (with tuition refund). If you do not drop by drop deadline, you are financially committing to pay for your courses. Tuesday, August 22, 2023

Verification of Attendance Deadline. Students who have not attended will receive a grade of "W" on their transcript. When you register for courses, you are financially committing to pay for your courses. Tuesday, August 29, 2023

Last Day to Withdraw with a "W". Financial Aid 60% earn date. If you do not withdraw by the Withdrawal deadline, you will receive a grade in the course. Friday, October 27, 2023

Deadline to apply/pay for Commencement participation Friday, Nov.17, 2023

Last Day of Term and Final Exams Wednesday, December 6, 2023

Grades Due Online by 8:00 p.m. Thursday, December 7, 2023

Grades Available Online in Workday @ 8 a.m. Friday, December 8, 2023

Commencement Wednesday, December 13, 2023 Thursday, December 14, 2023

Mon., Sept 4, 2023 Labor Day  
Fri., Nov 10, 2023 Veterans Day (Sat., Nov. 11)  
Mon., Nov. 20 - Sun. Nov 26, 2023 Thanksgiving Break  
Sat., Dec. 16,– Mon., Jan. 1, 2024 Winter Break

College Closed

## Calendar dates subject to change

By registering for one or more courses at IRSC, you are agreeing to fulfill a financial obligation to the College, and are responsible for the payment of tuition and/or fees associated with these course(s) by personal payment or Financial Aid (scholarships, or other state or federal programs) by the established payment deadline. To

not be obligated for these expenses, you must drop any unwanted courses by the end of the published drop with refund deadline or you will be personally responsible for financial payment of the costs of these courses. Failure to pay this financial obligation may result in your account being referred to a debt collection agency and reported to a credit bureau. You may also be responsible for any additional costs or collection fees incurred in the collection of any debt, as allowable by law. Courses with term dates other than those listed above (special registration) will have different deadlines. Please check your class schedule on MyPioneerPortal/Academics/View My Class & Grades for specific dates.

## Spring 2024

Early registration for eligible students. Please check your student dashboard for eligibility. When you register for courses, you are financially committing to pay for your courses.

Wednesday,  
October 11, 2023

Registration of Classes Begins. Payment due at the time of registration for classes. When you register for courses, you are financially committing to pay for your courses.

Monday, October  
16, 2023

Priority Deadline for Receipt of Transcripts, Residency, and Financial Aid documents.

Wednesday,  
November 8, 2023

### Spring Term 2024

Monday, Jan. 8 –  
Thursday, April 25,  
2024

Last Day to Register and Pay. When you register for courses, you are financially committing to pay for your courses.

Friday, January 5,  
2024

Spring Term Begins

Monday, January 8,  
2024

Last Day to Drop Classes (with tuition refund). When you register for courses, you are financially committing to pay for your courses.

Friday, January 12,  
2024

Verification of Attendance Deadline. Students who have not attended will receive a grade of "W" on their transcript. When you register for courses, you are financially committing to pay for your courses.

Friday, January 19,  
2024

Last Day for Withdraw with a "W". Financial Aid 60% earn date. If you do not withdraw by the Withdrawal deadline, you will receive a grade in the course.

Tuesday, March  
19, 2024

Deadline to apply/pay for Commencement participation

Friday, March 29,  
2024



Last Day of Term and Final Exams	Thursday, April 25, 2024
Grades Due Online by 8:00 p.m.	Friday, April 26, 2024
Grades Available Online in Workday @ 8 a.m.	Monday, April 29, 2024
Commencement	Thursday, May 2, 2024 Friday, May 3, 2024
College Closed	Mon., Jan. 15, 2024 Martin Luther King Jr. Day Mon., March 11 – Sun., March 17, 2024 Spring Break

Calendar dates subject to change

By registering for one or more courses at IRSC, you are agreeing to fulfill a financial obligation to the College, and are responsible for the payment of tuition and/or fees associated with these course(s) by personal payment or Financial Aid (scholarships, or other state or federal programs) by the established payment deadline. To not be obligated for these expenses, you must drop any unwanted courses by the end of the published drop with refund deadline or you will be personally responsible for financial payment of the costs of these courses. Failure to pay this financial obligation may result in your account being referred to a debt collection agency and reported to a credit bureau. You may also be responsible for any additional costs or collection fees incurred in the collection of any debt, as allowable by law. Courses with term dates other than those listed above (special registration) will have different deadlines. Please check your class schedule on MyPioneerPortal/Academics/View My Classes & Grades for specific dates.

Summer 2024

Early registration for eligible students. Please check your student dashboard for eligibility. When you register for courses, you are financially committing to pay for your courses.

Wednesday, February 28, 2024

Registration of Classes Begins. Payment due at the time of registration for classes. When you register for courses, you are financially committing to pay for your courses.

Monday, March 4, 2024

Priority Deadline for Receipt of Transcripts, Residency, and Financial Aid documents.

Friday, March 8, 2024	Friday, March 8, 2024	Friday, March 8, 2024
-----------------------	-----------------------	-----------------------

Summer Term 2024	Summer Full Term	Summer A	Summer B
	Wed., May 8 – Wed., Aug. 7, 2024	Wed., May 8 – Wed., June 19, 2024	Tues., June 25 – Wed., Aug. 7, 2024

Last Day to Register and Pay. When you register for courses, you are financially committing to pay for your courses.	Tues., May 7, 2024	Tues., May 7, 2024	Mon., June 24, 2024	p.m.	2024	2024
Summer Term Begins	Wed., May 8, 2024	Wed., May 8, 2024	Tues., June 25, 2024	Grades Available Online in Workday @ 8 a.m.	Fri., Aug. 9, 2024	Fri., June 21, 2024
Last Day to Drop (with tuition refund). If you do not drop by the deadline, you are financially committed to pay for your courses.	Tues., May 14, 2024	Tues., May 14, 2024	Mon., July 1, 2024	College Closed	Mon., May 27, 2024	Memorial Day Independence Day
Verification of Attendance Deadline. Students who have not attended will receive a grade of "W" on their transcript. When you register for courses, you are financially committing to pay for your courses.	Tues., May 21, 2024	Tues., May 21, 2024	Mon., July 8, 2024		Thurs., July 4, 2024	
Last Day for Withdraw with a "W". Financial Aid 60% ear date. If you do not withdraw by the Withdrawal deadline you will receive a grade in the course.	Mon., July 8, 2024	Tues., June 4, 2024	Tues., July 23, 2024	<p><b>Calendar dates subject to change</b> By registering for one or more courses at IRSC, you are agreeing to fulfill a financial obligation to the College, and are responsible for the payment of tuition and/or fees associated with these course(s) by personal payment or Financial Aid (scholarships, or other state or federal programs) by the established payment deadline. To not be obligated for these expenses, you must <u>drop</u> any unwanted courses by the end of the <u>published drop with refund deadline</u> or you will be personally responsible for financial payment of the costs of these courses. Failure to pay this financial obligation may result in your account being referred to a debt collection agency and reported to a credit bureau. You may also be responsible for any additional costs or collection fees incurred in the collection of any debt, as allowable by law.</p> <p>Courses with term dates other than those listed above (special registration) will have different deadlines. Please check your class schedule on MyPioneerPortal/Academics/View My Class &amp; Grades for specific dates.</p>		
Last Day of Term and Final Exams	Wed., Aug. 7, 2024	Wed., June 19, 2024	Wed., Aug. 7, 2024			
Grades Due Online by 8:00	Thurs., Aug. 8,	Thurs., June 20,	Thurs., Aug. 8, 2024			

## MISSION STATEMENT

**IRSC is a comprehensive college accredited to award Associate Degrees, Baccalaureate Degrees, and Career and Technical Certificates. As a leader in education and innovation, IRSC transforms lives by offering high-quality, affordable and accessible education through traditional and remote delivery.**

**IRSC is committed to**

- Creating a superior teaching and learning environment
- Developing a highly-skilled workforce
- Cultivating student success
- Promoting civic responsibility
- Embracing diversity
- Stimulating economic growth
- Fostering community engagement
- Providing cultural enrichment and lifelong learning

## 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](http://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. 12466: 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.shtml>.

## 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 Student Success 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 Success at IRSC helps 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, Veterans Services, Career and Transfer Services, Student Accessibility Services, Assessment Services, Recruitment and Admissions 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 Miley Library on Massey Campus in Fort Pierce. Other requests for archived information should be sent to the Curriculum Support Office on the Massey Campus, or requests may be made to [bsampson@irsc.edu](mailto:bsampson@irsc.edu).

### Apply for Admissions

Complete an Application for Admission at [www.irsc.edu](http://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](http://www.irsc.edu).

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. 275). 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 have additional requirements for admission and may have specific application deadlines. If you are interested in a Selective Admission program, please contact a student success coach, an advisor, the department, or check the appropriate webpage at [www.irsc.edu](http://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 four or more major terms (two 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](http://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 vocational credit toward a technical certificate.

New Dual Enrollment Associate in Arts Degree-seeking students are required to complete SLS 1101 (p. 275) Student Success during their first semester of attendance. See your student success coach for details.

For information on additional requirements and opportunities, go to [www.irsc.edu](http://www.irsc.edu), and click "PROGRAMS." Scroll down to and click "Unique Programs," and choose "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.
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](http://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 an Indian River State College Baccalaureate program must complete the Application for Admission and Residency Declaration and pay the \$30 non-refundable application fee. Applicants may complete this form online at [www.irsc.edu](http://www.irsc.edu). Admission is open to all who meet the admission requirements. Applicants must provide official transcripts for all prior college coursework. 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. 78) 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. .
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. 71) 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. 72) programs are accepted year-round, and students may start during any semester of the academic year. No provisional admission is allowed. 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. 199).
3. A cumulative Grade Point Average (GPA) of 2.5 in Associate level coursework.

Equivalent Prerequisites may be accepted (see the Common Prerequisite Manual at [www.flvc.org](http://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. 78)(B.S.N.) program are accepted each semester. Requirements for admission to the R.N. - B.S.N. are:

1. Diploma, Associate in Applied Science, or Associate in Science degree in Nursing.
2. Active, unencumbered, valid Florida Registered Nursing License.

3. Minimum cumulative Grade Point Average (GPA) of 2.5 on a 4.0 scale.
4. Completion of MGF 1106 (p. 244), or MGF 1107 (p. 244), or MAC 1105 (p. 237), or STA 2023 (p. 277), with a grade of "C" or higher. Applications for IRSC's *Bachelor of Science Degree in Biology* (p. 68) 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. 175)- General Biology, BSC 2010L (p. 175)- General Biology Lab, BSC 2011 (p. 175)- General Biology II, BSC 2011L (p. 175)- General Biology II Lab, CHM 1045 (p. 180)- General Chemistry I, CHM 1045L (p. 180)- General Chemistry I Lab, CHM 1046 (p. 180)- General Chemistry II, CHM 1046L (p. 180)- General Chemistry II Lab, CHM 2210 (p. 180)- Organic Chemistry I, CHM 2210L (p. 180)- Organic Chemistry I Lab, CHM 2211 (p. 181)- Organic Chemistry II, CHM 2211L (p. 181)- Organic Chemistry II Lab, MAC 2311 (p. 237) - Calculus I or MAC 2233 (p. 237) - Business Calculus I, STA 2023 (p. 277)- Statistics. Equivalent Prerequisites may be accepted (see the Common Prerequisite Manual at [www.flvc.org](http://www.flvc.org) or contact an IRSC Advisor for details).

Applications for IRSC's *Bachelor of Science Degree in Human Services* (p. 76) 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.
3. It is strongly recommended that coursework include key Ethics course, such as HUS 2500 - Ethics in Human Services.

Applications for IRSC's *Bachelor of Science Degree in Business Administration* (p. 70) 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. 179) - College Computing, or CGS 1100 (p. 179)- Introduction to Computer Applications for Business; ECO 2013 (p. 198) - Principles of Economics Macro; ECO-2023 (p. 198)- Principles of Economics Micro; STA-2023 (p. 277)- Elementary Statistics I; MAC-2233 (p. 237)- Business Calculus I; ACG-2001 (p. 161)- Financial Accounting I; ACG-2011 (p. 161)- Financial Accounting II; ACG-2071 (p. 161)- Managerial Accounting. Equivalent Prerequisites may be accepted (see the Common Prerequisite Manual at [www.flvc.org](http://www.flvc.org) or contact an IRSC advisor for details).

Applications for IRSC's *Bachelor of Science Degree in Public Administration* (p. 79) 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. 179) - College Computing, or CGS 1100 (p. 179)- Introduction to Computer Applications for Business; ECO 2013 (p. 198) - Principles of Economics Macro, or ECO 2023 (p. 198)- Principles of Economics Micro; POS 1041 (p. 266)- American Government. Equivalent Prerequisites may be accepted (see the Common Prerequisite Manual at [www.flvc.org](http://www.flvc.org) or contact an IRSC Advisor for details).

Applications for IRSC's *Bachelor of Science Degree in Criminal Justice* (p. 70) 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. 77) 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. 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 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. 161) - Financial Accounting I; ACG 2011 (p. 161)- Financial Accounting II; ACG 2071 (p. 161)- Managerial Accounting; ECO 2023 (p. 198)- Principles of Economics Micro; STA 2023 (p. 277)- Elementary Statistics I; CGS 1100 (p. 179) - Introduction to Computer Applications for Business, or CGS 1060 (p. 179)- College Computing. Equivalent Prerequisites may be accepted (see the Common Prerequisite Manual at [www.flvc.org](http://www.flvc.org) or contact an IRSC Advisor for details).

Applications for IRSC's *Bachelor of Science Degree in Accounting* (p. 67) 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. 161) - Financial Accounting I; ACG 2011 (p. 161)- Financial Accounting II; ACG 2071 (p. 161)- Managerial Accounting; ECO 2013 (p. 198) - Principles of Economics Macro; ECO 2023 (p. 198)- Principles of Economics Micro; MAC 2233 (p. 237) - Business Calculus I, or MAC 2311 (p. 237)- Calculus I with Analytic Geometry; STA 2023 (p. 277)- Elementary Statistics I; CGS 1100 (p. 179)- Introduction to Computer

Applications for Business, or CGS 1060 (p. 179)- College Computing. Equivalent Prerequisites may be accepted (see the Common Prerequisite Manual at [www.flvc.org](http://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 - Certificate of Professional Preparation

Anyone planning to enroll in an Indian River State College Certificate of Professional Preparation program must complete the Application for Admission and Residency Declaration and pay the \$30 non-refundable application fee. Applicants may complete this form online at [www.irsc.edu](http://www.irsc.edu). Admission is open to all who meet the admission requirements. Applicants must provide official transcripts for all prior college coursework.

Applications for IRSC's *Certificate of Professional Preparation in Biomedical Sciences* program are accepted year-round, and students may start during any semester of the academic year. Requirements for admission to the Certificate program are:

1. An Baccalaureate Degree from a regionally accredited postsecondary institution. A cumulative Grade Point Average (GPA) of 2.0 in Baccalaureate level coursework.

### 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 <https://www.irsc.edu/programs/health-sciences.html>.

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:

- 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 <https://www.irsc.edu/programs/health-sciences.html>.

### 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. Secondary/High School: Successful completion of a secondary high school program is required for admission. Students who have graduated from a foreign high school must have their foreign credentials evaluated by a current NACES member and provide IRSC Student Records Office with an evaluation. The evaluation must state that the student has completed a secondary education that is the equivalent of a standard US High School Diploma. \* If the student has completed two years of a foreign (non-native) language in High School, they should request a course by course evaluation.

Post-secondary: Submission of foreign post-secondary transcripts is optional. Students who have attended a postsecondary educational institution outside the United States and wish to transfer their coursework must have their foreign academic credentials evaluated by a current NACES member and provide IRSC Student Records Office with a course by course evaluation from each institution attended. The student is responsible for evaluation fees, and there is no guarantee that any coursework will transfer to IRSC.

3. Indian River State College accepts the following exams.

Official score report of the Test of English as a Foreign Language (TOEFL) is required of students whose native language is not English. A minimum score of **61** (Internet-based) is required. You may learn more about the test, and register online. Scores are valid for two years.

**or**

Official score report of the Duolingo is required of students whose native language is not English. A minimum score of **91** is required. You may learn more about the test, and register online. Scores are valid for two years.

**or**

Official score report of the International English Language Testing System IELTS is required of students whose native language is not English. A minimum score of **5.5** is required. You may learn more about the test, and register online. Scores are valid for two years.

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. 31) 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](http://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.

The submission deadline for all documentation that will be used to determine residency for tuition purposes is the day prior to the first day of classes. The responsibility of providing clear and convincing documentation that justifies classification of a student as a resident for tuition purposes rests with the student or, if the student is a dependent, his or her parent. Once a class has started, tuition and fees for that term are final, whether in-state or out-of-state.

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 24 months of non-enrollment. After 24 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 from the most recent tax year, evidencing the dependency of the student, along with a Notarized Affidavit of 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 501C 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](http://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.**

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

All students entering selective admission 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 a NACES

member organization and provide an evaluation to the IRSC Student Records Office. The evaluation must state that the student has completed a secondary education that is the equivalent of a standard U.S. high school diploma.

Refer to [International Transfer Coursework](#) (p. 31) for information about the evaluation of foreign postsecondary 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 institution participates in Florida's Statewide Course Numbering System and/or the student submits documentation of instructor credentials and a syllabus for each course.
- All military training, experience, or coursework that appears in the Florida Department of Education Credit or Clock hour for Military Equivalency list will be evaluated upon the IRSC's receipt of the student's transcript of the training or coursework. (6A-10.024).
- 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 may courses count toward a student's attempted hours for financial aid Satisfactory Academic Progress (SAP). (p. 32)
- Transfer Students with a last term below a 2.0 GPA will be admitted on an academic warning status. Students in this category should refer to the Academic Warning/Probation/Suspension (p. 42) section of this catalog.

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 and upper level 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](http://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. 30) 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.

Required placement scores and exemptions to P.E.R.T. testing and are listed on <https://irsc.edu/admissions/pert-test.html> and outlined in Section 1008.30, Florida Statutes.

The P.E.R.T. is offered daily at each campus. Photo identification is required. Testing schedules are available at [www.irsc.edu](http://www.irsc.edu) and at all IRSC campuses.

For specific details about Assessment Services and testing click [www.irsc.edu/admissions/assessmentservices/assessmentse rvices.aspx?id=388](http://www.irsc.edu/admissions/assessmentservices/assessmentse rvices.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](http://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](http://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. 32)).
- 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: <https://irsc.edu/financial-aid/satisfactory-academic-progress.html>

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](#)).

Students who do not attend the first week of their classes will be withdrawn for non-attendance 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 Services Office on the IRSC Massey Campus in Fort Pierce 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 Veterans Service 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 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](http://www.irscfoundation.org), or any of the four-county area high school guidance offices.

## Sign Up for New Student Orientation

SOAR - Student Orientation and Registration is an exciting, interactive introduction to student life at IRSC.

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!
- There are both in-person and online options for SOAR.

## Activate RiverMail

All students must activate their free RiverMail (email) account by clicking the activation link in the email sent to your personal email address on file within 3 business days of being accepted to IRSC. If you do not receive that email within that time, email [info@irsc.edu](mailto:info@irsc.edu) for assistance. Be sure to include your full name, student ID, and date of birth.

Returning students may log into their RiverMail through MyPioneerPortal with your RiverMail email address and password. If you can't remember your RiverMail address, contact the Student Communications Center for verification and access toll-free at 866-792-4772.

RiverMail is the **official** means of electronic communication for student information and important IRSC announcements. Check your mailbox daily for critical updates for registration, financial aid and other alerts. RiverMail is accessible through MyPioneerPortal.

Further information on RiverMail can be located at <http://www.irsc.edu/RiverMail>.

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

## Contact Your Advisor

All IRSC degree seeking and dual enrollment students are assigned an academic advisor. The advisor assists students with educational and career goals. Our current assignment model is based on meta-majors, which allows advisors to work with students based on their program of study and partner with Deans, Faculty and Staff for a proactive approach to advising.

Students may connect with an Advisor and other student services using QLess. Join the line with Qless. Join from anywhere, wait where you want, and be notified when you've reached the front of the line. Advisors collaborate with assigned students in-person, by phone, email and virtually to develop Academic Plans and educational goals. The Academic Plan is an advising tool that maps out required courses for the student's current program of study and provides the student and advisor a tracking mechanism towards degree progression. Each degree program has a specific Academic Plan for both full-time and part-time students. An Academic Plan should be developed within the student's first term of enrollment. Students may use their completed Academic Plan to select classes and register for subsequent terms.

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

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. 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 the IRSC Tutoring Center's website: <https://irsc.libguides.com/tutoring>.

## Select Classes and Register

### Registration

Register and pay for classes through Workday, which is accessible when logging into MyPioneerPortal. Note that instructors listed in the schedule are subject to change.

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

Students may also use online or phone registration to drop and add classes. Contact the IRSC Student Communications 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.

When you register for courses, you are financially committing to pay for your courses. By registering for one or more courses at IRSC, you are agreeing to fulfill a financial obligation to the College, and are responsible for the payment of tuition and/or fees associated with these course(s) by personal payment or Financial Aid (scholarships, or other state or federal programs) by the established payment deadline. To not be obligated for these expenses, you must drop any unwanted courses by the end of the published drop with refund deadline or you will be personally responsible for financial payment of the costs of these courses. Failure to pay this financial obligation may result in your account being referred to a debt collection agency and reported to a credit bureau. You may also be responsible for any additional costs or collection fees incurred in the collection of any debt, as allowable by law.

### *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](http://www.irsc.edu) or via the IRSC Student Communications Center (1-866-792-4772) or by contacting an advisor at any IRSC campus.

When you register for courses, you are financially committing to pay for your courses. By registering for one or more courses at IRSC, you are agreeing to fulfill a financial obligation to the College, and are responsible for the payment of tuition and/or fees associated with these course(s) by personal payment or Financial Aid (scholarships, or other state or federal programs) by the established payment deadline. To not be obligated for these expenses, you must drop any unwanted courses by the end of the published drop with refund deadline or you will be personally responsible for financial payment of the costs of these courses. Failure to pay this financial obligation may result in your account being referred to a debt collection agency and reported to a credit bureau. You may also be responsible for any additional costs or collection fees incurred in the collection of any debt, as allowable by law.

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 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. Withdrawals must occur according to the deadline noted in the Academic Calendar (p. 15).
3. Withdrawals from Special Registration classes must be completed prior to 70% of the course. A Special Registration class has beginning and ending dates that do not coincide with the beginning and ending dates of the Academic Calendar Term dates.
4. Withdrawals are not permitted for a student's third attempt in any college credit course. See the Withdrawal and Grade Forgiveness Policy (p. 36).

5. Withdrawals may be completed through the student portal at [www.irsc.edu](http://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.
6. Students may not withdraw themselves from their last class. Total Withdrawals (meaning withdrawals from all classes, or the last remaining ungraded class in a term) must be done by an advisor.
7. Financial Aid and Veteran students should refer to IRSC's Satisfactory Academic Progress for Financial Aid (p. 32) and Withdrawals - Return to Title IV (p. 33).

If any of the above conditions are not met, withdrawal requests will not be processed. Students are responsible to verify that all conditions have been met and that their withdrawal request was processed.

### 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.

Grade forgiveness applies only to:

1. Identical coursework (coursework with the same course number), and
2. Coursework taken at Indian River State College, or
3. Coursework offered at Indian River State College but taken at another institution.

Transfer coursework not offered at Indian River State College and brought in as elective credit or unclassified credit will not be eligible for grade forgiveness.

Federal Financial Aid rules do not use grade forgiveness in calculating Satisfactory Academic Progress (p. 32).

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.

### Instructor Withdrawals

Provided the student is not enrolled for the third attempt, Instructor Withdrawals may be used for documented extenuating circumstance such as deaths, illnesses, etc. After the grading window has closed, students should submit documentation to their instructor(s) and request an Instructor Withdrawal. Instructor Withdrawals must be approved by Dr. Belmont, Provost/Vice President of Academic Affairs, CAO.

Note that students who are receiving Bright Futures scholarships and other forms of financial aid may incur negative financial consequences as a result of class withdrawals. For this reason, students should consult with their advisor prior to requesting an Instructor Withdrawal.

### 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 2021 Fall Semester, 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.	\$400.00/cr. hr.	Adult High School Graduation	\$20.00
Advanced and Professional Lower-level	\$103.83/cr. hr.	\$390.49/cr. hr.	Practical Nursing Graduation	\$20.00
Postsecondary Vocational	\$103.83/cr. hr.	\$390.49/cr. hr.	Associate (A.A., A.S., A.A.S.), Career and Technical Education, Technical Certificate and Non-Degree Application	\$20.00
Educator Preparation Institutes	\$103.83/cr. hr.	\$390.49/cr. hr.	Baccalaureate Application	\$30.00
Developmental Education	\$103.83/cr. hr.	\$390.49/cr. hr.	Culinary Institute Application	\$30.00
Postsecondary Adult Vocational	\$2.56/contact hr.	\$10.21/contact hr.	Health Science Application	\$30.00
Continuing Workforce Education	\$8.00/contact hr.	\$8.00/contact hr.	International Student Application	\$30.00
Vocational Preparatory	\$30.00/term	\$30.00/term	Distance Learning Course	\$10.00/cr. or /30 hour
Adult General Education	\$30.00/term	\$30.00/term	Health Science Fee for Criminal Background Check/Drug Screening	\$100.00
Recreational and Leisure Time	\$1.00/contact hr.	\$1.00/contact hr.	Health Science Reasoning Test (HSRT)	\$10.00
Lifelong Learning Institute	\$7.50/contact hr.	\$7.50/contact hr.	Postsecondary Education Readiness Test (P.E.R.T.)	\$20.00
<b>Special fees (non-refundable), in addition to matriculation, tuition, and registration:</b>			National League of Nursing Exam	\$75.00
Late Registration		\$30.00	Competency Validated Credit - Service Fee	\$5.00/cr. or /30 hour
Cosmetology and Barbering Graduation		\$20.00	College Level Examination Program (CLEP)	\$30.00 <i>Additional test fee will be charged by CLEP</i>
			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
			Selection Center Phase I ( <i>includes: Interview &amp; Evaluation, Fingerprinting, Criminal History Check, Administrative Fees</i> )	\$135.00
			Selection Center Phase II ( <i>includes: CVSA Examination, Integrity Evaluation &amp; Screening, Background Investigation, Final Comprehensive Assessment</i> )	\$465.00
			<i>Psychological Evaluation - included in Phase II cost</i>	\$270.00
			<i>Polygraph Examination - included in Phase II cost</i>	\$195.00

Criminal Justice Basic Abilities Test	\$39.00	State Officer Certification Exam	\$100.00
Criminal Justice Physical Abilities Test	\$40.00	Dental Hygiene Instrument Kit and supplies	\$1,600.00
Fire Science Physical Abilities Test	\$50.00	Distance Learning Testing Fee for non-IRSC Students	\$40.00/exam
Fire Science Practice PAT	\$25.00	<b>Early Childhood Education Laboratory School</b>	
Treasure Coast Physical Abilities Test <i>*also called New Hire Physical Abilities Test</i>	\$60.00	Registration Fee (per student) *Summer Rates may vary	\$150.00
NSFI - National Firefighter Selection Inventory	\$80.00	Before School Care 7:30 - 8:00 a.m. (per student, per week)	\$15.00
Fire Science Mask Fees	\$99.59	School Day 8:30 a.m. - 3:30 p.m. (per student, per week)	
Selection Center Fingerprinting and Background check	\$55.50	Infants & Toddlers class	\$185.00
LE Agencies new hire fingerprinting	\$20.00	1 year old class	\$185.00
IRSC new hire employee fingerprinting	\$20.00	2 year old class (not potty trained / potty trained)	\$185.00 / \$150.00
Equivalency of Training	\$675.86	3 year old class	\$140.00
Equivalency of Training Application (In-State)	\$100.00	4 year old class	\$100.00
Equivalency of Training Application (Out-of-State)	\$350.00	After School Care 3:30 - 5:30 p.m. (per student, per week)	\$30.00
Refresher Familiarization fees:		Additional fees may be charged for instruction incurring unusual costs and for special services to individuals or community or governmental agencies.	
1 high liability area	\$225.00	An additional 2.3% credit card vendor convenience fee will be charged for all online credit card transactions.	
2 high liability area	\$450.00	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 Administrative Director of Recruitment and Admissions or any Campus President.	
3 high liability area	\$675.00	Refer to the Course Description (p. 161) section of this catalog for lab fees, test fees, insurance fees, and special fees assessed for individual courses.	
4 high liability area	\$900.00		
Retake one high liability proficiency area	\$300.00		

## Tuition Waiver Notification

### Out of State Tuition Waivers

The Florida legislature has approved two out-of-state tuition waiver programs that dramatically reduce 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 Florida while enrolled at IRSC. Student veterans must provide their DD-214 and one legal tie to the state of Florida from the Florida Statute 1009.21(3)(c)1 list. See also F.S. 1009.26(13).

### 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. Submitted 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, visit any campus or contact Student 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 to the Veterans Services Office no later than the first day of class.
2. Submit an Application for Veteran’s Deferment of Tuition and Fees to the Veterans Services Office.
3. Provide additional information necessary to the proper certification of enrollment by the educational institution to the Veterans Services Office.

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 outlined above, the only other refund requests considered by the College will be those in which extraordinary circumstances beyond the student’s control are supported by third party documentation. The extraordinary circumstance and dates of third party documentation must match the dates of the semester for which a drop with refund is being requested.

The following are considered eligible requests:

- Death of immediate family member—Request must be accompanied by documentation of the death and your relationship to the deceased. (Immediate family member is limited to parents, spouse, children and siblings.)
- Medical emergency—Provide a letter from a physician or healthcare agency, on letterhead indicating an illness or medical emergency of such severity that it prevents you from continuing in your course(s). The letter must include dates that match the semester for which the DWR is being requested. If the medical situation relates to an immediate family member, you must provide proof of family relationship and documentation to verify your role as a caretaker for the family member.
- Call to active military duty—Provide copy of military orders relevant to the term.

Students who believe their situation qualifies for consideration have no later than the last day of the semester immediately following the one for which the drop with refund is being requested to submit an official Request for Refund and any required documentation to an advisor. The advisor will verify all the documentation and forward to their Campus President or Administrative Director. Those individuals will then make a recommendation and students will be informed in writing of the decision. (Note: Drop with refund requests for spring semesters will have until the end of Summer B to be submitted.)

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 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 ID, students must take a current class schedule and receipt showing payment of tuition, along with a valid photo ID, to the Student Affairs Office at the Massey Campus in Fort Pierce (KSU-112). Student IDs are also available, once per semester, at the branch campuses. Call the campus for availability.

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

Students should always carry their IRSC Student ID as it serves to identify Indian River State College students to College employees 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 IRSC Student ID cards in possession at any time.

## Buy Your Books

The well-stocked River Shop bookstores, located on the Massey Campus in Fort Pierce (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/>

## Simple Syllabus

IRSC recently adopted Simple Syllabus campus-wide. Simple Syllabus is a centralized, template-driven platform that enables the personalization and publication of interactive class syllabi! Simple Syllabus also provides a tailored experience for each student with access to both current and previous digital class syllabi.

As a student, you are able to access your syllabi directly from within Blackboard or from the Simple Syllabus platform. The Syllabus Library houses all syllabi that have been published at IRSC and it includes a search tool that allows you to filter down syllabi by a specific term, organization, subject, course number, or instructor in addition to a general keyword search.

As a student – here are some features that directly benefit you:

**Future Class Planner** – Enables you to research classes in advance of registration to map out your future

**Accessible to All** – Syllabi are Section 508 and WCAG 2.0 level AA compliant.

**Real-Time Notifications** – You can subscribe to syllabi and receive email updates anytime content changes. All syllabi have an automatic timestamp with the last date/time updated.

**Material Planner** – You can prepare for the semester with a material planner that aggregates required class materials.

**Quick Navigation** – You can find the most relevant information through linked navigation.

## ACADEMIC STATUS

### Academic Warning/Probation/Suspension

A student shall be placed on Academic Warning at the end of the first term in which they have earned less than a 2.0 cumulative Grade Point Average (GPA). Students shall be placed on Academic Probation at the end of the second consecutive term in which they have earned less than a 2.0 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 2.0 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 Vice President of Student Success, Associate Vice President of Advising and Career Services, or a Campus President.

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 2.0 or higher for each subsequent semester of enrollment. If the GPA for any term of enrollment is below a 2.0 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 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 requirements set by each instructor. Those requirements are printed in the course syllabus. Students who do not complete the requirements to verify participation and/or attendance during the first week of the class will receive a grade of 'W' for non-attendance. For online classes, refer to the course syllabus in Blackboard regarding what constitutes attendance. Students who receive financial aid or veterans benefits should refer to the Financial Aid section of this catalog for further information on attendance and how attendance impacts financial aid.

### Award of College Credit

As per IRSC District Board of Trustees 6Hx11-5.21 policy, Indian River State College is authorized to provide instruction and to confer degrees, certificates, and diplomas. IRSC programs shall be offered at the standard credit hour length, established and approved by the State

Board of Education. SB Rule 6A-14.030 defines credit as the following:

1. College credit. College credit is the type of credit assigned by IRSC to courses or course equivalent learning that is part of an organized and specified program leading to a baccalaureate, associate degree, technical certificate, or Applied Technology Diploma pursuant to the stipulations in subsections (2) through (9). One (1) college credit is based on the learning expected from the equivalent of fifteen (15) fifty-minute periods of classroom instruction; with credits for such activities as laboratory instruction, internships, and clinical experience determined by the institution based on the proportion of direct instruction to the laboratory exercise, internship hours, or clinical practice hours.

a. Lower division college credit. Lower division college credit is assigned to college credit courses offered to freshmen and sophomores (1,000 and 2,000 level courses).

b. Upper division college credit. Upper division college credit is assigned to college credit courses offered to juniors and seniors (3,000 and 4,000 level courses).

2. Clock Hour. A clock hour is the unit assigned to courses or course equivalent learning that is part of an organized and specified program leading to an Applied Technology Diploma or a Career and Technical Certificate, also known as a Vocational Certificate. It applies to postsecondary adult career courses as defined in Section 1004.02(25), F.S. One (1) clock hour is based on the learning expected from the equivalent of thirty (30) hours of instruction.

3. Developmental credit. Developmental credit is the type of credit assigned by IRSC to courses that provide degree seeking students who wish to enroll in college credit courses with additional academic preparation determined to be needed pursuant to Rule 6A-10.0315, F.A.C. One (1) developmental credit is based on the learning expected from the equivalent of fifteen (15) fifty-minute periods of classroom instruction.

4. Institutional credit. Institutional credit is postsecondary credit that is competency-based. Institutional credit is not guaranteed to automatically transfer.

5. Noncredit. Noncredit is a term indicating that credit, as defined herein, is not awarded. It applies to the instructional classifications of noncredit continuing education, adult general education, citizenship, recreational, community education, and community instructional services. The unit of measure is hours of instruction.

## Change of Address

Students may change their address, email address, and phone numbers by logging into Workday through MyPioneerPortal. 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](http://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 coursework 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. The 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 with 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.

IRSC defines a school official as the following: A school official typically includes a person employed by IRSC in an administrative, supervisory, academic, research, or support staff position (including law enforcement unit personnel and health staff); a person serving on the board of trustees; or a student serving on an official committee, such as a disciplinary or grievance committee. A school official also may include a volunteer or contractor outside of IRSC who performs an institutional service of function for which the school would otherwise use its own employees and who is under the direct control of the school with respect to the use and maintenance of PII from education records, such as an attorney, auditor, or collection agent or a student volunteering to assist another school official in performing his or her tasks.

IRSC defines legitimate educational interest as the following: A school official typically has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for IRSC.

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. 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 email account.

Questions regarding this annual notification of student FERPA rights may be directed to 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 an Academic Plan/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 Workday account at [irsc.okta.com](https://irsc.okta.com). In addition, students may evaluate their academic progress and status each semester by reviewing their Academic Progress Report in Workday.

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 Academic Progress Report 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.

## 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 \$100 per incorrect document.

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® 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 purpose 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 Koblebard Student Union (KSU) on the Massey Campus in Fort Pierce. Information is also available through RiverLife at <https://irsc.campuslabs.com/engage/>.

### 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 RiverLife for meeting dates.

### Clubs and Organizations

Academy of Future Teachers

Accounting Club

Achiever's Club

Adventist Campus Ministries

Alpha Phi Sigma

National Criminal Justice Honor Society

Ambassador Club

Anthropology Club

Best Buddies Club

Brain Bowl

Caring Through Crafting

Chess Club

Chastain Math Club

Christian Student Fellowship Club

Circle K International

Coalition for Christian Outreach

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

Fellowship of Christian Athletes

Flag Football League

Florida Ultra Endurance Academic Research

Future Alumni Association

Game Design & Development Club

Global Study Abroad

Graphic Design/Digital Media Club

Haitian Cultural Club

Hallstrom Astronomical Society

Health & Self Club

Health Occupation Students of America (HOSA)

Honors Club\*

Honor Society for Nursing\*

H.O.P.E.

Human Services Club

InterFaith Club

Interior Design Club

International Club



International F-1 Club  
 Intramurals  
 Investment Club  
 Kappa Delta Pi\*  
 Lambda Nu Honor Society\*  
 Laser Club IRSCOPE  
 LEAPers Club  
 Lesbian Gay Bisexual Transgender Questionable (LGBTQ) Alliance  
 Medical Laboratory Technology (MLT) Club  
 Music  
 National Society of Leadership & Success (Sigma Alpha Pi)\*  
 Nursing Students Association (NSA)  
 Phi Theta Kappa (PTK)\*  
 Pioneer Radio  
 Political Science & Debate Club  
 Practical Nursing  
 Pre-Law Pioneers  
 Psychology Club  
 River Readers Book Club  
 Science Club  
 Sigma Beta Delta Honor Society\*  
 Spanish Club  
 Student Veterans Organization (SVO)  
 Surgical Technology Club  
 Table Tennis Club  
 Theater Scholars  
 ToastMasters: Leaders Linked & Connected  
 Tomeu Mentors Club  
 Virtual Connections  
 Writing Club  
  
 Athletic Teams:  
 Baseball  
 Basketball (Men)  
 Basketball (Women)  
 Diving (Men)/(Women)

Softball  
 Swimming (Men)/(Women)  
 Volleyball

*\*GPA Requirement*

## Phi Theta Kappa

As a society which honors high academic achievement, the Nu Iota 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 49th consecutive National Championship, and the women's team won its 45th National Championship at the 2023 NJCAA meet. In 1990, 1996, and 2003, the teams were recognized in Sports Illustrated magazine.

The IRSC Baseball Team also gained prominence in 2011 when 3rd baseman, Cory Spangenberg, was Major League Baseball's #10 overall pick in the draft. The team also won four FCSAA state championships in 1979, 1993, 1995 and 1996, qualifying the team to compete in the JUCO World Series on two separate occasions. In 2002, the IRSC Softball Team won the NJCAA National Championship and has won numerous Southern Conference championships—the most recent in 2022.

IRSC's Basketball and Volleyball teams consistently distinguish themselves in Southern Conference and state competitions. The Women's Basketball Team won the 2023 Southern Conference Championship. The men's last Southern Conference Championship this year, 2023, moves them to a 4-year string of conference titles. The team reached the Elite 8 of the NJCAA National Basketball Tournament in 2021 and the Sweet 16 of the tournament in 2022. The IRSC Volleyball Team participated in the 2011 and 2013 State Tournaments and was named IRSC "Academic All-Stars" in January 2014, with a 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.

Indian River recently invested \$5.3 million into the baseball and softball complexes to bolster the facilities. The complex features a new field-house and locker room facility for the teams. The complex features two fenced-in fields and two 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 Massey 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 Nations, music and dance performances, 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 Office of Student Engagement and Leadership, the Campus Coalition Government Office, College Ombudsman/Student Advocate, the River Shop bookstore, 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 ID and parking decal. These are provided at no cost to the student.

## IRSC Public Media

IRSC Public Media broadcasts on three FM radio frequencies across the Treasure Coast and Lake Okeechobee. With main studios in the "Q" Building on the Massey Campus, the stations are the exclusive NPR affiliates in the region. The award-winning news department covers stories throughout the Treasure Coast and beyond. WQCS is also the state-designated primary Emergency Alert System station for the area. IRSC

students can get an inside look at IRSC Public Media by joining the Pioneer Radio Club.

WQCS-FM 88.9: NPR News & Talk, BBC, and local news

WQCP-FM 91.1: Classical music, jazz, opera, and other arts/culture programming

WQJS-FM 88.5: Lake O Public Radio. BBC News in the morning and jazz all day and night. (Available on the Treasure Coast on 88.9 HD2.)

88.9-HD3: IRSC River Radio, featuring Pop hits from yesterday and today.

More information is available at [www.wqcs.org](http://www.wqcs.org).

## ACADEMIC AND SUPPORT SERVICES

### IRSC Tutoring Centers (Academic Support Center)

IRSC's Tutoring Centers (also known as the Academic Support Centers) provide free resources and tutoring to help students meet the demands of their academic courses. In-person tutoring is available at all IRSC campuses, and provide assistance in English, reading, English for Academic Purposes, math, science and health science. Diagnostic/prescriptive programs are available based on individual student needs.

Other support services include subject matter workshops, test reviews for selected certification exams, the Writing Center and access to computers, lab models, and other academic resources.

Students also have access to free, online tutoring available through the Tutoring Center's website:  
<https://irsc.libguides.com/tutoring>

### Career and Transfer Services Overview

The Career and Transfer Services office is committed to supporting the Student Success mission by providing robust services to promote career readiness: career assessment, resume reviews, mock interviews, transfer services, job search strategies, internships, networking and career expos.

We utilize the following online resources and printed materials for our students: resume rubrics, mock interview rubrics, NACE Competencies, the Resume Guide and Optimal Resume, College Central Network, Job Interview Questions and Career Coach.

Utilizing an online resource, **Career Coach**, students are encouraged to explore careers and programs and make informed decisions about employment and further education. Students complete a **Career Assessment** to find out how their interests relate to the world of work and increase their understanding of the careers they may be suited for. Career advisors encourage students and graduates to further explore Career Coach for information on hiring trends and salary by career field. A career advisor follows up each week with students that have completed the career assessment.

#### The Career Ready Program

The **Career Ready** program promotes career readiness and professional development. Students achieve core competency skills that today's employers are seeking in order to be successful in the workforce. Steps to Complete the Program:

1. Develop Career Competencies
2. Build a Resume
3. Participate in a Mock Interview
4. Create a LinkedIn Profile and Network
5. Attend two Career Events
6. Meet with a Career Advisor and complete a survey.

#### Virtual and in-person Workshops

The Career Services team offers classroom presentations, in person and virtual workshops. We offer the following workshops each semester.

- Career Ready Program Orientation
- Resume Writing Workshop
- Finding an Internship Workshop
- Dress to Impress Workshop
- LinkedIn Networking Workshop
- Interview Preparation Workshop
- Job Search Strategies Workshop.

#### Transfer Services

IRSC has **transfer agreements** with several institutions to make it easy and affordable to earn a bachelor's or post-graduate degree. Specific Associate and Baccalaureate degrees transfer seamlessly to other public and private universities. The Career and Transfer Services team meets one-on-one with students as well as conducts **transfer workshops** on a regular basis, both face-to-face and virtually. These workshops include partner universities as well as IRSC Bachelor Degree representatives.

**Internships** are available to students and graduates to provide professional opportunities in their field and to develop additional work competencies.

#### Job Shadowing

Job shadowing allows students to spend time with a professional in their field in order to get a better understanding of that particular career and daily tasks.

#### Micro-Internships through Parker Dewey

Micro-Internships are short-term, paid, professional assignments. These projects enable students to demonstrate skills, explore career paths, and build their networks as they seek the right full-time role. Micro-internships can take place year-round, typically range from 5 to 40 hours of work, and are due between one week and one month after kick-off.

## Child Care Services

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

The Center is open to students, staff and community families looking for a quality educational experience for their children, ages 12 weeks up to 5 years old. 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 educational program offers a developmentally appropriate learning environment.

For further information on either program, contact the Child Development 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.*

The Student Accessibility Services staff provide auxiliary aid services, reasonable accommodations and academic advising to students who self-identify by submitting an application and documentation of a disability. The Student Accessibility Services advisors work with students and faculty to ensure reasonable accommodations are met college-wide and coordinate with outside agencies to provide services and access to resources for SAS students. The Student Accessibility Services staff also work with area high schools to assist prospective high school graduates applying to IRSC. Dual enrollment Students who receive accommodations through their high school must complete the IRSC Application for services (<https://irsc.edu/documents/student-resources/student-accessibility/student-accessibility-services-application-7-06-22.pdf>) and provide all required documentation of their disability to receive accommodations in IRSC classes.

Notetaking assistance, testing accommodations, electronic textbooks, readers and scribes for testing, and sign language interpreters may be arranged for eligible students through the Student Accessibility Services Office.

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 the offering of educational events.

Free services include:

- emergency medical care
- nursing assessment of acute and chronic health conditions
- health education
- mental health support and resources
- grief support group
- Pioneer Pantry
- crisis intervention
- access to student health insurance
- special programs and activities
- 

community resources

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://irsc.smartcatalogiq.com/Current/Catalog/Academic-and-Support-Services/Health-and-Wellness-Center>. 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

River Hammock is the student residence facility owned and operated by the Indian River State College Foundation, Inc. It is located at the Massey Campus in Fort Pierce.

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 and Wi-Fi internet service.

Information and lease forms for River Hammock are available through the IRSC Housing Office location in the small annex building south of the gymnasium (Building P) on the Massey Campus.

## Libraries

IRSC Libraries are 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 library faculty and staff are available to provide individual and group assistance and guidance.

IRSC students and employees are able to request items from libraries throughout Florida using inter-library loan. The Miley Library is also 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](#)) and Introduction to Internet Research (LIS 2004) are recommended one credit courses offered each term to teach students how to find, evaluate, and integrate sources into their personal and academic information needs.

### **The Charles S. Miley Library – Massey Campus, Fort Pierce**

The Miley Library provides full service library resources for using and accessing information resources in all formats. The library provides robust physical and digital collections, and in-person reference assistance for students. This library has a computer lab and study rooms. The IRSC Tutoring Center is also co-located in the Miley Library.

### **Pruitt Campus Library – Pruitt Campus, Port St. Lucie**

Operated in cooperation between the College and St. Lucie County, the joint-use library offers exceptional resources to students and residents of St. Lucie County including books, periodicals, and media collections which reflect the college curriculum, as well as a diverse collection of current literature. This library has a computer lab, study rooms, and a large children and young adult collection.

### **Brckett Library - Mueller Campus, Vero Beach**

Operated in cooperation between the College and the Indian River County Library System, the joint-use library offers exceptional resources to students and residents of Indian River County including books, periodicals, and media collections which reflect the college curriculum, as well as a diverse collection of current literature. This library has study rooms, and a large children and young adult collection. The Marion C. Link Electronic Resource Center provides students with online access to a wealth of information resources, including the online library catalog, e-books, library databases, online library research and citation style guides and the worldwide resources of the internet.

### **Robert Morgade Library - Chastain Campus, Stuart**

Operated in cooperation between the College and the Martin County Library System, the joint-use library serves both students and Martin County residents and provides access to books, periodicals, and media collections which reflect the college curriculum and Martin County resident interest. The library also has a large children and young adult collection, computers, study rooms, and a makerspace.

### **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. The collection is co-located in the Dixon Hendry Tutoring Center (Academic Support Center).

## 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 Associate Vice President of Student Life serves as the College Ombudsman, and is accountable to the College President and the Vice President of Student Affairs. The Student Ombudsman, Dr. Floralba Arbelo, can be reached at (772) 462-7474 or [farbelo@irsc.edu](mailto:farbelo@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](http://www.irsc.edu) 24/7, 365 days per year - click on the RiverSupport link at <https://esweb.irsc.edu/Mariner/student/ssp/faq.jsp> 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

All students may order official transcripts through Parchment at [www.parchment.com](http://www.parchment.com).

Students who have access to Workday may request official transcripts to be sent to other Florida public institutions by logging into [MyPioneerPortal](#).

All obligations to the College must be satisfied before transcripts or education verifications will be released.

If you have questions about outgoing transcripts, contact Student Records at 772-462-7460 or [records@irsc.edu](mailto:records@irsc.edu).

## 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](http://www.irsc.edu)

Parking decals are required for employee and student vehicles. Students may obtain a decal from the Student Affairs Office on the Massey Campus in Fort Pierce or from the Admissions Office at branch campuses at no charge.

Reserved spaces are for employees only. Students parking in a "Reserved" space may be ticketed and/or towed at the owner's expense. Students may park in a designated "Reserved" space after 5:00 p.m. on a Saturday or Sunday.

No parking:

- on sidewalk
- on grass
- by a fire hydrant
- facing the wrong direction (no backing into spaces)
- in handicap spaces without a handicap tag
- on the white-striped, safety pavement markings
- occupying more than one parking space
- in visitor parking spaces
- obstructing traveled portion of road/parking lot
- by no parking signs
- in loading zones.

Parking regulations are administered and enforced by IRSC Campus Safety and Security.

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.

## Florida Virtual Campus (FLVC)

FLVC has a family of services including:

- FLVC Library Services: operates the library system and services utilized by the State University System and Florida College System, along with a shared catalog and statewide collection of online journals, e-books, and other e-resources
- Distance Learning and Student Services (DLSS): provides innovative educational services for students, educators, and administrators in Florida, DLSS operates several statewide services including FloridaShines.
- FloridaShines: works with the state's public colleges and universities and other partners to help students succeed in school and beyond. IRSC students can obtain transcripts, grades, transient student forms, and transfer program admission information. They also use the online service for many purposes including conducting graduation checks and A.A. Degree transfer evaluations, and gathering information about career exploration.



## 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.

#### 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 designated on their transcript.

Computation of Academic Awards for the Baccalaureate Degree (p. 64) is based on all coursework attempted (excluding developmental education).

Computation of Academic Awards for the Associate in Arts Degree (p. 81) 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. 94) and the Associate in Applied Science (p. 94) 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 their degree program should meet with their assigned advisor prior to the start of their last semester to review their Academic Progress Report to ensure that they have met all program requirements for graduation..

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 commencement regalia and a diploma cover. Upon successful completion of all courses, the degrees or certificates will be recorded on the student transcript, with an electronic diploma emailed to the student's River Mail shortly after commencement, and a hard-copy diploma or certificate will be mailed within two to three weeks at the end of the term.

### 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 Massey Campus in Fort Pierce 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/](http://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:

- Certificate of Professional Preparation
- 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 and Technical Education 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.

Required placement scores and exemptions to P.E.R.T. testing and are listed on <https://irsc.edu/admissions/pert-test.html> and outlined in Section 1008.30, Florida Statutes.

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. 34).

## 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. To this end Indian River College strives to cultivate the following knowledge and skills within its general education curriculum.

In compliance with Rule 6A-14.0303, General Education Core Course Options, beginning in the 2022-23 academic year and thereafter, students entering associate in arts, associate in science or associate in applied science, or baccalaureate degree programs must complete at least one (1) core course from each of the general education subject areas prior to the awarding of their degree.

Pursuant to s. 1007.25(4), F.S., all students initially entering a public postsecondary institution in the 2022-23 academic year (Fall 2022), and thereafter, and enroll in general education core courses are eligible for the awarding of a digital badge. Florida public postsecondary institutions now offer the Fundamentals of Written Communication digital badge. With this badge, students will be able to not only enhance your personal communications but also convey to future employers that you have acquired vital skills needed for professional success.

The Fundamentals of Written Communication digital badge is awarded automatically when a grade of C or better is earned in English Composition I (ENC 1101) or a course for which ENC 1101 is a prerequisite, and added to your FASTER transcript.

Effective written communication is the ability to communicate ideas, information, and perspectives clearly, adapting a message to different audiences and situations, and using the appropriate style to convey meaning in various written contexts.

By completing ENC 1101, students will demonstrate information literacy, comprehension of written material, and conveying information in writing for a variety of rhetorical purposes and audiences.

Some of the learning outcomes associated with ENC 1101 that results in this badge include:

- Examining and analyzing written material
- Synthesizing information and ideas
- Developing content relevant to the purpose
- Demonstrating the ability to write to a specific audience
- Presenting a perspective informed by research and critical thinking
- Revising written communication based on feedback.

Effective written communication is important in the workplace, and below is a list of some of the benefits:

- Enhances an employee's ability to interpret and evaluate a wide variety of written material
- Promotes research, critical thinking, and problem solving
- Advances the development of clearly written material relevant to the intent
- Enhances the use of appropriate language for an intended audience
- Increases the competent, effective, and responsible use of information.

### General Education Learning Outcomes

The general education curriculum at Indian River State College provides a range of knowledge and skills to cultivate the habits that will promote lifelong learning and prepare students to participate responsibly in a rapidly changing, diverse, and complex global society. To this end Indian River State College seeks to provide the following learning outcomes for all students.

#### Behavioral and Social Analysis

- Demonstrate critical thinking skills in the analysis, evaluation, and formation of ideas about the human experience.

#### Communication

- Demonstrate effective communication skills for a variety of audiences.

#### Critical Thinking

- Demonstrate ability to interpret meaning and draw conclusions using evidence as support.

#### Mathematical Reasoning

- Demonstrate mathematical reasoning in problem solving. **Scientific Reasoning**

- Demonstrate scientific 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
<b>and will select one from the following:</b>		
ENC 1102	English Composition II	3
ENC 1107	Advanced College Writing	3
ENC 2210	Technical Writing	3
AML 2010	American Literature through Reconstruction	3
AML 2020	American Literature from Reconstruction to Present	3
ENL 2012	English Literature: Medieval to Romantic Era	3
ENL 2022	English Literature: Romantic Era to present	3
LIT 2110	World Literature from ancient through the Renaissance	3
LIT 2120	World Literature from the Enlightenment through the present	3
MMC 2100	Writing for Mass Communications	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. 60).

AML 2010	American Literature through	3
----------	-----------------------------	---

AML 2020	Reconstruction American Literature from Reconstruction to Present	3
ARH 1000	Art Appreciation	3
ENC 1102	English Composition II	3
ENL 2012	English Literature: Medieval to Romantic Era	3
ENL 2022	English Literature: Romantic Era to present	3
ENL 2330	Introduction to Shakespeare	3
HUM 1020	Introduction to Humanities	3
IDS 1110	The Pursuit of Knowledge	3
IDS 1955	Interdisciplinary Study Abroad	3
LIT 1000	Introduction to Literature	3
LIT 2110	World Literature from ancient through the Renaissance	3
LIT 2120	World Literature from the Enlightenment through the present	3
MMC 2100	Writing for Mass Communications	3
MUL 2010	Music Appreciation	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 1300	Introduction to World Religions	3
THE 1000	Introduction to Theatre (Drama)	3
THE 2300	Survey of Dramatic Literature	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.

**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. 60).

MAC 1105	College Algebra	3
MGF 1106	Survey in Mathematics	3
MGF 1107	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

# CERTIFICATE OF PROFESSIONAL PREPARATION

## Certificate of Professional Preparation

CERTIFICATE IN BIOMEDICAL SCIENCES (p. 63)

EDUCATOR PREPARATION INSTITUTE (p. 63)

### Certificate of Professional Preparation Requirements

The **Certificate of Professional Preparation** program provides college-level instruction to prepare baccalaureate degree holders for licensure, certification, credentialing examinations, or other demonstrations of competency necessary for entry into professional occupations.

The Certificate of Professional Preparation is awarded to a student who has completed the required courses within the program. Students must submit their official postsecondary transcript(s), and complete at least twenty-five percent (25%) of the Certificate requirements at IRSC with a cumulative GPA of 2.0 or higher.

### CERTIFICATE IN BIOMEDICAL SCIENCES - P0010

This program is for baccalaureate program for students who are preparing for graduate-level medical school, dental school, pharmacy school or other health-related professional school. It is a 15-semester hour program in upper-level biology courses that will prepare students for the graduate school curriculum and entrance exams. Transfer credit will be given for successfully equivalent courses listed on the student's official transcript.

### DEGREE REQUIREMENTS

#### Required program

BCH 4053	Biochemistry I	3
BCH 4053L	Biochemistry I Laboratory	1
PCB 3063	Introduction to Genetics	3
PCB 3063L	Introduction to Genetics Laboratory	1
PCB 4233	Immunology	3
ZOO 3733	Human Anatomy	3
ZOO 3733L	Human Anatomy Laboratory	1

Grade of "C" or higher required in all courses.

### EDUCATOR PREPARATION INSTITUTE - F0020

This program of study was designed for non-education 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.

### REQUIREMENTS

#### Requirements

Required courses for Certification in Elementary Education (grades K-6) • Prekindergarten-Primary Education (Age 3 through grade 3) • Middle Grades English (grades 5-9) • English (grades 6-12) • Reading (grades K-12) • Reading (endorsement) • English to Speakers of Other Languages (ESOL) (grades K-12)

EDF 3214	Human Development and Learning	3
EDF 4430	Measurement, Evaluation and Assessment	3
EDG 4410	Classroom Management and Communication	3
TSL 4100	ESOL Methods, Curriculum and Assessment	3
EDG 3343	Instructional Strategies	3
RED 3342	Foundations of Research Based Practices in Reading Education and Application of Instruction	3
EDG 3949	EPI Practicum	1
RED 4519	Diagnostic and Instructional Interventions in Reading	3
RED 4654	Differentiated Instruction Foundations and Applications	3
RED 4854	Reading Practicum	2

#### Required courses for All Other Certification Areas:

EDF 3214	Human Development and Learning	3
EDF 4430	Measurement, Evaluation and Assessment	3
TSL 4100	ESOL Methods, Curriculum and Assessment	3
EDG 4410	Classroom Management and Communication	3
EDG 3343	Instructional Strategies	3
EDG 3949	EPI Practicum	1
RED 3342	Foundations of Research Based Practices in Reading Education and Application of Instruction	3

## BACHELOR DEGREE PROGRAMS

### Bachelor of Science

ACCOUNTING (p. 67)

BIOLOGY  
(p. 68)

BUSINESS ADMINISTRATION (p. 70)

CRIMINAL JUSTICE (p. 70)

EDUCATION (p. 72)

ELEMENTARY EDUCATION with READING and  
ESOL ENDORSEMENTS (p. 72)

EXCEPTIONAL STUDENT EDUCATION with  
READING and ESOL ENDORSEMENTS (p. 73)

MIDDLE GRADES MATHEMATICS (p. 74)

EDUCATOR PREPARATION INSTITUTE (p. 63)

HEALTHCARE MANAGEMENT (p. 75)

HUMAN SERVICES (p. 76)

YOUTH & FAMILY STUDIES (p. 76)

ADDICTIONS STUDIES (p. 77)

HUMAN SERVICES GENERALIST (p. 76)

INFORMATION TECHNOLOGY MANAGEMENT  
AND CYBER SECURITY (p. 77)

(p. 77)

NURSING (p. 78)

(p. 78)

PUBLIC ADMINISTRATION (p. 79)

EMERGENCY PLANNING AND MANAGEMENT  
CONCENTRATION (p. 79)

PUBLIC POLICY AND LEADERSHIP  
CONCENTRATION (p. 80)

### Bachelor Of Applied Science

DIGITAL MEDIA (p. 71)

GRAPHIC DESIGN & VISUAL COMMUNICATION  
CONCENTRATION (p. 71)

ANIMATION, GAMING, AND MODELING  
CONCENTRATION (p. 72)

ORGANIZATIONAL MANAGEMENT (p. 78)

### 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](http://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. NOTE: SYG X000 completed in Fall 2024 or after will not satisfy general education course credit for the subject discipline of social science.

Indian River State College requires all incoming students from the 2018-2019 academic year and beyond, to meet the Civic Literacy requirement. All first-time-in-college (FTIC) students entering all Florida College System (FCS) and State University System (SUS) institutions must demonstrate competency in civic literacy by the time they graduate per Florida Statute 1007.25 and Florida Board of Governors Regulation 8.006. There are three cohorts of students currently matriculating at Florida public institutions subject to varying Civic Literacy requirements. As demonstrated below, the exact civic literacy requirements are based on the academic term in which a student first enrolled in a Florida public institution. If you are unsure which cohort you fall into, schedule an appointment with your assigned academic advisor.

**Cohort 1:** Prior to the award of an **associate in arts** or **baccalaureate degree**, first-time-in-college students entering a Florida College System institution between the 2018-19 to 2020-21 school year must demonstrate competency in civic literacy by successfully completing **either** a course **or** an exam.

**Cohort 2:** Prior to the award of an **associate in arts** or **baccalaureate degree**, students initially entering a Florida College System institution in the 2021-22 school year, and thereafter, must demonstrate competency in civic literacy by successfully completing a course **and** an exam.

**Cohort 3:** Prior to the award of an **associate in science** or **associate in applied science** degree, students initially entering a Florida College System institution in the 2022-23 school year, and thereafter, must demonstrate competency in civic literacy by successfully completing a course **and** an exam.

In compliance with the Florida Department of Education Rule 6A-10.02413, students must demonstrate civic literacy competency prior to the award of an Associates or Bachelors degree. The State Board of Education defines civics literacy competency as follows:

1. Earning a passing grade in AMH2020 or POS1041 **AND** earning a passing score on the Florida Civics Literacy Exam

OR

2. Passing one of the following exams which gives students credit for the course and civics literacy exam

AP Government and Politics: United States (3)

AP United States History (4)

CLEP: American Government (50).

## DEGREE REQUIREMENTS

### Communications - 6 credits

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

ENC 1101	English Composition I And	3
ENC 1102	English Composition II	3
ENC 1107	Advanced College Writing	3
ENC 2210	Technical Writing	3
AML 2010	American Literature through Reconstruction	3
AML 2020	American Literature from Reconstruction to Present	3
AML 2600	Introduction to African American Literature	3
ENL 2012	English Literature: Medieval to Romantic Era	3
ENL 2022	English Literature: Romantic Era to present	3
LIT 2110	World Literature from ancient through the Renaissance	3
LIT 2120	World Literature from the Enlightenment through the present	3
LIT 2190	Caribbean Literature	3
MMC 2100	Writing for Mass Communications	3
SPC 1608	Public Speaking	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..

SPC 1608 changes from A.A. elective credit to Communications General Education credit, effective Spring 2024.

### 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 through Reconstruction	3
AML 2020	American Literature from Reconstruction to Present	3
AML 2600	Introduction to African American Literature	3

	Literature	
ARH 1000	Art Appreciation	3
DAN 2100	Dance Appreciation	3
ENC 1102	English Composition II	3
ENL 2012	English Literature: Medieval to Romantic Era	3
ENL 2022	English Literature: Romantic Era to present	3
ENL 2330	Introduction to Shakespeare	3
HUM 1020	Introduction to Humanities	3
IDS 1110	The Pursuit of Knowledge	3
IDS 1955	Interdisciplinary Study Abroad	3
LIT 1000	Introduction to Literature	3
LIT 2110	World Literature from ancient through the Renaissance	3
LIT 2120	World Literature from the Enlightenment through the present	3
LIT 2190	Caribbean Literature	3
MMC 2100	Writing for Mass Communications	3
MUL 2010	Music Appreciation	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 1071	Eastern Philosophies	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 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 1106, MGF 1107, STA 2023 to comply with General Education Core Course Options.

2023-2024 is the last year MGF 1106 and MGF 1107 meet General Education Core Course Options for Mathematics subject area.

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 1106	Survey in Mathematics	3
MGF 1107	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 1053 to comply with General Education Core Course Options. IRSC does not offer 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 1020	Introduction to Human Biology	3
BSC 1020L	Introduction to Human Biology Lab	1
BSC 1084	Survey of the Human Body	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
BSC 2085	Anatomy & Physiology I	3
BSC 2085L	Anatomy & Physiology I Lab	1
BSC 2086	Anatomy & Physiology II	3
BSC 2086L	Anatomy & 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
GLY 1010	Introduction to Geology	3
OCB 1000	Introduction to Marine Biology	3
OCB 1630	Marine Ecology	3
OCE 2001	Introduction to Oceanography	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 1053	College Physics I	3
PHY 1053L	College Physics I Lab	1
PHY 1054	College Physics II	3
PHY 1054L	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.

NOTE: SYG 2000 completed in Fall 2024 or after will not satisfy general education core course credit for the subject discipline of social science.

Students must take 6 credits from the following:

AMH 2010	American History: Discovery through Reconstruction	3
AMH 2020	American History: Reconstruction 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 General Anthropology	3
DEP 2004	Human Development	3
ECO 2013	Principles of Economics Macro	3
ECO 2023	Principles of Economics Micro	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. 64) 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

ACG 2001, ACG 2011, ACG 2071 require a grade of "C" or higher to be admitted in the program.

#### 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
MAR 3023	Marketing Management	3

ACG 3131 (p. 161), ACG 3141 (p. 161), ACG 3341 (p. 161), ACG 3401 (p. 161), ACG 4501 (p. 162), ACG 4651 (p. 162), TAX 4001 (p. 280), TAX 4101 (p. 280) 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
MAN 4504	Operations Management	3
MAR 4613	Marketing Research	3
MAN 3802	Strategies and Technology Entrepreneurship	3
MAN 4301	Human Resource Management	3
MAN 3240	Organizational Behavior	3
MAN 4046	Perspective in Leadership	3
TAX 4940	IRS VITA Tax Practicum	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 Capstone II, BSC 4911L (p. 234), with a grade of "C" or higher.

Refer to General Education Requirements (p. 64) for additional requirements.

**Transfer from Associate Degree: 24 credits**

**General Education Requirement: 36 credits**

**Core Biology Concentration: 28 credits**

**Major Concentration Courses: 21 credits**

**Additional Electives: 11 credits**

## BACHELOR OF SCIENCE DEGREE IN BIOLOGY - S0070

### DEGREE REQUIREMENTS

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

Students planning to go to graduate or professional school after obtaining the B.S. in Biology must take MAC2311.

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

All Common Prerequisite Required Courses require a grade of "C" or higher.

**Core Biology Concentration (Required: 28 credits)**

BCH 4053	Biochemistry I	3
BCH 4053L	Biochemistry I Laboratory	1
BSC 3464	Biotechnology I	3
BSC 3464L	Biotechnology I Laboratory	1
BSC 3931	Junior Seminar	1
ISC 4910L	Senior Capstone I	2
ISC 4911L	Senior Capstone 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
PHY 1053	College Physics I	3
PHY 1053L	College Physics I Lab	1
PHY 1054	College Physics II	3

PHY 1054L	College Physics II Lab	1
-----------	------------------------	---

**Additional Electives - Required 11 credits**

**Additional 11 credits of General Education or Science courses required. Secondary Science Education Concentration requires 11 credits of General Education.**

**Concentration Electives (Select 21 credits):**

BCH 4054	Biochemistry II	3
BOT 3015	Plant Biology	3
BSC 3312	Marine Biology	3
BSC 3465	Biotechnology II	3
BSC 3465L	Biotechnology II Laboratory	1
BSC 4422	Applications in Biotechnology	3
BSC 4434	Introduction to Bioinformatics	3
ISC 3426	Health Professional Exam Preparation	1
ISC 3940	Community-Based Medical Shadowing	1
PCB 3674	Evolutionary Biology	3
PCB 4023	Cell Biology and Physiology	3
PCB 4023L	Cell Biology & Physiology Laboratory	1
PCB 4024	Molecular Biology	3
PCB 4043	General Ecology	3
PCB 4043L	General Ecology Laboratory	1
PCB 4233	Immunology	3
PCB 4701	Human Physiology	3
PCB 4701L	Human Physiology Laboratory	1
ZOO 3733	Human Anatomy	3
ZOO 3733L	Human Anatomy Laboratory	1

**Secondary Science Education Concentration Required - 15 credits**

The Secondary Science Education Concentration in Biology also requires 6 credit of additional Secondary Science Education Concentration electives.

EDF 4430	Measurement, Evaluation and Assessment	3
EDG 3343	Instructional Strategies	3
EDG 4410	Classroom Management and Communication	3
RED 3360	Teaching Reading in Middle/Secondary Schools	3
TSL 4100	ESOL Methods, Curriculum and Assessment	3

**Secondary Science Education Concentration Electives (Select 6 credits)**

Additional 6 credits of upper level BSC, BCH, BOT, PCB, or ZOO courses required with at least one course must be taken with an associated laboratory section.

BCH 4054	Biochemistry II	3
BOT 3015	Plant Biology	3
BSC 3465	Biotechnology II	3
BSC 3465L	Biotechnology II Laboratory	1

BSC 4422	Applications in Biotechnology	3
BSC 4434	Introduction to Bioinformatics	3
ISC 3426	Health Professional Exam Preparation	1
ISC 3940	Community-Based Medical Shadowing	1
PCB 3674	Evolutionary Biology	3
PCB 4023	Cell Biology and Physiology	3
PCB 4023L	Cell Biology & Physiology Laboratory	1
PCB 4024	Molecular Biology	3
PCB 4043	General Ecology	3
PCB 4043L	General Ecology Laboratory	1
PCB 4233	Immunology	3
PCB 4701	Human Physiology	3
PCB 4701L	Human Physiology Laboratory	1
ZOO 3733	Human Anatomy	3
ZOO 3733L	Human Anatomy 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. 64) 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. 64) for additional requirements.

## BACHELOR OF SCIENCE IN CRIMINAL JUSTICE - S0120

### DEGREE REQUIREMENTS

**Core Criminal Justice Concentration 21 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
CCJ 4054	Criminal Justice Ethics and Liability	3
CJL 3010	Legal Aspects of Policing	3
CCJ 4700	Methods of Research in Criminal Justice	3

**Concentration Electives - must select a minimum of three (3) 3000 and/or 4000 level courses**

Select at least 9 credits from the following:

CJJ 3015	Juvenile Justice System	3
CCJ 4666	Victimology	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

**Additional Electives - 30 credits**

Additional credits may be from lower or upper level courses.

Lower division coursework may be from the A.A. or A.S. degree. Recommended areas of study are criminal justice, fire science, paralegal, homeland security, emergency medical services, or other public safety academic areas.

It is strongly recommended that coursework include key skill-building courses such as:

CCJ 1600	Deviant Behavior	3
CCJ 2020	Introduction to Criminal Justice	3
CJC 2000	Introduction to Corrections	3
CJL 2100	Criminal Law	3
CJL 2500	Introduction to the Courts	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. 64) for additional requirements.

### 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
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	Portfolio-Graphic Design and Vis Com	3
GRA 4954	Capstone Project -GD and Vis Com	3
CGS 4828	Advanced Web Design	3
	Or	
GRA 4759	Scripting for Websites 2	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

**Additional Electives (21 credits)**

Additional credits may be from lower or upper level courses. However, the following lower division courses are strongly recommended.

DIG 1000	Introduction to Digital Media	3
DIG 1115	Digital Imaging 1	3
DIG 2030	Digital Video Fundamentals	3
GRA 1129	Visualization Basics	3
GRA 1151	Vector Design 1	3
GRA 1206	Typography	3
CGS 1821	Website Development	3
	Or	
DIG 2500	Fundamentals of Interactive Web Design	3

**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 3362	3D Character Animation	3
DIG 3375	Modeling Vehicles and Structures	3
DIG 3713	Gaming and Simulation Principles	3
DIG 4354	Character Modeling	3
DIG 4394	Motion Graphics: Advanced	3

	Compositing	
DIG 4792	Textures and Lighting	3
DIG 4950	Portfolio-Animation, Gaming, & Modeling	3

**Concentration Electives (select 9 credits)**

CAP 3054	Casual Game Development	3
DIG 3253	Digital Audio Production	3
DIG 4355	Artificial Effects and Environments	3
DIG 4433	Advanced Animation Techniques	3
DIG 4931	Special Topics in Digital Media	3
GRA 4941	Digital Media Internship/Practicum	3
DIG 4951	Capstone Project - Animation, Gaming, and Modeling	3
GRA 3735	Multimedia Video Production	3

**Additional Credits (21 Credits)**

Additional credits may be from lower or upper level courses. However, the following lower division courses are strongly recommended.

COP 2000	Introduction to Computer Programming I	3
DIG 1000	Introduction to Digital Media	3
DIG 1115	Digital Imaging 1	3
DIG 2302	3D Modeling & Animation 1	3
DIG 2303	3D Digital Animation 2	3
GRA 1129	Visualization Basics	3
DIG 2030	Digital Video Fundamentals	3
	Or	
DIG 1143	Video Making for Social Media	3

**Bachelor's Degree Programs in  
Education****BACHELOR OF SCIENCE DEGREE IN  
ELEMENTARY EDUCATION WITH READING  
AND ESOL ENDORSEMENTS - S0160****120 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 subjects 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. A passing score on the FTCE General Knowledge (GK) Exam is a pre-requisite to EDG 4376 (GK English Language Arts and Writing), EDG 4377 (GK Math),



EDG 4940 (GK Math), RED 4654 (GK Reading), and RED 4854 (GK Reading).

3. 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.
4. Successful completion of Student Teaching (EDE 4936 and EDE 4941).
5. 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: EDG 3620, EDG 4377, EDG 4376, EDG 4940, EEX 4066 and LAE 4416.

Refer to General Education Requirements (p. 64) for additional requirements.

Also required: Completion of all lower-division state-mandated common prerequisites including the Education prerequisites: EDF 2005 (p. 199).

*\*This program includes multiple field experience requirements in Florida schools.*

**Transfer from Associate Degree: 24 credits**

**General Education Requirement: 36 credits**

**Major Concentration Courses: 60 credits**

### DEGREE REQUIREMENTS

#### Major Concentration (60 credits)

SLS 3318L	Orientation to Education Programs	0
EDF 3214	Human Development and Learning	3
RED 3342	Foundations of Research Based Practices in Reading Education and Application of Instruction	3
EDG 3620	Curriculum and Instruction	3
EDG 4410	Classroom Management and Communication	3
EME 3410	Integrating Technology in the Classroom	3
EDF 4430	Measurement, Evaluation and Assessment	3
EDG 4377	Integrating Mathematics and Science	3
EEX 4601	Effective Behavioral Interventions and Practices in Exceptional Students	3
TSL 4081	Second Language Acquisition and Cross-Cultural Communication	3
EDG 4940	Integrating Mathematics and Science Practicum	1
EEX 4066	Educational Programming in Exceptional Student Education	3
RED 4519	Diagnostic and Instructional	3

	Interventions in Reading	
LAE 4416	Children's Literature in Elementary Education	3
EDG 4376	Integrating Language Arts and Social Science	3
RED 4854	Reading Practicum	2
RED 4654	Differentiated Instruction Foundations and Applications	3
TSL 4100	ESOL Methods, Curriculum and Assessment	3
EDE 4936	Seminar in Elementary Education	3
EDE 4941	Internship for Elementary Education	9

### 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. A passing score on the FTCE General Knowledge (GK) Exam is a pre-requisite to EDG 4376 (GK English Language Arts and Writing), EDG 4377 (GK Math), EDG 4940 (GK Math), RED 4654 (GK Reading), and RED 4854 (GK Reading).
3. 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.
4. Successful completion of Student Teaching (EEX 4941 and EEX 4945).
5. 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. 64) for additional requirements.

Also required: Completion of all lower-division state-mandated common prerequisites including the Education prerequisites: EDF 2005 (p. 199).

*\*This program includes multiple field experience requirements in Florida schools.*

**Transfer from Associate Degree : 24 credits**

**General Education Requirement: 36 credits**

**Major Concentration Courses: 61 credits**

## DEGREE REQUIREMENTS

### Major Concentration (61 credits)

SLS 3318L	Orientation to Education Programs	0
EDF 3214	Human Development and Learning	3
RED 3342	Foundations of Research Based Practices in Reading Education and Application of Instruction	3
EEX 4221	Educational Assessment of Exceptional Students	3
EDG 4410	Classroom Management and Communication	3
EME 3410	Integrating Technology in the Classroom	3
EDF 4430	Measurement, Evaluation and Assessment	3
EDG 4377	Integrating Mathematics and Science	3
EEX 4601	Effective Behavioral Interventions and Practices in Exceptional Students	3
TSL 4081	Second Language Acquisition and Cross-Cultural Communication	3
EEX 4264	Curriculum and Instruction for Students with Disabilities K-5	3
EDG 4940	Integrating Mathematics and Science Practicum	1
EEX 3103	Survey of Normal/Abnormal Language and Speech	1
RED 4519	Diagnostic and Instructional Interventions in Reading	3
EEX 4265	Curriculum and Instruction for Students with Disabilities 6-12	3
RED 4854	Reading Practicum	2
RED 4654	Differentiated Instruction Foundations and Applications	3
TSL 4100	ESOL Methods, Curriculum and Assessment	3
EDG 4376	Integrating Language Arts and Social Science	3

EEX 4941	Internship in Exceptional Student Education	9
EEX 4945	Seminar in Exceptional Student Education	3

## 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, and MAE 4932).
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.

*\*This program includes multiple field experience requirements in Florida schools.*

**Transfer from Associate Degree : 24 credits**

**General Education Requirement: 36 credits**

**Major Concentration Courses: 60 credits**

## DEGREE REQUIREMENTS

### Major Concentration (60 credits)

SLS 3318L	Orientation to Education Programs	0
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 3342	Foundations of Research Based Practices in Reading Education and Application of Instruction	3
STA 2023	Elementary Statistics I	3
TSL 4100	ESOL Methods, Curriculum and Assessment	3
MAE 4945	Student Teaching in Mathematics Math Elective	10 3

## 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 36 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. 64) for additional requirements.

## 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	3
	Or	
CGS 1060	College Computing	3

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

#### Core Healthcare Management Concentration (36 credits)

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

#### Electives

Additional credits may be from lower or upper level courses.

Lower division coursework may be from the A.A. or A.S. degree.

It is strongly recommended that coursework include key skill-building courses from the HSC and HSA prefix such as:

HSC 1001C	Introduction to Healthcare Management	4
-----------	---------------------------------------	---

HSC 1632C	Overview of Healthcare Delivery	3
HSC 1653	Healthcare Ethics	3
HSC 2802C	Health Science Seminar	4

## 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. 64) for additional requirements.

#### DEGREE REQUIREMENTS

##### Core Courses (24 Credits)

HUS 3300	Humanistic and Existential Therapy	3
HUS 3314	Cognitive and Behavioral Therapy	3
MHS 3460	Crisis Intervention	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
HUS 4945	Capstone - Advanced Internship in	6

#### Human Services

#### Additional Electives

Additional credits may be from lower or upper level courses.

Lower division coursework may be from the A.A. or A.S. degree.

It is strongly recommended that coursework include key skill-building courses with an HUS prefix.

### HUMAN SERVICES GENERALIST CONCENTRATION - S0080

#### DEGREE REQUIREMENTS (21 CREDITS)

##### Course Selection

HUS 3350	Issues in Intimate Partner 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 Intimate Partner 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 4574	Issues of Aging and Family Dynamics	3
HUS 4361	High Risk and Offender Youth	3
HUS 4364	Youth, Drugs, and Gangs	3
HUS 4442	Addictions Family Counseling	3

Select 21 credits from above courses.

## ADDICTIONS STUDIES CONCENTRATION - S0100

### DEGREE REQUIREMENTS (21 CREDITS)

#### Course Selection

HUS 3409	Addictive Experiences	3
HUS 4407	Substance Abuse and Aging	3
HUS 4410	Internet Addictions	3
HUS 4416	Issues in Impulse Control	3
HUS 4462	Gender Issues in Treatment and Recovery	3
HUS 4361	High Risk and Offender Youth	3
HUS 4364	Youth, Drugs, and Gangs	3
HUS 4442	Addictions Family Counseling	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 33 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. 64) for additional requirements.

## 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
	Or	
SPC 1017	Fundamentals of Speech Communication	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

#### Major Concentration 33 credits

CNT 4406	Network Security and Cryptography	3
ISM 3011	Introduction to Management Information Systems	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 Systems Technology	3

#### Electives 27 credits:

Recommended areas of study include courses with COP, CAP, CNT, CET, CGS, CIS, CTS, or ISM prefixes.

It is strongly recommended that coursework include key skill-building courses such as:

CET 1178	A+ Certification Hardware	3
CET 1179C	A+ Certification Software	3
COP 2030	Introduction to Python	3
CTS 1104	Windows Operating Systems Fundamentals	3
CTS 1155	Introduction to Help Desk Concepts	3
CTS 1334	Windows Server	3
CTS 2106	Linux Fundamentals	3
CTS 2651	CCNA2: Switching, Routing, & Wireless Essentials	3

CTS 2652 CCNA3: Enterprise Networking 3

## 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. 64) 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	3

	Care	
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 39 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. 64) for additional requirements.

## BACHELOR OF APPLIED SCIENCE DEGREE IN ORGANIZATIONAL MANAGEMENT - R0010

### DEGREE REQUIREMENTS

#### Major Concentration Courses 39 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

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
	Additionally select 3 - 6 credits from	
MAN 4504	Operations Management	3
GEB 4930	Selected Topics in Management	3
MAN 4442	International Business	3
MAR 4613	Marketing Research	3

*If GEB 4970 is selected student must take six (6) credits.*

*MAN 4504 is highly recommended from above selection.*

### Electives

Lower division coursework may be from the A.A. or A.S. degree. Recommended area of study are general business, management, marketing, finance, business law, or other academic areas in business.

It is strongly recommended that coursework include key skill-building courses such as:

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
BUL 2241	Business Law I	3
FIN 2001	Introduction to Finance	3
FIN 1100	Personal Finance	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. 64) 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.

### 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. 64) for additional requirements.

### DEGREE REQUIREMENTS

#### Core Courses - 42 credits

PAD 3003	Intro to Public Administration	3
PAD 3104	Organizational Behavior and Administration	3
DSC 3215	Emergency Planning	3
DSC 4218	Emergency Planning II	3
PAD 3844	Public Health and Emergency Management	3
PAD 3372	Communication in Emergency Management	3
PAD 3034	Policy Development and	3

	Implementation	
PAD 3223	Public Budgeting and Finance	3
PAD 3330	Urban and Regional Planning	3
PAD 3431	Leadership	3
PAD 4320	Program Evaluation in Public Management	3
PAD 4046	Values, Ethics, and Conflict Resolution	3
PAD 4332	Strategic Planning	3
PAD 4879	Capstone in Public Administration	3

**Electives**

Elective requirements for student who have earned an A.A. degree - 18 credits

General Education Requirements for students who have earned an A.S. degree - 21 credits

It is highly recommended that students choose the Emergency Administration and Management electives.

PAD 4442	Public Relations for Public Managers	3
PAD 4806	State and Local Government Administration	3
PAD 4414	Public Personnel Management	3
PAD 4603	Administrative Law for Public Administrators	3
FES 3803	Multi-Agency Incident Command	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. 64) for additional requirements.

**DEGREE REQUIREMENTS****Core Courses - 42 credits**

PAD 3003	Intro to Public Administration	3
PAD 3330	Urban and Regional Planning	3
PAD 3431	Leadership	3
PAD 4320	Program Evaluation in Public Management	3
PAD 4332	Strategic Planning	3
PAD 4442	Public Relations for Public Managers	3

PAD 4806	State and Local Government Administration	3
PAD 3034	Policy Development and Implementation	3
PAD 3223	Public Budgeting and Finance	3
PAD 4046	Values, Ethics, and Conflict Resolution	3
PAD 4879	Capstone in Public Administration	3
PAD 3104	Organizational Behavior and Administration	3
PAD 4414	Public Personnel Management	3
PAD 4603	Administrative Law for Public Administrators	3

**Electives**

Elective requirements for students who have earned an A.A. degree - 18 credits.

General Education Requirements for students who have earned an A.S. degree - 21 credits.



## ASSOCIATE IN ARTS DEGREE

### *Associate in Arts Degree - College Transfer Program*

The program tracks listed 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.

To assist with planning, IRSC has identified a number of program tracks within the framework of the A.A. degree program to prepare students for many of the most common transfer majors, as shown below. An advisor can work with the student to develop a customized plan for the intended transfer institution as well as for additional transfer majors not included in this list. When you graduate from Indian River State College with an A.A. degree, your diploma will say **Associate in Arts**. Even though you'll have picked a specialization, or 'transfer track,' so you are prepared for your upper division coursework, IRSC doesn't identify this as an individual 'major'. There is just one A.A. degree.

It is essential that students in the A.A. degree program choose electives that satisfy requirements for their intended transfer major. Your assigned advisor can help you create a personalized academic plan which outlines the right classes to take each semester so that you have a smooth and successful transfer.

### *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. 275) 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.

<https://www.flrules.org/gateway/ruleNo.asp?id=6A-14.0303>

- Communication:
  - ENC X101 English Composition I; or
  - Any student who successfully completes a course with an 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. NOTE: SYG X000 completed in Fall 2024 or after will not satisfy general education core course credit for the subject discipline of social science.

Indian River State College requires all incoming students from the 2018-2019 academic year and beyond, to meet the Civic Literacy requirement. All first-time-in-college (FTIC) students entering all Florida College System (FCS) and State University System (SUS) institutions must demonstrate competency in civic literacy by the time they graduate per Florida Statute 1007.25 and Florida Board of Governors Regulation 8.006. There are three cohorts of students currently matriculating at Florida public institutions subject to varying Civic Literacy requirements. As demonstrated below, the exact civic literacy requirements are based on the academic term in which a student first enrolled in a Florida public institution. If you are unsure which cohort you fall into, schedule an appointment with your assigned academic advisor.

**Cohort 1:** Prior to the award of an **associate in arts** or **baccalaureate degree**, first-time-in-college students entering a Florida College System institution between the 2018-19 to 2020-21 school year must demonstrate competency in civic literacy by successfully completing **either** a course **or** an exam.

**Cohort 2:** Prior to the award of an **associate in arts** or **baccalaureate degree**, students initially entering a Florida College System institution in the 2021-22 school year, and thereafter, must demonstrate competency in civic literacy by successfully completing a course **and** an exam.

**Cohort 3:** Prior to the award of an **associate in science** or **associate in applied science** degree, students initially entering a Florida College System institution in the 2022-23 school year, and thereafter, must demonstrate competency in civic literacy by successfully completing a course **and** an exam.

In compliance with the Florida Department of Education Rule 6A-10.02413, students must demonstrate civic literacy competency prior to the award of an Associates or Bachelors degree. The State Board of Education defines civics literacy competency as follows:

1. Earning a passing grade in AMH2020 or POS1041 **AND** earning a passing score on the Florida Civics Literacy Exam  
OR
  2. Passing one of the following exams which gives students credit for the course and civics literacy exam
- AP Government and Politics: United States (3)  
AP United States History (4)  
CLEP: American Government (50).

### Required Courses for Graduation - (A.A. Degree) – 36 Semester Hours

The faculty of Indian River State College are committed to the continuous improvement of teaching and learning. The Associate in Arts Program Learning Outcomes represent the essential skills needed for successful transfer from the Associate in Arts to the baccalaureate. The Associate in Arts Program Learning outcomes include the General Education Learning Outcomes (p. 61) as a core component of the A.A. Curriculum.

#### Associate in Arts Learning Outcomes

- Behavioral and Social Analysis - Demonstrate critical thinking skills in the analysis, evaluation, and formation of ideas about the human experience.
- Communication - Demonstrate effective communication skills for a variety of audiences.
- Critical thinking - Demonstrate ability to interpret meaning and draw conclusions using evidence as support.
- Ethical Reasoning - Demonstrate ability to recognize, understand, and use ethical reasoning.
- Historical Thinking - Demonstrate ability to analyze change, continuity, complexity, context, and causality of historical events, people, ideas, or process.
- Information Literacy - Demonstrate the ability to think critically about how information is created, consumed, and distributed. Recognize when information is needed

and demonstrate the ability to locate, evaluate, synthesize, and ethically use information.

- Mathematical Reasoning - Demonstrate mathematical reasoning in problem solving.
- Scientific Reasoning - Demonstrate scientific reasoning in problem solving.

### DEGREE REQUIREMENTS

#### Communications - 6 credits

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

ENC 1101	English Composition I And	3
ENC 1102	English Composition II	3
ENC 1107	Advanced College Writing	3
ENC 2210	Technical Writing	3
AML 2010	American Literature through Reconstruction	3
AML 2020	American Literature from Reconstruction to Present	3
AML 2600	Introduction to African American Literature	3
ENL 2012	English Literature: Medieval to Romantic Era	3
ENL 2022	English Literature: Romantic Era to present	3
LIT 2110	World Literature from ancient through the Renaissance	3
LIT 2120	World Literature from the Enlightenment through the present	3
LIT 2190	Caribbean Literature	3
MMC 2100	Writing for Mass Communications	3
SPC 1608	Public Speaking	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.

SPC 1608 changes from A.A. elective credit to Communications General Education credit, effective Spring 2024.

#### 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 through Reconstruction	3
AML 2020	American Literature from Reconstruction to Present	3
AML 2600	Introduction to African American Literature	3
ARH 1000	Art Appreciation	3
DAN 2100	Dance Appreciation	3

ENC 1102	English Composition II	3
ENL 2012	English Literature: Medieval to Romantic Era	3
ENL 2022	English Literature: Romantic Era to present	3
ENL 2330	Introduction to Shakespeare	3
HUM 1020	Introduction to Humanities	3
IDS 1110	The Pursuit of Knowledge	3
IDS 1955	Interdisciplinary Study Abroad	3
LIT 1000	Introduction to Literature	3
LIT 2110	World Literature from ancient through the Renaissance	3
LIT 2120	World Literature from the Enlightenment through the present	3
LIT 2190	Caribbean Literature	3
MMC 2100	Writing for Mass Communications	3
MUL 2010	Music Appreciation	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 1071	Eastern Philosophies	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 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 1106, MGF 1107, STA 2023 to comply with General Education Core Course Options.

2023-2024 is the last year MGF 1106 and MGF 1107 meet General Education Core Course Options for Mathematics subject area.

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 1106	Survey in Mathematics	3
MGF 1107	Explorations in Mathematics	3
MGF 1130	Mathematical Thinking	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 1053 to comply with General Education Core Course Options. IRSC does not offer 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 1020	Introduction to Human Biology	3
BSC 1020L	Introduction to Human Biology Lab	1
BSC 1084	Survey of the Human Body	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
BSC 2085	Anatomy & Physiology I	3
BSC 2085L	Anatomy & Physiology I Lab	1
BSC 2086	Anatomy & Physiology II	3
BSC 2086L	Anatomy & 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
GLY 1010	Introduction to Geology	3
OCB 1000	Introduction to Marine Biology	3
OCB 1630	Marine Ecology	3
OCE 2001	Introduction to Oceanography	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 1053	College Physics I	3
PHY 1053L	College Physics I Lab	1

PHY 1054	College Physics II	3
PHY 1054L	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.

NOTE: SYG 2000 completed in Fall 2024 or after will not satisfy general education core course credit for the subject discipline of social science.

*Students must take 12 credits total of Social Science courses.*

AMH 2010	American History: Discovery through Reconstruction	3
AMH 2020	American History: Reconstruction 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 General Anthropology	3
DEP 2004	Human Development	3
ECO 2013	Principles of Economics Macro	3
ECO 2023	Principles of Economics Micro	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.

## **A.A. TRACK - ACCOUNTING - 11010**

See General Education Degree Requirements (p. 83) 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. 198), ECO-2023 (p. 198), MAC-2233 (p. 237), and STA-2023 (p. 277) 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.

### **A.A. TRACK - AGRICULTURE (GENERAL) - 11030**

See General Education Requirements (p. 82) 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.

### **A.A. TRACK - BIOLOGY (GENERAL)- 11070**

See General Education Requirements (p. 82) 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.

### **A.A. TRACK - BIOLOGY (PREPROFESSIONAL) - 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

**A.A. TRACK - BUSINESS ADMINISTRATION - 11080**

See General Education Requirements (p. 82) 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.

**A.A. TRACK - CHEMISTRY - 11090**

See General Education Requirements (p. 82) 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 1053	College Physics I	3
PHY 1053L	College Physics I Lab	1
PHY 1054	College Physics II	3
PHY 1054L	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.

**A.A. TRACK - CRIMINAL JUSTICE - 11120**

See General Education Requirements (p. 82) 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

**A.A. TRACK - DRAMATIC ARTS/THEATRE - 11430**

See General Education Requirements (p. 82) 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
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
MVV 1111	Class Voice I & II	1

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.

**A.A. TRACK - ECONOMICS- 11150**

See General Education Requirements (p. 82) 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.

**A.A. TRACK - ELEMENTARY AND SPECIAL EDUCATION - 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. 82) 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
MAE 2111	Mathematics Content for the Elementary Grades	3
RED 2010	Introduction to Reading Language Arts	3

**A.A. TRACK - SECONDARY EDUCATION - 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. 82) for additional requirements.

**DEGREE REQUIREMENTS****Required courses available at IRSC needed for transfer to Florida University System programs**

EDF 2005	Introduction to the Teaching	3
----------	------------------------------	---



**Profession**

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.

**A.A. TRACK - ENGINEERING - 11180**

See General Education Requirements (p. 82) 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. 238), and MAC 2313 (p. 238) 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.

**A.A. TRACK - ENGLISH - 11190**

See General Education Requirements (p. 82) 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 through Reconstruction	3
AML 2020	American Literature from Reconstruction to Present	3
CRW 2001	Creative Writing I	3
CRW 2002	Creative Writing II	3
ENL 2012	English Literature: Medieval to Romantic Era	3
ENL 2022	English Literature: Romantic Era to present	3
LIT 2110	World Literature from ancient through the Renaissance	3
LIT 2120	World Literature from the Enlightenment through the present	3
MMC 1000	Survey of Mass Communication	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.

**A.A. TRACK - FINANCE/MARKETING - 11210**

See General Education Requirements (p. 82) 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.

**A.A. TRACK - FOREIGN LANGUAGE - 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. 82) 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

## A.A. TRACK - HEALTH SCIENCE - 11550

See General Education Requirements (p. 82) for additional requirements.

## DEGREE REQUIREMENTS

### Required courses available at IRSC needed for transfer to Florida University System programs:

BSC 2085	Anatomy & Physiology I	3
BSC 2085L	Anatomy & Physiology I Lab	1
BSC 2086	Anatomy & Physiology II	3
BSC 2086L	Anatomy & 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
HSC 1653	Healthcare Ethics	3

HSC 2531	Medical Terminology I	3
MCB 2010	Microbiology for Health Sciences	3
MCB 2010L	Microbiology Lab for Health Sciences	1
PHY 1020	Principles of Physics	3
SLS 1101	Student Success	3

## A.A. TRACK - HISTORY - 11240

See General Education Requirements (p. 82) 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
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:

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.

## A.A. TRACK - HUMANITIES - 11250

See General Education Requirements (p. 82) 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	Music Appreciation	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.

### **A.A. TRACK - MATHEMATICS - 11290**

See General Education Requirements (p. 82) 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 1053	College Physics I	3
PHY 1053L	College Physics I Lab	1
PHY 1054	College Physics II	3
PHY 1054L	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.

### **A.A. TRACK - MUSIC - 11300**

See General Education Requirements (p. 82) 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	Music Appreciation	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

### **A.A. TRACK - PHILOSOPHY - 11340**

See General Education Requirements (p. 82) 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 1071	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.

### **A.A. TRACK - PHYSICAL EDUCATION - 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. 82) 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 2085	Anatomy & Physiology I	3
BSC 2085L	Anatomy & Physiology I Lab	1
BSC 2086	Anatomy & Physiology II	3
BSC 2086L	Anatomy & 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 2085, BSC 2086, 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.

### **A.A. TRACK - PHYSICS TRACK - 11360**

See General Education Requirements (p. 82) 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 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.

### **A.A. TRACK - POLITICAL SCIENCE - 11370**

See General Education Requirements (p. 82) 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.

### **A.A. TRACK - PSYCHOLOGY - 11390**

See General Education Requirements (p. 82) 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.

## A.A. TRACK - PUBLIC ADMINISTRATION - 11400

See General Education Requirements (p. 82) 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:

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.

## A.A. TRACK - SOCIOLOGY - 11420

See General Education Requirements (p. 83) 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. 98)

Accounting Technology Operations (p. 99)

Accounting Technology Management (p. 99)

### AIR CONDITIONING, REFRIGERATION & HEATING SYSTEMS TECHNOLOGY (p. 99)

Certificate in:

Residential Air Conditioning Refrigeration and Heating  
Systems Assistant (p. 100)

Air Conditioning Refrigeration and Heating Systems  
Technology (p. 100)

### AUTOMOTIVE SERVICE MANAGEMENT TECHNOLOGY (p. 100)

Certificate in:

Automotive Service Technician (p. 101)

General Automotive Technician (p. 101)

### BUILDING CONSTRUCTION TECHNOLOGY (p. 102)

### BUSINESS ADMINISTRATION (p. 103)

Certificate in:

Business Specialist (p. 104)

Business Operations (p. 104)

Human Resources Administrator (p. 105)

Business Management (p. 105)

Entrepreneurship (p. 106)

### COMPUTER INFORMATION TECHNOLOGY (p. 106)

Certificate in:

Computer Information Data Specialist (p. 106)

Help Desk Support Technician  
(p. 106)

Information Technology Support Specialist (p. 107)

Computer Programming Specialist (p. 107)

### CRIME SCENE TECHNOLOGY (p. 107)

### CRIMINAL JUSTICE TECHNOLOGY (p. 108)

### CULINARY MANAGEMENT (p. 109)

Certificate in:

Chef's Apprentice (p. 109)

Culinary Arts Management Operations (p. 110)

Culinary Arts (p. 110)

### DENTAL HYGIENE (p. 110)

### DIGITAL MEDIA TECHNOLOGY (p. 111)

Certificate in:

Digital Media Production (p. 112)

Digital Media Support (p. 112)

### DRAFTING & DESIGN CERTIFICATES (p. 112) (p. 112)

Certificate in:

Autocad Foundations (p. 112)

Drafting (p. 113)

### EARLY CHILDHOOD EDUCATION (p. 113)

Certificate in:

Preschool-Specialization (p. 114)

Child-Care-Center-Management-Specialization (p. 114)

Child Development & Early Intervention (p. 114)

### ELECTRICAL POWER TECHNOLOGY (p. 115)

### ELECTRONICS ENGINEERING TECHNOLOGY (p. 116)

Certificate in:

Solar Energy Technician (p. 117)

Lasers & Photonics (p. 117)

Robotics and Simulation Technician (p. 117)

Basic Electronics (p. 117)

Electronic Technology (p. 117)

### EMERGENCY ADMINISTRATION & MANAGEMENT (p. 117)

Certificate in

Emergency Management (p. 118)

### EMERGENCY MEDICAL SERVICES (p. 118)

Certificate in:

Emergency Medical Technician (p. 119)

Paramedic (p. 119)

### FIRE SCIENCE TECHNOLOGY (p. 120)

### GRAPHICS TECHNOLOGY (p. 121)

Certificate in:

Graphic Design Support (p. 122)

Graphic Design Production (p. 122)

### HEALTH INFORMATION TECHNOLOGY CERTIFICATES (p. 122)

Certificate in:

Healthcare Informatics Specialist (p. 122)

Medical Coder/Biller (p. 122)

### HEALTH SERVICES MANAGEMENT (p. 123)

### H (p. 124)EALTH NAVIGATOR SPECIALIST CERTIFICATE (p. 124) (p. 124)

### HOSPITALITY AND TOURISM MANAGEMENT (p. 124)

Certificate in:

Guest Services Specialist (p. 125)

Event Planning Management (p. 125)

Rooms Division Management (p. 125)

INTERIOR DESIGN TECHNOLOGY (p. 125)

Certificate in:

Kitchen & Bath Design (p. 126)

Home Staging Certificate (p. 126)

LANDSCAPE & HORTICULTURE TECHNOLOGY (p. 126)

Certificate in:

Landscape & Horticulture Specialist (p. 127)

Landscape & Horticulture Professional (p. 127)

Landscape & (p. 127) Horticulture Technician (p. 127)

LOGISTICS AND TRANSPORTATION CERTIFICATE (p. 128)

Certificate in:

Logistics and Transportation Specialist (p. 128)

MARKETING MANAGEMENT (p. 128)

Certificate in:

Marketing Operations (p. 129)

MEDICAL LABORATORY TECHNOLOGY (p. 129)

NURSING, A.S. DEGREE - R.N. (p. 130)

PARALEGAL STUDIES/LEGAL ASSISTING (p. 131)

PHYSICAL THERAPIST ASSISTANT (p. 132)

RADIOGRAPHY (p. 133)

RESPIRATORY CARE (p. 134)

RESTAURANT MANAGEMENT (p. 135)

SMALL UNMANNED AIRCRAFT SYSTEMS AND APPLICATIONS CERTIFICATE (p. 135)

Certificate in:

Small Unmanned Aircraft Systems and Applications (p. 135)

SOCIAL AND HUMAN SERVICES (p. 135)

SUPERVISION AND MANAGEMENT FOR INDUSTRY (p. 137)

SURGICAL SERVICES (p. 137)

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. 161) 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 Communications, 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. 61) 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**

In compliance with Rule 6A-14.0303, General Education Core Course Options, beginning in the 2022-23 academic year and thereafter, students entering associate in arts, associate in science or associate in applied science, or baccalaureate degree programs must complete at least one (1) course from each of the general education subject areas listed in this section prior to the awarding of their degree.

- 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. NOTE: SYG X000 completed in Fall 2024 or after will not satisfy general education core course credit for the subject discipline of social science.

Indian River State College requires all incoming students from the 2018-2019 academic year and beyond, to meet the Civic Literacy requirement. All first-time-in-college (FTIC) students entering all Florida College System (FCS) and State University System (SUS) institutions must demonstrate competency in civic literacy by the time they graduate per Florida Statute 1007.25 and Florida Board of Governors Regulation 8.006. There are three cohorts of students currently matriculating at Florida public institutions subject to varying Civic Literacy requirements. As demonstrated below, the exact civic literacy requirements are based on the academic term in which a student first enrolled in a Florida public institution. If you are unsure which cohort you fall into, schedule an appointment with your assigned academic advisor.

**Cohort 1:** Prior to the award of an **associate in arts or baccalaureate degree**, first-time-in-college students entering a Florida College System institution between the 2018-19 to 2020-21 school year must demonstrate competency in civic literacy by successfully completing **either** a course **or** an exam.

**Cohort 2:** Prior to the award of an **associate in arts or baccalaureate degree**, students initially entering a Florida College System institution in the 2021-22 school year, and thereafter, must demonstrate competency in civic literacy by successfully completing a course **and** an exam.

**Cohort 3:** Prior to the award of an **associate in science or associate in applied science degree**, students initially entering a Florida College System institution in the 2022-23 school year, and thereafter, must demonstrate competency in civic literacy by successfully completing a course **and** an exam.

In compliance with the Florida Department of Education Rule 6A-10.02413, students must demonstrate civic literacy competency prior to the award of an Associates or Bachelors degree. The State Board of Education defines civics literacy competency as follows:

1. Earning a passing grade in AMH2020 or POS1041 **AND** earning a passing score on the Florida Civics Literacy Exam
  - OR
  2. Passing one of the following exams which gives students credit for the course and civics literacy exam
- AP Government and Politics: United States (3)  
 AP United States History (4)  
 CLEP: American Government (50).

## DEGREE REQUIREMENTS

### Communications/English

ENC 1101	English Composition I	3
----------	-----------------------	---

Gordon Rule Course: must achieve a grade of C or higher for the Associate in Science Degree.

### Humanities/Fine Arts

ARH 1000	Art Appreciation	3
HUM 1020	Introduction to Humanities	3
LIT 1000	Introduction to Literature	3
MUL 2010	Music Appreciation	3
PHI 1010	Introduction to Philosophy	3
THE 1000	Introduction to Theatre (Drama)	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 2311	Calculus I with Analytic Geometry	5
MGF 1106	Survey in Mathematics	3
MGF 1107	Explorations in Mathematics	3
STA 2023	Elementary Statistics I	3

Gordon Rule Course: must achieve a grade of C or higher for the Associate in Science and Associate in Applied Science Degree.

2023-2024 is the last year MGF 1106 and MGF 1107 meet General Education Core Course Options for Mathematics subject area.

### Natural Science

AST 1002	General Astronomy	3
BSC 1005	Life Science	3
BSC 2010	General Biology I	3
BSC 2085	Anatomy & Physiology I	3
CHM 1020	Introduction to Chemistry	3
CHM 1045	General Chemistry I	3
PHY 1020	Principles of Physics	3
PHY 2048	Physics with Calculus I	3
PHY 1053	College Physics I	3

### Social/Behavioral Science

AMH 2020	American History: Reconstruction to the Present	3
POS 1041	American Government	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 - Communications/English**

ENC 1101	English Composition I	3
----------	-----------------------	---

**General Education - Mathematics**

MAC 1105	College Algebra or higher	3
----------	---------------------------	---

**General Education - Humanities/Fine Arts**

Select 3 credits from the following:

ARH 1000	Art Appreciation	3
HUM 1020	Introduction to Humanities	3
LIT 1000	Introduction to Literature	3
MUL 2010	Music Appreciation	3
PHI 1010	Introduction to Philosophy	3
THE 1000	Introduction to Theatre (Drama)	3

**General Education - Natural Science**

Select 3 credits from the following:

AST 1002	General Astronomy	3
BSC 1005	Life Science	3
BSC 2010	General Biology I	3
BSC 2085	Anatomy & Physiology I	3
CHM 1020	Introduction to Chemistry	3
CHM 1045	General Chemistry I	3
PHY 1020	Principles of Physics	3
PHY 1053	College Physics I	3
PHY 2048	Physics with Calculus I	3

**General Education - Social/Behavioral Science**

AMH 2020	American History: Reconstruction to the Present	3
----------	---	---

**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
APA 2144	Intuit QuickBooks	3
BUL 2241	Business Law I	3
CTS 1205	Excel I	3
SLS 1261	Essentials of Contemporary Leadership	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

ACG 2001, ACG 2011, ACG 2071, ACG 2100 and TAX 2000 require grade of 'C' or higher.

**Major Field Electives - Select 12 credits**

APA 1152	Orientation to QuickBooks Desktop	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
MAT 1033	Intermediate Algebra	3

ECO 2013 (p. 198), ECO 2023 (p. 198), MAC 2233 (p. 237), and STA 2023 (p. 277) recommended for students seeking Bachelor's Degree Program in Accounting (p. 67).

**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 1100	Introduction to Computer Applications for Business	3

ACG 2001 and ACG 2011 require a grade of 'C' or higher.

## 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

ACG 2001, ACG 2011, and ACG 2071 require a grade of 'C' or higher.

## ACCOUNTING TECHNOLOGY MANAGEMENT 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. 168) 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. 67).

### 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

ACG 2001, ACG 2011, ACG 2071, ACG 2100, and TAX 2000 require a grade of 'C' or higher.

#### Major Field Electives - Select 9 credits

APA 1152	Orientation to QuickBooks Desktop	1
BUL 2241	Business Law I	3
CGS 1060	College Computing	3

COP 2700	Database Programming	3
GEB 2214	Business Communications	3
ECO 2013	Principles of Economics Macro	3
	Or	
ECO 2023	Principles of Economics Micro	3
ENC 2210	Technical Writing	3
	Or	
SLS 1261	Essentials of Contemporary Leadership	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 - Communications/English

ENC 1101	English Composition I	3
----------	-----------------------	---

#### General Education - Humanities/Fine Arts

HUM 1020	Introduction to Humanities	3
----------	----------------------------	---

#### General Education - Mathematics

MGF 1107	Explorations in Mathematics	3
----------	-----------------------------	---

#### General Education - Natural Science

PHY 1020	Principles of Physics	3
----------	-----------------------	---

#### General Education - Social/Behavioral Science

AMH 2020	American History: Reconstruction to the Present	3
----------	---	---

#### 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
<b>Major Field Electives - Select 12 credits</b>		
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
AER 2758C	Automotive Air Conditioning and Heating (N)	4
ETM 1111	Energy in Building Design	3
MAT 1100	Quantitative Reasoning	3
	Or	
MAT 1033	Intermediate Algebra	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**

#### 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 - Communications/English

ENC 1101	English Composition I	3
----------	-----------------------	---

##### General Education - Humanities/Fine Arts

Select 3 credits from the following:

ARH 1000	Art Appreciation	3
HUM 1020	Introduction to Humanities	3

LIT 1000	Introduction to Literature	3
MUL 2010	Music Appreciation	3
PHI 1010	Introduction to Philosophy	3
THE 1000	Introduction to Theatre (Drama)	3

**General Education - Mathematics**

MGF 1107	Explorations in Mathematics	3
----------	-----------------------------	---

**General Education - Natural Science**

Select 3 credits from the following:

AST 1002	General Astronomy	3
BSC 1005	Life Science	3
BSC 2010	General Biology I	3
BSC 2085	Anatomy & Physiology I	3
CHM 1020	Introduction to Chemistry	3
CHM 1045	General Chemistry I	3
PHY 1020	Principles of Physics	3
PHY 1053	College Physics I	3
PHY 2048	Physics with Calculus I	3

**General Education - Social/Behavioral Science**

POS 1041	American Government	3
	Or	
AMH 2020	American History: Reconstruction to the Present	3

**Major Field Required Courses - 50 credits**

AER 1081C	Introduction to Automotive Technology (N)	4
AER 1198C	Engine Overhaul, Repair and Testing (N)	4
AER 1498C	Suspension, Steering, and Alignment (N)	4
AER 1598C	Automotive Brake Systems (N)	4
AER 1694C	Introduction to Automotive Electrical Systems (N)	4
AER 2298C	Automatic Transmissions and Transaxles (N)	4
AER 2398C	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 2758C	Automotive Air Conditioning and Heating (N)	4
AER 1070	Automotive Service Management (N)	3
DIM 2250C	Hybrid and Alternative Fuel Vehicles (N)	3

**Major Field Electives - Select 3 credits**

MAT 1100	Quantitative Reasoning	3
----------	------------------------	---

AER 1810	Automotive Work Experience (N)	1 - 3
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
SBM 1000	Entrepreneurship	3
DIM 2021C	Diesel Service (N)	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.

**DEGREE REQUIREMENTS****Requirements List**

AER 1081C	Introduction to Automotive Technology (N)	4
AER 1694C	Introduction to Automotive Electrical Systems (N)	4
AER 1598C	Automotive Brake Systems (N)	4
AER 1498C	Suspension, Steering, and Alignment (N)	4
AER 2898C	Engine Performance (N)	4
AER 2758C	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.

## DEGREE REQUIREMENTS

### Requirements List

AER 1081C	Introduction to Automotive Technology (N)	4
AER 1694C	Introduction to Automotive Electrical Systems (N)	4
AER 1598C	Automotive Brake Systems (N)	4
AER 1498C	Suspension, Steering, and Alignment (N)	4
AER 2898C	Engine Performance (N)	4
AER 2758C	Automotive Air Conditioning and Heating (N)	4
AER 1198C	Engine Overhaul, Repair and Testing (N)	4
AER 2298C	Automatic Transmissions and Transaxles (N)	4
AER 2398C	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 - Communications/English

ENC 1101	English Composition I	3
----------	-----------------------	---

#### General Education - Humanities/Fine Arts

Select 3 credits from the following:

ARH 1000	Art Appreciation	3
HUM 1020	Introduction to Humanities	3
LIT 1000	Introduction to Literature	3
MUL 2010	Music Appreciation	3
PHI 1010	Introduction to Philosophy	3
THE 1000	Introduction to Theatre (Drama)	3

#### General Education - Mathematics

Select 3 credits from the following:

MAC 1105	College Algebra	3
MAC 2311	Calculus I with Analytic Geometry	5
MGF 1106	Survey in Mathematics recommended	3
MGF 1107	Explorations in Mathematics	3
STA 2023	Elementary Statistics I	3

#### General Education - Natural Science

Select 3 credits from the following:

AST 1002	General Astronomy	3
BSC 1005	Life Science	3
BSC 2010	General Biology I	3
BSC 2085	Anatomy & Physiology I	3
CHM 1020	Introduction to Chemistry	3
CHM 1045	General Chemistry I	3
PHY 1020	Principles of Physics recommended	3
PHY 1053	College Physics I	3
PHY 2048	Physics with Calculus I	3

#### General Education - Social/Behavioral Science

AMH 2020	American History: Reconstruction to the Present	3
	Or	
POS 1041	American Government	3

#### Major Field Required Courses - 39 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
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
<b>Major Field Electives - select 6 credits</b>		
BCN 2040	Zero Energy Building Design and Construction	3
BCN 2592	Residential Energy Fundamentals	3
BCN 2598	Sustainable Building Systems	3
BCN 2599	Green Building and Energy Efficiency	3
ETM 1111	Energy in Building Design	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 - Communications/English

ENC 1101	English Composition I	3
----------	-----------------------	---

##### General Education - Humanities/Fine Arts

Select 3 credits from the following:

ARH 1000	Art Appreciation	3
HUM 1020	Introduction to Humanities	3
LIT 1000	Introduction to Literature recommended	3
MUL 2010	Music Appreciation	3
PHI 1010	Introduction to Philosophy	3
THE 1000	Introduction to Theatre (Drama)	3

##### General Education - Mathematics

Select 3 credits from the following:

MAC 1105	College Algebra recommended	3
----------	--------------------------------	---

MAC 2311	Calculus I with Analytic Geometry	5
MGF 1106	Survey in Mathematics	3
MGF 1107	Explorations in Mathematics	3
STA 2023	Elementary Statistics I	3

##### General Education - Natural Science

Select 3 credits from the following:

AST 1002	General Astronomy	3
BSC 1005	Life Science recommended	3
BSC 2010	General Biology I	3
CHM 1045	General Chemistry I	3
PHY 1053	College Physics I	3
PHY 2048	Physics with Calculus I	3

##### General Education - Social/Behavioral Science

AMH 2020	American History: Reconstruction to the Present	3
----------	--	---

##### 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
SLS 1261	Essentials of Contemporary Leadership	3
APA 1111	Introduction to Accounting Or	3
ACG 2001	Financial Accounting I	3
GEB 2214	Business Communications Or	3
ENC 2210	Technical Writing	3
MAN 2021	Principles of Management Or	3
MNA 2345	Supervision	3
QMB 1001	Mathematics of Business Or	3
ACG 2011	Financial Accounting II	3

##### Major Field Electives - select 15 credits

##### Suggested Specialization Electives – Hospitality Management

FOS 2201	Food Service Sanitation Management	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	6.5
	ABI	

**Suggested Specialization Electives – Customer Service**

MKA 2021	Salesmanship	3
----------	--------------	---

**Suggested Specialization Electives – Finance**

FIN 1100	Personal Finance	3
MKA 2021	Salesmanship	3

**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

**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
APA 1152	Orientation to QuickBooks Desktop	1
ECO 2023	Principles of Economics Micro	3
FIN 1100	Personal Finance	3
GEB 2941	Applied Internship	3-4
MAN 2300	Introduction to Human Resource Management	3
MAR 2101	Social Media Marketing	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 resources 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.

**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
SLS 1261	Essentials of Contemporary Leadership	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
QMB 1001	Mathematics of Business	3
	Or	
ACG 2011	Financial Accounting II	3
FOS 2201	Food Service Sanitation Management	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	6.5
	ABI	
MKA 2021	Salesmanship	3
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
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

## 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

## 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 - Communications/English

ENC 1101	English Composition I	3
----------	-----------------------	---

#### General Education - Humanities/Fine Arts

PHI 1010	Introduction to Philosophy	3
----------	----------------------------	---

#### General Education - Mathematics

MAC 1105	College Algebra or higher	3
----------	---------------------------	---

#### General Education - Natural Science

PHY 1020	Principles of Physics	3
----------	-----------------------	---

#### General Education - Social/Behavioral Science

POS 1041	American Government	3
----------	---------------------	---

#### Major Field Required Courses - 33 credits

CET 1178	A+ Certification Hardware	3
CET 1179C	A+ Certification Software	3
CGS 1540	Database Fundamentals	3
CIS 1000	Introduction to Information Technology	3
COP 2000	Introduction to Computer Programming I	3
CTS 1104	Windows Operating Systems Fundamentals	3
CTS 1155	Introduction to Help Desk Concepts	3
CTS 1334	Windows Server	3
CTS 1650	CCNA1: Introduction to Networks	3
CTS 2106	Linux Fundamentals	3
STA 2023	Elementary Statistics I	3

#### Major Field Electives - Select 12 credits

Up to 12 credits from any course with CEN, CGS, CIS, CTS, or COP prefixes

MAT 1033	Intermediate Algebra	3
----------	----------------------	---

## 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**

CET 1178	A+ Certification Hardware	3
CET 1179C	A+ Certification Software	3
CIS 1000	Introduction to Information Technology	3
CTS 1104	Windows Operating Systems Fundamentals	3
CTS 1650	CCNA1: Introduction to Networks	3
CTS 2106	Linux Fundamentals	3

**INFORMATION TECHNOLOGY SUPPORT SPECIALIST CERTIFICATE - 60390****60390 - 18 Credits****DEGREE REQUIREMENTS****Major Field Electives - 18 credits**

CGS 1100	Introduction to Computer Applications for Business Or	3
CGS 1060	College Computing	3
CET 1178	A+ Certification Hardware	3
CET 1179C	A+ Certification Software	3
CTS 1650	CCNA1: Introduction to Networks	3
CTS 1104	Windows Operating Systems Fundamentals	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 2000	Introduction to Computer Programming I	3
CGS 1540	Database Fundamentals	3
COP 2830	Web Programming	3
CET 1179C	A+ Certification Software	3
COP 2030	Introduction to Python	3
	Select any one of the following courses:	
COP 2001	Computer Programming II Or	3
COP 2700	Database Programming Or	3
COP 2800	Java Programming	3

**Crime Scene Technology****20900 - 60 Credits**

The Indian River State College, Public Service Education Division's Associate in Science in Crime Scene Investigations Technician is designed to prepare students for employment in field related to crime scene investigation. Those who complete the program will be able to locate, preserve, develop, collect, analyze and present physical evidence relating to a crime. Students will learn the skills necessary to accurately map out, collect and log evidence, develop and preserve fingerprints, photograph crime scene and evidentiary materials, write reports, and present courtroom testimony all while maintain their personal safety on a crime scene and in a crime laboratory.

**ASSOCIATE IN SCIENCE DEGREE IN CRIME SCENE TECHNOLOGY****DEGREE REQUIREMENTS****General Education - Communication/English**

ENC 1101	English Composition I	3
ENC 1102	English Composition II	3

**General Education - Humanities/Fine Arts**

Select 3 credits from the following:

ARH 1000	Art Appreciation	3
HUM 1020	Introduction to Humanities	3
LIT 1000	Introduction to Literature	3
MUL 2010	Music Appreciation	3
PHI 1010	Introduction to Philosophy	3
THE 1000	Introduction to Theatre (Drama)	3

**General Education - Mathematics**

Select 3 credits from the following:

MGF 1106	Survey in Mathematics	3
MGF 1107	Explorations in Mathematics	3
MAC 1105	College Algebra	3
STA 2023	Elementary Statistics I	3

**General Education - Natural Science**

BSC 2085	Anatomy & Physiology I	3
BSC 2085L	Anatomy & Physiology I Lab	1

**General Education - Social/Behavioral Science**

AMH 2020	American History: Reconstruction to the Present Or	3
POS 1041	American Government	3

**Major Field Required Courses - 18 credits**

CJE 2644	Crime Scene Safety	3
----------	--------------------	---

CCJ 2020	Introduction to Criminal Justice	3
CJE 1641	Intro to Crime Scene Technology	3
CJE 1673	Crime Scene Photography I	3
CJE 2671	Latent Fingerprint I	3
CJL 2062	Constitutional Law	3

**Major Field Electives - Select 23 credits**

CJE 1642	Crime Scene Technology 2	3
CJE 2677	Latent Fingerprint Development 2	3
CJE 1772	Crime Scene Photography II	3
CJL 2100	Criminal Law	3
CJL 2130	Rules of Evidence	3
CCJ 1600	Deviant Behavior	3
SYG 1361	Sociology of Death	3
CJE 2604	Courtroom Presentation of Evidence	3
MAT 1100	Quantitative Reasoning	3
MAT 1033	Intermediate Algebra	3
CCJ 2022	Contemporary Issues in Criminal Justice	1-3

**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 - Communications/English**

ENC 1101	English Composition I	3
----------	-----------------------	---

**General Education - Humanities/Fine Arts**

Select 3 credits from the following:

ARH 1000	Art Appreciation	3
HUM 1020	Introduction to Humanities	3
LIT 1000	Introduction to Literature	3
LIT 1000	Introduction to Literature	3
MUL 2010	Music Appreciation	3
PHI 1010	Introduction to Philosophy	3
THE 1000	Introduction to Theatre (Drama)	3

**General Education - Mathematics**

Select 3 credits from the following:

MGF 1106	Survey in Mathematics	3
MGF 1107	Explorations in Mathematics	3
STA 2023	Elementary Statistics I	3
MAC 1105	College Algebra	3
MAC 2311	Calculus I with Analytic Geometry	5

**General Education - Natural Science**

Select 3 credit from the following:

AST 1002	General Astronomy	3
BSC 1005	Life Science	3
BSC 2010	General Biology I	3
BSC 2085	Anatomy & Physiology I	3
CHM 1020	Introduction to Chemistry	3
CHM 1045	General Chemistry I	3
PHY 1020	Principles of Physics	3
PHY 1053	College Physics I	3
PHY 2048	Physics with Calculus I	3

**General Education - Social/Behavioral Science**

AMH 2020	American History: Reconstruction to the Present	3
	Or	
POS 1041	American Government	3

**Major Field Required Courses - 21 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
ENC 1102	English Composition II	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	Foundations of Law Enforcement Leadership	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

CJE 2644	Crime Scene Safety	3
CJE 1641	Intro to Crime Scene Technology	3
CJE 1673	Crime Scene Photography I	3
CJE 2671	Latent Fingerprint I	3
CJE 2604	Courtroom Presentation of Evidence	3
POS 1041	American Government	3
SPC 1608	Public Speaking	3
PSY 2012	Introduction to Psychology	3
	Or	
SYG 2000	Introduction to Sociology	3
	Or	
SYG 2010	Social Problems	3
MAT 1100	Quantitative Reasoning	3
	Or	
MAT 1033	Intermediate Algebra	3
CGS 1060	College Computing	3
	Or	
CGS 1100	Introduction to Computer Applications for Business	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 - Communications/English

ENC 1101	English Composition I	3
----------	-----------------------	---

##### General Education - Humanities/Fine Arts

PHI 1010	Introduction to Philosophy	3
----------	----------------------------	---

##### General Education - Mathematics

MGF 1107	Explorations in Mathematics	3
----------	-----------------------------	---

##### General Education - Natural Science

BSC 1005	Life Science	3
----------	--------------	---

##### General Education - Social Behavioral Science

POS 1041	American Government	3
----------	---------------------	---

### Major Field Required Courses - 39 credits

FOS 2201	Food Service Sanitation Management	3
FSS 2251	Food & Beverage Management	3
FSS 1203C	Quantity Food Production I	3
HUN 1203	Culinary Nutrition	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 2284C	Catering and Banquet Management	3
FSS 2248C	Pantry and Garde Manger	4
FSS 2500	Food and Beverage Cost Control	3

Core culinary courses FSS 1203C, FSS 1240C, FSS 1246C, FSS 2204C, FSS-2206C (p. 215), 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 6 credits

HFT 2223	Human Relations and Supervisory Development	3
FSS 2942	Internship in Culinary Management	1-3
CGS 1100	Introduction to Computer Applications for Business	3
FSS 2950C	Culinary Competition	1-2
HFT 2245	Guest Service Management	3
APA 1111	Introduction to Accounting	3
GEB 1011	Introduction to Business	3
MAN 2021	Principles of Management	3
MAR 2011	Principles of Marketing	3

## 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	3

	Management	
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.

### 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	4
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 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 in dental hygiene is accredited by the Commission on Dental Accreditation. The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (312) 440-4653 or at 211 East Chicago Avenue, Chicago Ill. 60611. The Commission's web address is <https://coda.ada.org/>. 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 - Communications/English**

ENC 1101	English Composition I	3
----------	-----------------------	---

**General Education - Humanities/Fine Arts**

HUM 1020	Introduction to Humanities	3
----------	----------------------------	---

**General Education - Mathematics**

MGF 1106	Survey in Mathematics	3
----------	-----------------------	---

**General Education - Natural Science**

CHM 1020	Introduction to Chemistry or higher	3
----------	-------------------------------------	---

**General Education - Social/Behavioral Science**

POS 1041	American Government	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 - 73 credits**

DEH 1003	Pre-Clinical Dental Hygiene	1
DEH 1003L	Pre-Clinical Dental Hygiene Lab	2
DEH 1130	Oral Embryology and Histology	2
DES 1020	Head, Neck & Dental Anatomy	3
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
DES 1840	Preventive Dentistry	1
DEH 1800	Clinical Dental Hygiene I	2
DEH 1800L	Clinical Dental Hygiene I Lab	3
DEH 2602	Periodontology	2
DES 1100	Elements of Dental Materials	2
DES 1100L	Elements of Dental Materials Lab	1
DES 1600	Health Office Emergencies	2
DEH 1300	Pharmacology	2
DEH 1802	Clinical Dental Hygiene II	2
DEH 1802L	Clinical Dental Hygiene II Lab	1
DES 1051	Nitrous Oxide Monitoring	1
DES 2051C	Pain Control and Anesthesia	2
DEH 2602L	Periodontology Lab	1
DES 2530C	Expanded Functions for Dental Hygienists	2
DEH 2702	Community Dental Health	2
DEH 2804	Clinical Dental Hygiene III	2
DEH 2804L	Clinical Dental Hygiene III Lab	4
DEH 2400	General and Oral Pathology	2
DEH 2702L	Community Dental Health Lab	1
DEH 2806	Clinical Dental Hygiene IV	2
DEH 2806L	Clinical Dental Hygiene IV Lab	5
BSC 2086	Anatomy & Physiology II	3
BSC 2086L	Anatomy & Physiology II Lab	1
MCB 2010	Microbiology for Health Sciences	3
MCB 2010L	Microbiology Lab for Health Sciences	1

HUN 1201	Nutrition	3
SPC 1608	Public Speaking	3
PSY 2012	Introduction to Psychology	3

All core curriculum and natural science courses require a grade of "C" or higher. CHM-1020 (p. 180) and BSC 2086 and BSC 2086L must be completed by the end of the Fall semester, first year. MCB-2010 (p. 242) and MCB-2010L (p. 242) 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 - Communications/English**

ENC 1101	English Composition I	3
----------	-----------------------	---

**General Education - Humanities/Fine Arts**

Select 3 credits from the following:

ARH 1000	Art Appreciation	3
HUM 1020	Introduction to Humanities	3
LIT 1000	Introduction to Literature	3
MUL 2010	Music Appreciation	3
PHI 1010	Introduction to Philosophy	3
THE 1000	Introduction to Theatre (Drama)	3

**General Education - Mathematics**

Select 3 credits from the following:

MAC 1105	College Algebra	3
MAC 2311	Calculus I with Analytic Geometry	5
MGF 1106	Survey in Mathematics recommended	3
MGF 1107	Explorations in Mathematics	3
STA 2023	Elementary Statistics I	3

**General Education - Natural Science**

Select 3 credits from the following:

AST 1002	General Astronomy	3
BSC 1005	Life Science	3
BSC 2010	General Biology I	3
BSC 2085	Anatomy & Physiology I	3
CHM 1020	Introduction to Chemistry	3
CHM 1045	General Chemistry I	3
PHY 1020	Principles of Physics recommended	3
PHY 1053	College Physics I	3
PHY 2048	Physics with Calculus I	3

**General Education - Social/Behavioral Science**

AMH 2020	American History: Reconstruction to the Present Or	3
POS 1041	American Government	3

**Field Required Courses - 36 credits**

DIG 1000	Introduction to Digital Media	3
DIG 1115	Digital Imaging 1	3
DIG 2251	Digital Audio Fundamentals	3
DIG 2303	3D Digital Animation 2	3
DIG 2430	Visual Story Development	3
DIG 2581	Digital Media Portfolio	3
GRA 1129	Visualization Basics	3
GRA 1151	Vector Design 1	3
GRA 2160	Digital Animation	3
GRA 2161	Introduction to Motion Graphics and Compositing	3
DIG 2030	Digital Video Fundamentals Or	3
DIG 1143	Video Making for Social Media	3
DIG 2302	3D Modeling & Animation 1	3

**Electives - Select 9 credits**

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 1143	Video Making for Social Media	3
DIG 1930	Special Topics in Digital Media	.5 - 3
DIG 2116	Digital Imaging 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	Vector Design 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 1	3
DIG 2030	Digital Video Fundamentals	3
DIG 2203	Digital Video 2 Production	3
GRA 2160	Digital Animation	3
GRA 2161	Introduction to Motion Graphics and Compositing	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.

**DEGREE REQUIREMENTS****Major Field Required Courses – 24 credits**

DIG 1115	Digital Imaging 1	3
GRA 1151	Vector Design 1	3
DIG 2302	3D Modeling & Animation 1	3
CGS 1821	Website Development	3
GRA 2161	Introduction to Motion Graphics and Compositing	3
DIG 2030	Digital Video Fundamentals	3
DIG 2203	Digital Video 2 Production	3
GRA 2160	Digital Animation	3

**Drafting and Design Certificates****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.

### 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 - Communications/English

ENC 1101	English Composition I	3
----------	-----------------------	---

#### General Education - Humanities/Fine Arts

Select 3 credits from the following:

ARH 1000	Art Appreciation	3
	Recommended:	
HUM 1020	Introduction to Humanities	3
LIT 1000	Introduction to Literature	3
MUL 2010	Music Appreciation	3
PHI 1010	Introduction to Philosophy	3
	Recommended	
THE 1000	Introduction to Theatre (Drama)	3
	Recommended:	

#### General Education - Mathematics

Select 3 credits from the following:

MAC 1105	College Algebra	3
MAC 2311	Calculus I with Analytic Geometry	5
MGF 1106	Survey in Mathematics	3
MGF 1107	Explorations in Mathematics	3
	recommended	
STA 2023	Elementary Statistics I	3

#### General Education - Natural Science

Select 3 credits from the following:

AST 1002	General Astronomy	3
BSC 1005	Life Science	3
	recommended	
BSC 2010	General Biology I	3
BSC 2085	Anatomy & Physiology I	3
CHM 1020	Introduction to Chemistry	3
CHM 1045	General Chemistry I	3
PHY 1020	Principles of Physics	3
PHY 1053	College Physics I	3
PHY 2048	Physics with Calculus I	3

#### General Education - Social/Behavioral Science

AMH 2020	American History: Reconstruction to the Present	3
	Or	
POS 1041	American Government	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 2010	Introduction to Special Education	3
EEC 1734	Basic Childhood Nutrition	3

CHD 2334	Early Childhood Language Arts and Reading	3
----------	---	---

**Major Field Electives - Select 15 credits**

EEC 1520	Early Childhood Leadership And Organizational Mgmt recommended	3
EEC 1947	Practicum in Teaching Strategies recommended	3
HUS 1540	Family Relations recommended	3
MAT 1100	Quantitative Reasoning recommended	3
PPE 2001	Person and Personality Development recommended	3
CGS 1060	College Computing Or	3
CGS 1100	Introduction to Computer Applications for Business	3
EEC 1523	Programming for Early Childcare Administrators	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
SYG 2000	Introduction to Sociology	3
PSY 2012	Introduction to Psychology	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	3

EEC 1946	Curriculum 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 2010	Introduction to Special 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.

**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
EEC 1734	Basic Childhood Nutrition	3
CGS 1060	College Computing	3
EEC 1520	Early Childhood Leadership And	3

	Organizational Mgmt	
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 1106	Survey in Mathematics	3
PPE 2001	Person and Personality Development	3
HUS 1540	Family Relations	3

## Electrical Power Technology

### 20850 - 68 Credits

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 - Communications/English

ENC 1101	English Composition I	3
----------	-----------------------	---

##### General Education - Humanities/Fine Arts

PHI 1010	Introduction to Philosophy	3
----------	----------------------------	---

##### General Education - Mathematics

MAC 1105	College Algebra	3
----------	-----------------	---

##### General Education - Natural Science

PHY 1020	Principles of Physics	3
----------	-----------------------	---

##### General Education - Social/Behavioral Science

POS 1041	American Government	3
----------	---------------------	---

#### Major Field Required Courses - Select 41 credits:

##### Instrumentation And Control And Electrical (ICE)

CHM 1020	Introduction to Chemistry	3
EET 1015C	DC Circuits	3
EET 1025C	AC Circuits	3
EET 1215C	Introduction to Electronics	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 1701	Industrial Safety	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 Components II	3
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 Electives - Select 12 credits

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 - Communications/English

ENC 1101	English Composition I	3
----------	-----------------------	---

##### General Education - Humanities/Fine Arts

Select 3 credits from the following:

ARH 1000	Art Appreciation	3
HUM 1020	Introduction to Humanities	3
LIT 1000	Introduction to Literature	3
MUL 2010	Music Appreciation	3
PHI 1010	Introduction to Philosophy	3
THE 1000	Introduction to Theatre (Drama)	3

##### General Education - Mathematics

MAC 1105	College Algebra	3
----------	-----------------	---

##### General Education - Natural Science

PHY 1020	Principles of Physics	3
----------	-----------------------	---

##### General Education - Social/Behavioral Science

POS 1041	American Government	3
----------	---------------------	---

##### 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	Intro 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 2930	Special Topics in Electronic Engineering (N)	.5 - 3
EET 2950	Electronics Capstone Project	3
ETS 2215	Geometrical Optics	3
ETS 2230	Laser Technologies	3

##### Robotics-Manufacturing

EET 2930	Special Topics in Electronic Engineering (N)	.5 - 3
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
EET 2930	Special Topics in Electronic Engineering (N)	.5 - 3

##### Solar Energy

ETP 1420	Solar Thermal Systems	3
----------	-----------------------	---

ETP 2410 Solar Photovoltaic Systems 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	Intro 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	Intro 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**

### **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	Intro 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 - Communications/English**

ENC 1101	English Composition I	3
----------	-----------------------	---

**General Education - Humanities/Fine Arts**

Select 3 credits from the following:

ARH 1000	Art Appreciation	3
HUM 1020	Introduction to Humanities	3
LIT 1000	Introduction to Literature	3
MUL 2010	Music Appreciation	3
PHI 1010	Introduction to Philosophy	3
THE 1000	Introduction to Theatre (Drama)	3

**General Education - Mathematics**

Select 3 credits from the following:

MAC 1105	College Algebra	3
MAC 2311	Calculus I with Analytic Geometry	5
MGF 1106	Survey in Mathematics	3
MGF 1107	Explorations in Mathematics	3
STA 2023	Elementary Statistics I	3

**General Education - Natural Science**

Select 3 credits from the following:

AST 1002	General Astronomy	3
BSC 1005	Life Science	3
BSC 2010	General Biology I	3
BSC 2085	Anatomy & Physiology I	3
CHM 1020	Introduction to Chemistry	3
CHM 1045	General Chemistry I	3
PHY 1020	Principles of Physics	3
PHY 1053	College Physics I	3
PHY 2048	Physics with Calculus I	3

**General Education - Social/Behavioral Science**

POS 1041	American Government	3
----------	---------------------	---

**Major Field Required Courses - 18 credits**

FFP 2840	Disaster Operations	3
FFP 2820	Principles of Emergency Management	3
DSC 2063	Risk Communications	3
DSC 1222	Psychological Management of Disasters	3
DSC 1641	Exercise Design and Evaluation	3
DSC 2941	Emergency Management Capstone	3

**Major Field Electives - Select 27 credits**

DSC 1002	Terrorism and U.S. Security	3
DSC 1003	Introduction to Homeland Security	3
DSC 2212	Disaster Response, Mitigation and Recovery	3
FFP 2801	Incident Command System	3
MAN 2021	Principles of Management	3
MAN 2300	Introduction to Human Resource Management	3
SLS 1261	Essentials of Contemporary Leadership	3
SPC 1608	Public Speaking	3
SYG 2010	Social Problems	3
TRA 2131	Purchasing Management	3
ECO 2013	Principles of Economics Macro	3

ECO 2023	Principles of Economics Micro	3
MAT 1033	Intermediate Algebra	3
Or		
MAT 1100	Quantitative Reasoning	3
CGS 1060	College Computing	3
Or		
CGS 1100	Introduction to Computer Applications for Business	3

CGS 1060 or CGS 1060 is required for B.S. in Public Administration Degree

ECO 2013 or ECO 2023 is required for B.S. in Public Administration Degree

**EMERGENCY MANAGEMENT CERTIFICATE - 60260****60260 - 24 Credits****DEGREE REQUIREMENTS****Major Field Required Courses – 24 credits**

FFP 2820	Principles of Emergency Management	3
DSC 2063	Risk Communications	3
FFP 2840	Disaster Operations	3
DSC 1002	Terrorism and U.S. Security	3
DSC 2212	Disaster Response, Mitigation and Recovery	3
DSC 1222	Psychological Management of Disasters	3
DSC 1641	Exercise Design and Evaluation	3
SLS 1261	Essentials of Contemporary Leadership	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](http://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 Certificate 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 - Communications/English

ENC 1101	English Composition I	3
----------	-----------------------	---

##### General Education - Humanities/Fine Arts

Select 3 credits from the following:

ARH 1000	Art Appreciation	3
HUM 1020	Introduction to Humanities	3
LIT 1000	Introduction to Literature	3
MUL 2010	Music Appreciation	3
PHI 1010	Introduction to Philosophy	3
THE 1000	Introduction to Theatre (Drama)	3

##### General Education - Mathematics

Select 3 credits from the following:

MGF 1106	Survey in Mathematics	3
MGF 1107	Explorations in Mathematics	3
MAC 1105	College Algebra	3
STA 2023	Elementary Statistics I	3
MAC 2311	Calculus I with Analytic Geometry	5

##### General Education - Natural Science

BSC 2086	Anatomy & Physiology II	3
BSC 2086L	Anatomy & Physiology II Lab	1

Natural Science courses require a grade of C or higher.

##### General Education - Social/Behavioral Science

POS 1041	American Government	3
	Or	
AMH 2020	American History: Reconstruction to the Present	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 - 57 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 2664	Paramedic Clinical/Field Experience I	6
EMS 2602C	Paramedic II	12
EMS 2665	Paramedic Clinical/Field Experience II	6
EMS 2659	Paramedic III and select one from the following:	6
MAT 1033	Intermediate Algebra	3
	Or	
MAT 1100	Quantitative Reasoning	3

## EMERGENCY MEDICAL TECHNICIAN

### 60650 - 12 Credits

#### (Selective Admission)

The Emergency Medical Technology certificate 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.

Students who successfully meet program requirements are eligible to take the National Registry of Emergency Medical Technicians' (NREMT) EMT certification exam. Students 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](http://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.

## DEGREE REQUIREMENTS

### Major Field Required Courses

EMS 2601C	Paramedic I	12
EMS 2664	Paramedic Clinical/Field Experience I	6
EMS 2602C	Paramedic II	12
EMS 2665	Paramedic Clinical/Field Experience II	6
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 - Communications/English

ENC 1101	English Composition I	3
----------	-----------------------	---

### General Education - Humanities/Fine Arts

Select 3 credits from the following:

ARH 1000	Art Appreciation	3
----------	------------------	---

HUM 1020	Introduction to Humanities	3
LIT 1000	Introduction to Literature	3
MUL 2010	Music Appreciation	3
PHI 1010	Introduction to Philosophy	3
THE 1000	Introduction to Theatre (Drama)	3

### General Education - Mathematics

Select 3 credits from the following:

MGF 1106	Survey in Mathematics	3
MGF 1107	Explorations in Mathematics	3
STA 2023	Elementary Statistics I	3
MAC 1105	College Algebra	3
MAC 2311	Calculus I with Analytic Geometry	5

### General Education - Natural Science

Select 3 credits from the following:

AST 1002	General Astronomy	3
BSC 1005	Life Science	3
BSC 2010	General Biology I	3
BSC 2085	Anatomy & Physiology I	3
CHM 1020	Introduction to Chemistry	3
CHM 1045	General Chemistry I	3
PHY 1020	Principles of Physics	3
PHY 1053	College Physics I	3
PHY 2048	Physics with Calculus I	3

### General Education - Social/Behavioral Science

Choose 3 credits:

AMH 2020	American History: Reconstruction to the Present	3
	Or	
POS 1041	American Government	3

### Major Field Required Courses - 15 credits

FFP 1000	Principles of Emergency Services	3
FFP 1812	Engine 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

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 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 2840	Disaster Operations	3
FFP 2949	Fire Science Observation	4
MAT 1100	Quantitative Reasoning	3
	Or	
MAT 1033	Intermediate Algebra	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.

## ASSOCIATE IN SCIENCE DEGREE IN GRAPHICS TECHNOLOGY

### 20580 - 64 credits

#### DEGREE REQUIREMENTS

##### General Education - Communications/English

ENC 1101	English Composition I	3
----------	-----------------------	---

##### General Education - Humanities/Fine Arts

Select 3 credits from the following:

ARH 1000	Art Appreciation	3
HUM 1020	Introduction to Humanities	3
LIT 1000	Introduction to Literature	3
MUL 2010	Music Appreciation	3
PHI 1010	Introduction to Philosophy	3
THE 1000	Introduction to Theatre (Drama)	3

##### General Education - Mathematics

Select 3 credits from the following:

MAC 1105	College Algebra	3
MAC 2311	Calculus I with Analytic Geometry	5

MGF 1106	Survey in Mathematics	3
	recommended	
MGF 1107	Explorations in Mathematics	3
STA 2023	Elementary Statistics I	3

##### General Education - Natural Science

Select 3 credits from the following:

AST 1002	General Astronomy	3
BSC 1005	Life Science	3
BSC 2010	General Biology I	3
BSC 2085	Anatomy & Physiology I	3
CHM 1020	Introduction to Chemistry	3
CHM 1045	General Chemistry I	3
PHY 1020	Principles of Physics	3
	recommended	
PHY 1053	College Physics I	3
PHY 2048	Physics with Calculus I	3

##### General Education - Social/Behavioral Science

AMH 2020	American History: Reconstruction to the Present	3
	Or	
POS 1041	American Government	3

##### Major Field Required Courses - 42 credits

CGS 1821	Website Development	3
DIG 1000	Introduction to Digital Media	3
DIG 1115	Digital Imaging 1	3
DIG 2030	Digital Video Fundamentals	3
DIG 2251	Digital Audio Fundamentals	3
DIG 2302	3D Modeling & Animation 1	3
DIG 2581	Digital Media Portfolio	3
GRA 1121	Publication Design	3
GRA 1129	Visualization Basics	3
GRA 1151	Vector Design 1	3
GRA 1206	Typography	3
GRA 2160	Digital Animation	3
GRA 2161	Introduction to Motion Graphics and Compositing	3
PGY 1800	Principles of Digital Photography	3

##### Major Field Electives - Select 7 credits

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	Digital Imaging 2	3
DIG 2203	Digital Video 2 Production	3
DIG 2303	3D Digital Animation 2	3
DIG 2500	Fundamentals of Interactive Web Design	3
GRA 2152	Vector Design 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	Introduction to Digital Media	3
DIG 1115	Digital Imaging 1	3
GRA 1151	Vector Design 1	3
DIG 2116	Digital Imaging 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.

#### DEGREE REQUIREMENTS

##### Major Field Required Courses – 24 credits

CGS 1821	Website Development	3
DIG 1000	Introduction to Digital Media	3
DIG 1115	Digital Imaging 1	3
GRA 1129	Visualization Basics	3
GRA 1121	Publication Design	3
GRA 1151	Vector Design 1	3
DIG 2116	Digital Imaging 2	3
GRA 1206	Typography	3

## Health Information Technology Certificates

## 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	3
HSC 2531	Medical Terminology I	3

All HIM prefix courses require a grade of C or higher.

## 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	3
	Or	
BSC 2086	Anatomy & Physiology II	3
HSC 2531	Medical Terminology I	3
HIM 1012	Legal Aspects of Health Information	3
HIM 1000	Introduction to Health Information Management	3

HIM 1444	Pathopharmacology	4
HIM 1510C	Health Care Data Analysis	3
HIM 1282	Basic CPT Coding	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
HIM 2960	Coding Credential Exam Review	1
HIM 2275	Revenue Cycle Management	2

All natural science and HIM prefix courses require a grade of C or higher.

## 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 - Communications/English

ENC 1101	English Composition I	3
----------	-----------------------	---

##### General Education - Humanities/Fine Arts

Select 3 credits from the following:

PHI 1010	Introduction to Philosophy	3
ARH 1000	Art Appreciation	3
HUM 1020	Introduction to Humanities	3
LIT 1000	Introduction to Literature	3
MUL 2010	Music Appreciation	3

THE 1000	Introduction to Theatre (Drama)	3
----------	---------------------------------	---

##### General Education - Mathematics

Select 3 credits from the following:

STA 2023	Elementary Statistics I Recommended	3
MAC 1105	College Algebra	3
MAC 2311	Calculus I with Analytic Geometry	5
MGF 1106	Survey in Mathematics	3
MGF 1107	Explorations in Mathematics	3

##### General Education - Natural Science

Select 3 credits from the following:

BSC 1005	Life Science	3
AST 1002	General Astronomy	3
BSC 2010	General Biology I	3
BSC 2085	Anatomy & Physiology I	3
CHM 1020	Introduction to Chemistry	3
CHM 1045	General Chemistry I	3
PHY 1020	Principles of Physics	3
PHY 2048	Physics with Calculus I	3
PHY 1053	College Physics I	3

Natural Science requires a grade of C or higher.

##### General Education - Social/Behavioral Science

POS 1041	American Government Or	3
AMH 2020	American History: Reconstruction to the Present	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 - 32 credits

ACG 2001	Financial Accounting I	3
ACG 2011	Financial Accounting II	3
ACG 2071	Managerial Accounting	3
ECO 2023	Principles of Economics Micro	3
HSC 1001C	Introduction to Healthcare Management	4
HSC 1632C	Overview of Healthcare Delivery	3
HSC 2802C	Health Science Seminar	4
HSC 1653	Healthcare Ethics	3
PSY 2012	Introduction to Psychology	3
CGS 1060	College Computing Or	3
CGS 1100	Introduction to Computer Applications for Business	3

Area requires a grade of C or higher.

##### Major Field Electives - select 13 credits

GEB 1011	Introduction to Business	3
MNA 2345	Supervision	3
MAT 1033	Intermediate Algebra	3
SLS 1261	Essentials of Contemporary Leadership	3

SPC 1608	Public Speaking	3
LIS 1002	Information Literacy and Research Skills	1

*Area requires a grade of C or higher*

## HEALTH NAVIGATOR SPECIALIST 60700

### 60700 - 31 Credits

#### DEGREE REQUIREMENTS

##### Major Field Required Courses - 20 credits

ENC 1101	English Composition I	3
BSC 2085	Anatomy & Physiology I	3
BSC 2085L	Anatomy & Physiology I Lab	1
BSC 2086	Anatomy & Physiology II	3
BSC 2086L	Anatomy & Physiology II Lab	1
HSC 2531	Medical Terminology I	3
HSA 2102	Introduction to Public Health and Health Navigation	3
	and select one from the following:	
MAC 1105	College Algebra	3
MAC 2311	Calculus I with Analytic Geometry	5
MGF 1106	Survey in Mathematics	3
MGF 1107	Explorations in Mathematics	3
STA 2023	Elementary Statistics I	3

ENC 1101, MAC 1105, MAC 2311, MGF 1106, MGF 1107. STA 2023 require a grade of C or higher.

##### Major Field Electives - select 11 credits

AMH 2020	American History: Reconstruction to the Present	3
	Or	
POS 1041	American Government	3
HUN 1201	Nutrition	3
MCB 2010	Microbiology for Health Sciences	3
MCB 2010L	Microbiology Lab for Health Sciences	1
PHY 1020	Principles of Physics	3
CHM 1020	Introduction to Chemistry	3
PSY 2012	Introduction to Psychology	3
DEP 2004	Human Development	3
HSC 1101	Developing Personal Well-being	1
ARH 1000	Art Appreciation	3
	Or	
HUM 1020	Introduction to Humanities	3
	Or	
LIT 1000	Introduction to Literature	3
	Or	
MUL 2010	Music Appreciation	3
	Or	
PHI 1010	Introduction to Philosophy	3
	Or	
THE 1000	Introduction to Theatre (Drama)	3

ARH 1000, HUM 1020, LIT 1000, MUL 2010, PHI 1010, THE 1000 require a grade of C or higher.

## 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 - Communications/English

ENC 1101	English Composition I	3
----------	-----------------------	---

##### General Education - Humanities/Fine Arts

PHI 1010	Introduction to Philosophy	3
----------	----------------------------	---

##### General Education - Mathematics

MGF 1107	Explorations in Mathematics	3
----------	-----------------------------	---

##### General Education - Natural Science

BSC 1005	Life Science	3
----------	--------------	---

##### General Education - Social Behavioral Science

POS 1041	American Government	3
----------	---------------------	---

##### Major Field Required Courses - select 42 credits

HFT 1000	Introduction to Hospitality and Tourism	3
FOS 2201	Food Service Sanitation Management	3
FSS 2251	Food & Beverage Management	3
HFT 2500	Marketing & Sales in the Hospitality Industry	3
FSS 2284C	Catering and Banquet Management	3
HFT 1410	Front Office Management	3
HFT 2630	Security Issues in the Hospitality Industry	3
HFT 2223	Human Relations and Supervisory Development	3
HFT 2942	Internship in Hospitality	3
HFT 1300	Managing Housekeeping Operations	3
FSS 2500	Food and Beverage Cost Control	3
HFT 2600	Hospitality Law	3
HFT 2210	Hospitality Mgmt & Leadership	3
HFT 2245	Guest Service Management	3

##### Major Field Electives - Select 3 credits

MAT 1100	Quantitative Reasoning	3
----------	------------------------	---

	Or	
MAT 1033	Intermediate Algebra	3
CGS 1100	Introduction to Computer Applications for Business	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 2245	Guest Service Management	3
HFT 1410	Front Office Management	3
HFT 2223	Human Relations and Supervisory Development	3
HFT 1300	Managing Housekeeping Operations	3

**EVENT PLANNING MANAGEMENT - 60600****60600 - 24 credits****DEGREE REQUIREMENTS****Major Field Required Courses - 24 credits**

HFT 1000	Introduction to Hospitality and Tourism	3
FOS 2201	Food Service Sanitation Management	3
FSS 2284C	Catering and Banquet Management	3
HFT 2630	Security Issues in the Hospitality Industry	3
HFT 2223	Human Relations and Supervisory Development	3
HFT 2500	Marketing & Sales in the Hospitality Industry	3
FSS 2500	Food and Beverage Cost Control	3
HFT 2600	Hospitality Law	3

**ROOMS DIVISION MANAGEMENT - 60610****60610 - 30 credits****DEGREE REQUIREMENTS****Major Field Required Courses - 30 credits**

HFT 1000	Introduction to Hospitality and Tourism	3
HFT 2245	Guest Service Management	3
HFT 1410	Front Office Management	3
HFT 2630	Security Issues in the Hospitality Industry	3

HFT 2223	Human Relations and Supervisory Development	3
HFT 2942	Internship in Hospitality	3
HFT 1300	Managing Housekeeping Operations	3
HFT 2500	Marketing & Sales in the Hospitality Industry	3
HFT 2600	Hospitality Law	3
HFT 2210	Hospitality Mgmt & Leadership	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 - Communications/English**

ENC 1101	English Composition I	3
----------	-----------------------	---

**General Education - Humanities/Fine Arts**

ARH 1000	Art Appreciation	3
----------	------------------	---

**General Education - Mathematics**

MAC 1105	College Algebra recommended	3
	Or	
MGF 1106	Survey in Mathematics	3

**General Education - Natural Science**

Select 3 credits from the following:

AST 1002	General Astronomy	3
BSC 1005	Life Science recommended	3
BSC 2010	General Biology I	3
CHM 1020	Introduction to Chemistry	3
PHY 1020	Principles of Physics	3

**General Education - Social/Behavioral Science**

AMH 2020	American History: Reconstruction to the Present	3
	Or	
POS 1041	American Government	3

**Major Field Required Courses - 60 credits**

ETD 1320	Introduction to AutoCAD	3
IND 1019	Interior Design Proxemics &	3

	Environmental	
IND 1020	Principles of Interior Design	3
IND 1301	Interior Design Graphics	3
IND 1401	Technical Design I	2
IND 1420	Materials and Sources of Interior Design	3
IND 1429	Textiles	3
IND 1462	Introduction to Architectural CAD	3
IND 1935	Building Codes and Barrier Free	3
IND 2016	Commercial Interior Design I	3
IND 2222	Commercial Design II	3
IND 2100	History of Interiors I	3
IND 2210	Residential Interiors	3
IND 2432	Lighting for Interior Design	3
IND 2500	Interior Design Business Practices	3
IND 2523	Interior Design Portfolio	2
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	Internship	3
IND 2970	Interior Design Thesis	3

### KITCHEN AND BATH DESIGN CERTIFICATE - 60280

**60280 - 39 Credits**

#### 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 1420	Materials and Sources of Interior Design	3
IND 1429	Textiles	3
IND 1935	Building Codes and Barrier Free	3
IND 2432	Lighting for 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

##### Major Field Electives - Select 5 credits

IND 1462	Introduction to Architectural CAD	3
IND 2100	History of Interiors I	3
IND 2940	Internship	3

### HOME STAGING CERTIFICATE - 60500

**60500 - 12 credits**

#### DEGREE REQUIREMENTS

##### Major Field Required Courses - 9 credits

IND 1020	Principles of Interior Design	3
----------	-------------------------------	---

IND 1420	Materials and Sources of Interior Design	3
IND 1429	Textiles	3
<b>Major Field Electives - Select 3 credits</b>		
IND 1401	Technical Design I	2
IND 2100	History of Interiors I	3
IND 2432	Lighting for Interior Design	3

### 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 - Communications/English

ENC 1101	English Composition I	3
----------	-----------------------	---

##### General Education - Humanities/Fine Arts

PHI 1010	Introduction to Philosophy	3
----------	----------------------------	---

##### General Education - Mathematics

MGF 1106	Survey in Mathematics	3
	Or	
MGF 1107	Explorations in Mathematics	3
	Or	
MAC 1105	College Algebra	3

##### General Education - Natural Science

BSC 1005	Life Science	3
----------	--------------	---

##### General Education - Social/Behavioral Science

POS 1041	American Government	3
----------	---------------------	---

##### 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
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
MAT 1033	Intermediate Algebra	3

	Or	
MAT 1100	Quantitative Reasoning	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
ORH 1510	Plant Identification	3
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 Shop Management	3
GCO 2632	Golf Course Organization and Administration	3
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 Shop Management	3
GCO 1947	Golf Course Design Concepts	3
GCO 2632	Golf Course Organization and Administration	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
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.

**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 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

## LOGISTICS AND TRANSPORTATION SPECIALIST

**60680 - 18 Credits**

This program trains students to become specialists in logistics and transportation. Specialists in this area are concerned with ensuring goods are delivered safely, efficiently, and on time on a consistent basis. Logistics is a complex process that requires a broad range of skills and abilities to coordinate and time a highly detailed chain of events. Specialists in logistics and transportation evaluate, plan and coordinate a company's entire supply chain, overseeing a product's life cycle from acquisition through distribution and delivery. Students will gain skills in operations, inventory, purchasing, warehousing, and quality management.

**DEGREE REQUIREMENTS****Major Field Required Courses - 18 credits**

MAN 2043	Quality Management	3
MAN 2500	Operations Management	3
MNA 2216	Inventory Management	3
TRA 2010	Transportation and Logistics	3
TRA 2131	Purchasing Management	3
TRA 2230	Warehouse Management	3

**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 - Communications/English**

ENC 1101	English Composition I	3
----------	-----------------------	---

**General Education - Humanities/Fine Arts**

Select 3 credits from the following:

ARH 1000	Art Appreciation	3
HUM 1020	Introduction to Humanities	3
LIT 1000	Introduction to Literature recommended	3
MUL 2010	Music Appreciation	3
PHI 1010	Introduction to Philosophy	3
THE 1000	Introduction to Theatre (Drama)	3

**General Education - Mathematics**

Select 3 credits from the following:

MAC 1105	College Algebra recommended	3
MAC 2311	Calculus I with Analytic Geometry	5
MGF 1106	Survey in Mathematics	3
MGF 1107	Explorations in Mathematics	3
STA 2023	Elementary Statistics I	3

**General Education - Natural Science**

Select 3 credits from the following:

AST 1002	General Astronomy	3
BSC 1005	Life Science recommended	3
BSC 2010	General Biology I	3
BSC 2085	Anatomy & Physiology I	3
CHM 1020	Introduction to Chemistry	3
CHM 1045	General Chemistry I	3
PHY 1020	Principles of Physics	3
PHY 1053	College Physics I	3
PHY 2048	Physics with Calculus I	3

**General Education - Social/Behavioral Science**

AMH 2020	American History: Reconstruction to the Present Or	3
POS 1041	American Government	3

**Major Field Required Courses - 30 credits**

ADV 2000	Advertising and Sales Promotion	3
GEB 1011	Introduction to Business	3
GEB 2941	Applied Internship Or	3-4
GEB 2214	Business Communications	3
MAR 2011	Principles of Marketing	3



MAR 2101	Social Media Marketing	3	SBM 1000	Entrepreneurship	3
MKA 2021	Salesmanship	3	APA 1111	Introduction to Accounting	3
QMB 1001	Mathematics of Business	3		Or	
SLS 1261	Essentials of Contemporary Leadership	3	ACG 2001	Financial Accounting I	3
APA 1111	Introduction to Accounting	3	CGS 1060	College Computing	3
	Or			Or	
ACG 2001	Financial Accounting I	3	CGS 1100	Introduction to Computer Applications for Business	3
MAN 2021	Principles of Management	3		Or	
	Or		CIS 1000	Introduction to Information Technology	3
MNA 2345	Supervision	3	SLS 1261	Essentials of Contemporary Leadership	3
<b>Major Field Electives - Select 15 credits</b>			MAN 2021	Principles of Management	3
APA 1152	Orientation to QuickBooks Desktop	1		Or	
BUL 2241	Business Law I	3	MNA 2345	Supervision	3
MAN 2300	Introduction to Human Resource Management	3	<b>Major Field Required Courses effective Spring 2024</b>		
MNA 1821	Electronic Commerce	3	GEB 1011	Introduction to Business	3
SBM 1000	Entrepreneurship	3	MAR 2011	Principles of Marketing	3
FIN 1100	Personal Finance	3	GEB 2214	Business Communications	3
SPC 1608	Public Speaking	3	MKA 2021	Salesmanship	3
CGS 1060	College Computing	3	MAR 2101	Social Media Marketing	3
	Or		SBM 1000	Entrepreneurship	3
CGS 1100	Introduction to Computer Applications for Business	3	SLS 1261	Essentials of Contemporary Leadership	3
	Or			Or	
CIS 1000	Introduction to Information Technology	3	MAN 2021	Principles of Management	3
	Maximum of two courses with CGS, MAN, MKA, MNA, HFT, or SLS prefix		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

## 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 Major Field Required and Elective courses.

## DEGREE REQUIREMENTS

### Major Field Required Courses - Select 30 Credits effective Fall 2023

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

## 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 - Communications/English

ENC 1101 English Composition I 3

#### General Education - Humanities/Fine Arts

Select 3 credits from the following:

ARH 1000	Art Appreciation	3
HUM 1020	Introduction to Humanities	3
LIT 1000	Introduction to Literature	3
MUL 2010	Music Appreciation	3
PHI 1010	Introduction to Philosophy	3
THE 1000	Introduction to Theatre (Drama)	3

#### General Education - Mathematics

Select 3 credits from the following:

MAC 1105	College Algebra	3
MAC 2311	Calculus I with Analytic Geometry	5
STA 2023	Elementary Statistics I	3
MGF 1106	Survey in Mathematics	3
MGF 1107	Explorations in Mathematics	3

#### General Education - Natural Science

Students are required to complete 3 credits from BSC 2010, BSC 2085, CHM 1020, or CHM 1045.

Select either BSC 2011 with BSC 2011L or BSC 2086 with BSC 2086L, these may not be mixed.

Also select 8 credits of Chemistry (CHM 1032 (p. 180) is not a Natural Science General Education course, but may be used as part of the 8 credits of Chemistry):

Select from the following options:

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

Or

BSC 2085	Anatomy & Physiology I	3
BSC 2085L	Anatomy & Physiology I Lab	1
BSC 2086	Anatomy & Physiology II	3
BSC 2086L	Anatomy & Physiology II Lab	1

Select 8 credits of Chemistry - CHM 1032 may not be used for Natural

Science General Education

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

All Natural Science courses require a grade of "C" or higher for program completion.

#### General Education - Social/Behavioral Science

AMH 2020	American History: Reconstruction to the Present	3
----------	---	---

Or

POS 1041	American Government	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 - 52 credits

MLT 1040C	Introduction to Medical Technology	3
MLT 1330	Hemostasis	3
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 - Communications/English

ENC 1101	English Composition I	3
----------	-----------------------	---

##### General Education - Humanities/Fine Arts

Select 3 credits from the following:

ARH 1000	Art Appreciation	3
HUM 1020	Introduction to Humanities	3
LIT 1000	Introduction to Literature	3
MUL 2010	Music Appreciation	3
PHI 1010	Introduction to Philosophy	3
THE 1000	Introduction to Theatre (Drama)	3

##### General Education - Mathematics

Select 3 credits from the following:

MGF 1107	Explorations in Mathematics recommended	3
MAC 1105	College Algebra	3
MGF 1106	Survey in Mathematics	3
MAC 2311	Calculus I with Analytic Geometry	5
STA 2023	Elementary Statistics I	3

##### General Education - Natural Science

BSC 2085	Anatomy & Physiology I	3
BSC 2085L	Anatomy & Physiology I Lab	1
BSC 2086	Anatomy & Physiology II	3
BSC 2086L	Anatomy & Physiology II Lab	1

##### General Education - Social/Behavioral Science

AMH 2020	American History: Reconstruction to the Present	3
	Or	
POS 1041	American Government	3

##### Major Field Required Courses - 52 credits

HUN 1201	Nutrition	3
NUR 1021C	Intro to Nursing Concepts 1	10
NUR 1034C	Health-Illness-Concepts 2	11
PSY 2012	Introduction to Psychology	3
NUR 2035C	Health-Illness Concepts 3	10
NUR 2205C	Nursing and Complex Health Concepts 4	11
	Also choose:	
MCB 2010	Microbiology for Health Sciences	3
MCB 2010L	Microbiology Lab for Health Sciences	1
	Or	
MCB 3023	General Microbiology	3

MCB 3023L	General Microbiology Laboratory	1
-----------	---------------------------------	---

Upon acceptance, a complete health screen, drug screen and Florida Department of Law Enforcement check are required. All core curriculum (NUR prefix), English, humanities, math, and natural science courses require a grade of C or higher. BSC 2085 and BSC 2085L must be completed prior to [NUR-1021C](#).

## 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

#### GENERAL EDUCATION

##### General Education - Communications/English

ENC 1101	English Composition I	3
----------	-----------------------	---

##### General Education - Humanities/Fine Arts

Select 3 credits from the following:

ARH 1000	Art Appreciation	3
HUM 1020	Introduction to Humanities	3
LIT 1000	Introduction to Literature	3
MUL 2010	Music Appreciation	3
PHI 1010	Introduction to Philosophy	3
THE 1000	Introduction to Theatre (Drama)	3

##### General Education - Mathematics

Select 3 credits from the following:

MGF 1106	Survey in Mathematics	3
MGF 1107	Explorations in Mathematics	3
STA 2023	Elementary Statistics I	3
MAC 1105	College Algebra	3
MAC 2311	Calculus I with Analytic Geometry	5

##### General Education - Natural Science

Select 3 credits from the following:

AST 1002	General Astronomy	3
----------	-------------------	---

BSC 1005	Life Science	3
BSC 2010	General Biology I	3
BSC 2085	Anatomy & Physiology I	3
CHM 1020	Introduction to Chemistry	3
CHM 1045	General Chemistry I	3
PHY 1020	Principles of Physics	3
PHY 1053	College Physics I	3
PHY 2048	Physics with Calculus I	3

**General Education - Social/Behavioral Science**

POS 1041	American Government	3
----------	---------------------	---

**Major Field Required Courses - 27 credits**

Grade of 'C' or higher required for ENC 1102.

ENC 1102	English Composition II	3
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 22 credits**

ACG 2001	Financial Accounting I	3
CJL 2062	Constitutional Law	3
CJL 2100	Criminal Law	3
CGS 1060	College Computing	3
LIS 1002	Information Literacy and Research Skills	1
LIS 2004	Research Strategies for College Students	1
LIS 2005	Advanced Information Literacy and Research Skills	3
MAT 1100	Quantitative Reasoning Or	3
MAT 1033	Intermediate Algebra	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 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) 3030 Potomac Avenue, Suite 100, Alexandria, Virginia, 22305-3085, phone 703-706-3245, email [accreditation@apta.org](mailto:accreditation@apta.org) (p. 132), website <http://www.capteonline.org> (p. 132).

**ASSOCIATE IN SCIENCE DEGREE IN PHYSICAL THERAPIST ASSISTANT****20690 - 74 credits****DEGREE REQUIREMENTS****Requirements - Communication/English**

ENC 1101	English Composition I	3
----------	-----------------------	---

**General Education - Humanities/Fine Arts**

Select 3 credits from the following:

ARH 1000	Art Appreciation	3
HUM 1020	Introduction to Humanities	3
LIT 1000	Introduction to Literature	3
MUL 2010	Music Appreciation	3
PHI 1010	Introduction to Philosophy	3
THE 1000	Introduction to Theatre (Drama)	3

**General Education - Mathematics**

Select 3 credits from the following:

MAC 1105	College Algebra or higher	3
MGF 1106	Survey in Mathematics	3
MGF 1107	Explorations in Mathematics	3
MAC 2311	Calculus I with Analytic Geometry	5
STA 2023	Elementary Statistics I	3

**General Education - Natural Science**

PHY 1020	Principles of Physics or higher And	3
BSC 2085	Anatomy & Physiology I	3
BSC 2085L	Anatomy & Physiology I Lab	1
BSC 2086	Anatomy & Physiology II	3
BSC 2086L	Anatomy & Physiology II Lab	1

**General Education - Social/Behavioral Sciences**

POS 1041	American Government Or	3
AMH 2020	American History: Reconstruction to the Present	3

**Major Field Required Courses - 48 credits**

PHT 1000	Introduction to Physical Therapy	2
PHT 1020	Principles of Practice I	2
PHT 1020L	Principles of Practice I Lab	2
PHT 1121	Functional Anatomy and Kinesiology	3
PHT 1121L	Functional Anatomy and Kinesiology Lab	2
PHT 1213	Foundations of Therapeutic Exercise	3
PHT 1213L	Foundations of Therapeutic Exercise Lab	2
PHT 1080	Principle of Practice II	2
PHT 1080L	Principles of Practice II Lab	1
PHT 1132	Musculoskeletal PT	3
PHT 1132L	Musculoskeletal PT Lab	2
PHT 2210	Principles of Practice III	2
PHT 2210L	Principles of Practice III Lab	2
PHT 2810	PTA Clinic I	5
PHT 2255	Neuromuscular PT	3
PHT 2255L	Neuromuscular PT Lab	2
PHT 2289	Cardiopulmonary & Systemic Physical Therapy	3
PHT 2289L	Cardiopulmonary & Systemic PT Lab	2
PHT 2820	PTA Clinical II	5

All core curriculum, English, humanities, mathematics, 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.

**Major Field Elective - 3 credits**

PSY 2012	Introduction to Psychology	3
----------	----------------------------	---

**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 - Communications/English**

ENC 1101	English Composition I	3
----------	-----------------------	---

**General Education - Mathematics**

MAC 1105	College Algebra	3
----------	-----------------	---

**General Education - Humanities/Fine Arts**

Select 3 credits from the following:

ARH 1000	Art Appreciation	3
HUM 1020	Introduction to Humanities	3
LIT 1000	Introduction to Literature	3
MUL 2010	Music Appreciation	3
PHI 1010	Introduction to Philosophy	3
THE 1000	Introduction to Theatre (Drama)	3

**General Education - Natural Science**

BSC 2085	Anatomy & Physiology I	3
BSC 2085L	Anatomy & Physiology I Lab	1
BSC 2086	Anatomy & Physiology II	3
BSC 2086L	Anatomy & Physiology II Lab	1

**General Education - Social/Behavioral Science**

POS 1041	American Government	3
Or		
AMH 2020	American History: Reconstruction to the Present	3

General Education courses may be taken prior to acceptance into the program or must be completed while in the program.

**Major Field Required Courses - 57 credits**

PSY 2012	Introduction to Psychology	3
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	3
RTE 2533	Radiographic Procedures IV	2
RTE 2533L	Radiographic Procedures IV Lab	1
RTE 2553	Radiographic Procedures V	3

RTE 2553L	Radiographic Procedures V Lab	1
RTE 2854	Radiographic Clinical Education VI	1
RTE 2864	Radiographic Clinical Education VII	3
RTE 2874	Radiographic Clinical Education VIII	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](http://www.coarc.com)).

Commission on Accreditation for Respiratory Care  
(CoArc)  
Associate in Science in Respiratory Care  
817-283-2835  
[www.coarc.com](http://www.coarc.com)

## ASSOCIATE IN SCIENCE DEGREE IN RESPIRATORY CARE

### 20710 - 76 credits

#### DEGREE REQUIREMENTS

##### General Education - Communications/English

ENC 1101	English Composition I	3
----------	-----------------------	---

##### General Education - Humanities/Fine Arts

Select 3 credits from:

ARH 1000	Art Appreciation	3
HUM 1020	Introduction to Humanities	3
LIT 1000	Introduction to Literature	3
MUL 2010	Music Appreciation	3
PHI 1010	Introduction to Philosophy	3
THE 1000	Introduction to Theatre (Drama)	3

##### General Education - Mathematics

Select 3 credits from the following:

MAC 1105	College Algebra	3
MAC 2311	Calculus I with Analytic Geometry	5
MGF 1106	Survey in Mathematics	3
MGF 1107	Explorations in Mathematics	3
STA 2023	Elementary Statistics I	3

##### General Education - Natural Science

BSC 2085	Anatomy & Physiology I	3
BSC 2085L	Anatomy & Physiology I Lab	1
BSC 2086	Anatomy & Physiology II	3
BSC 2086L	Anatomy & Physiology II Lab	1

##### General Education - Social/Behavioral Science

AMH 2020	American History: Reconstruction to the Present	3
	Or	
POS 1041	American Government	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 Care 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 Care Clinic I	5
RET 2442	Respiratory Care Theory III with Lab	3
RET 2833	Respiratory Care Clinic II	2
RET 2414C	Pulmonary Function Studies with Lab	3
RET 2264	Mechanical Ventilation with Lab	3
RET 2834	Respiratory Care Clinic III	5
RET 2280	Critical Respiratory Care	3
RET 2835	Respiratory Care 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
HSC 2531	Medical Terminology I	3

All core curriculum (RET), HSC 2531 (p. 228), and natural science courses require a grade of "C" or higher. BSC 2085 and BSC 2085L (p. 175) must be completed by the end of the Fall semester, first year. Mathematics (p. 241), BSC-2086 and BSC-2086L must be completed by the end of the Spring semester, first year.

## Restaurant Management

### 20800 - 60 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 - 60 credits

#### DEGREE REQUIREMENTS

##### General Education - Communications/English

ENC 1101	English Composition I	3
----------	-----------------------	---

##### General Education - Humanities Fine Arts

PHI 1010	Introduction to Philosophy	3
----------	----------------------------	---

##### General Education - Mathematics

MGF 1107	Explorations in Mathematics	3
----------	-----------------------------	---

##### General Education - Natural Science

BSC 1005	Life Science	3
----------	--------------	---

##### General Education - Social/Behavioral Science

POS 1041	American Government	3
----------	---------------------	---

##### Major Field Required Courses - 12 credits

FOS 2201	Food Service Sanitation Management	3
----------	------------------------------------	---

FSS 2251	Food & Beverage Management	3
----------	----------------------------	---

FSS 1203C	Quantity Food Production I	3
-----------	----------------------------	---

HUN 1203	Culinary Nutrition	3
----------	--------------------	---

##### Specialization Electives - 27 credits

HFT 1000	Introduction to Hospitality and Tourism	3
----------	---	---

FSS 1240C	Classical Cuisine	3
-----------	-------------------	---

FSS 1246C	Baking and Pastries I	3
-----------	-----------------------	---

HFT 2245	Guest Service Management	3
----------	--------------------------	---

FSS 2284C	Catering and Banquet Management	3
-----------	---------------------------------	---

HFT 2223	Human Relations and Supervisory Development	3
----------	---	---

FSS 2500	Food and Beverage Cost Control	3
----------	--------------------------------	---

HFT 2500	Marketing & Sales in the Hospitality Industry	3
----------	---	---

HFT 2600	Hospitality Law	3
----------	-----------------	---

FSS 1240C (p. 215) and FSS 1246C (p. 215) require a grade of C or higher for successful program progression and completion.

### Major Field Electives - Select 6 credits

CGS 1100	Introduction to Computer Applications for Business	3
----------	--	---

HFT 2630	Security Issues in the Hospitality Industry	3
----------	---	---

HFT 2943	Internship in Restaurant Management	3
----------	-------------------------------------	---

APA 1111	Introduction to Accounting	3
----------	----------------------------	---

GEB 1011	Introduction to Business	3
----------	--------------------------	---

MAN 2021	Principles of Management	3
----------	--------------------------	---

MAR 2011	Principles of Marketing	3
----------	-------------------------	---

MNA 2345	Supervision	3
----------	-------------	---

## SMALL UNMANNED AIRCRAFT SYSTEMS AND APPLICATIONS

### 60690 - 24 Credits

This certificate program provides both theoretical knowledge as well as practical hands-on skills in operation of small unmanned aircraft systems (sUAS) and their applications. Through a sequence of courses, students will be prepared to take FAA107 Commercial Remote Pilot Exam. Practical training consists of comprehensive flight training on a flight simulator, followed by indoor obstacle flight labs and finally, outdoor flight missions on the most popular drone vehicles. Students will also be introduced to the concepts, techniques, and software tools used for aerial photo and video collection and production, autonomous flight modes and operations, photogrammetry in surveying, real estate, public safety, mining, agriculture, and other popular applications of small unmanned aircraft systems.

#### DEGREE REQUIREMENTS

##### Major Field Required Courses - 24 credits

ASC 1560	Intro to Small Unmanned Aircraft Systems	3
----------	--	---

EET 1015C	DC Circuits	3
-----------	-------------	---

ASC 1571C	Remote Pilot Simulator	0.5-5
-----------	------------------------	-------

ASC 1572L	sUAS Indoor Flight Training	0.5-5
-----------	-----------------------------	-------

ASC 2565	FAA-107 Commercial Remote Pilot Ground School	3
----------	---	---

ASC 2573C	sUAS Outdoor Flight Training	0.5-5
-----------	------------------------------	-------

ASC 2563C	Applications in Aerial Photo- and Videography	3
-----------	---	---

ASC 2561C	sUAS Autonomous Mission Applications	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 - Communications/English

ENC 1101 English Composition I 3

#### General Education - Humanities/Fine Arts

HUM 1020 (p. 228) is recommended for students planning to pursue a Bachelor of Science Degree in Human Services at Indian River State College.

Select 3 credits from the following:

HUM 1020	Introduction to Humanities	3
ARH 1000	Art Appreciation	3
LIT 1000	Introduction to Literature	3
MUL 2010	Music Appreciation	3
PHI 1010	Introduction to Philosophy	3
THE 1000	Introduction to Theatre (Drama)	3

#### General Education - Mathematics

MGF 1106 is recommended for students planning to pursue a Bachelor of Science Degree in Human Services at Indian River State College.

Select 3 credits from the following:

MGF 1106	Survey in Mathematics	3
MGF 1107	Explorations in Mathematics	3
STA 2023	Elementary Statistics I	3
MAC 1105	College Algebra	3
MAC 2311	Calculus I with Analytic Geometry	5

#### General Education - Natural Science

BSC-1005 (p. 174) is recommended for students planning to pursue a Bachelor of Science Degree in Human Services at Indian River State College.

Select 3 credits from the following:

BSC 1005	Life Science	3
AST 1002	General Astronomy	3
BSC 2010	General Biology I	3
BSC 2085	Anatomy & Physiology I	3
CHM 1020	Introduction to Chemistry	3
CHM 1045	General Chemistry I	3
PHY 1020	Principles of Physics	3
PHY 1053	College Physics I	3

PHY 2048	Physics with Calculus I	3
----------	-------------------------	---

#### General Education - Social/Behavioral Science

AMH 2020	American History: Reconstruction to the Present recommended Or	3
----------	--	---

POS 1041	American Government	3
----------	---------------------	---

#### Major Field Required Courses - 33 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
----------	------------------------------	---

PSY 2012	Introduction to Psychology	3
----------	----------------------------	---

#### Major Field Electives - Select 12 credits

A maximum of 4 credits in Foreign Language may be used as elective credits.

DEP 1002	Child and Adolescent Psychology Recommended	3
----------	--	---

PPE 2001	Person and Personality Development Recommended:	3
----------	--	---

HUS 2111	Introduction to Interpersonal Communication recommended	3
----------	--	---

ENC 1102	English Composition II is recommended for students planning to pursue a Bachelor of Science Degree in Human Services at Indian River State College	3
----------	---	---

CCJ 1600	Deviant Behavior	3
----------	------------------	---

HSC 2400	First Aid and Safety	3
----------	----------------------	---

SYG 2010	Social Problems	3
----------	-----------------	---

CGS 1060	College Computing	3
----------	-------------------	---

BSC 2010L	General Biology I Lab Or	1
-----------	-----------------------------	---

BSC 1005L	Life Science Lab and select one from the following:	1
-----------	--	---

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
----------	-------------------------	---



## Supervision and Management for Industry

### ASSOCIATE IN SCIENCE DEGREE IN SUPERVISION AND MANAGEMENT FOR INDUSTRY

#### 20910- 60 credits

Students providing approved competency applied learning documentation receive college credits towards the technical skills required in the program. An additional required sequence of courses and approved elective will prepare the student for further education and careers in the manufacturing sector.

This unique degree offers students articulated credits toward the technical requirement of the degree. Students then will take a series of courses that will provide the skills needed for supervisory and management roles within their respective fields of training. Students will also earn two to four State Technical Certifications while earning the degree.

Once you complete the program: First line supervisor or manager of industrial related jobs. Alternatively continue into the Bachelor of Applied Science Degree in Organizational Management.

Contact the School of Business Division for approved listing of programs which articulation at 772-462-7665.

#### DEGREE REQUIREMENTS

##### General Education - Communication/English

ENC 1101	English Composition I	3
----------	-----------------------	---

##### General Education - Humanities/Fine Arts

Select 3 credits from the following:

ARH 1000	Art Appreciation	3
HUM 1020	Introduction to Humanities	3
LIT 1000	Introduction to Literature	3
MUL 2010	Music Appreciation	3
PHI 1010	Introduction to Philosophy	3
THE 1000	Introduction to Theatre (Drama)	3

##### General Education - Mathematics

Select 3 credits from the following:

MAC 1105	College Algebra	3
MAC 2311	Calculus I with Analytic Geometry	5
MGF 1106	Survey in Mathematics	3
MGF 1107	Explorations in Mathematics	3
STA 2023	Elementary Statistics I	3

##### General Education - Natural Science

Select 3 credits from the following:

AST 1002	General Astronomy	3
----------	-------------------	---

BSC 1005	Life Science	3
BSC 2010	General Biology I	3
BSC 2085	Anatomy & Physiology I	3
CHM 1020	Introduction to Chemistry	3
CHM 1045	General Chemistry I	3
PHY 1020	Principles of Physics	3
PHY 2048	Physics with Calculus I	3
PHY 1053	College Physics I	3

#### General Education - Social/Behavior Science

Select 3 credits from the following:

AMH 2020	American History: Reconstruction to the Present	3
POS 1041	American Government	3

#### Major Field Required Courses - 21 credits

GEB 2214	Business Communications	3
CGS 1100	Introduction to Computer Applications for Business	3
MAN 2021	Principles of Management	3
FIN 2001	Introduction to Finance	3
BUL 2241	Business Law I	3
MAR 2011	Principles of Marketing	3
GEB 1011	Introduction to Business	3

#### Articulated Major Field Electives - 6 - 24 credits

SLS 1261	Essentials of Contemporary Leadership	3
ETI 2943	Practicum in Technical Industry	3 - 21

The number of elective credits will be awarded based on the number of articulated credits awarded for ETI 2943.

#### Approved Electives

The number of elective credits required will be awarded based on the number of articulated credits awarded for ETI 2943.

SBM 1000	Entrepreneurship	3
ENC 2210	Technical Writing	3
QMB 1001	Mathematics of Business	3
ACG 2001	Financial Accounting I	3
ACG 2011	Financial Accounting II	3
ACG 2071	Managerial Accounting	3
MKA 2021	Salesmanship	3
MAR 2101	Social Media Marketing	3
MNA 1821	Electronic Commerce	3
FIN 1100	Personal Finance	3
APA 2144	Intuit QuickBooks	3
MAN 2300	Introduction to Human Resource Management recommended	3

## Surgical Services

### 20890 - 64 Credits

#### (Selective Admission)

Graduates of this program are eligible to sit for the national certification exam administered by the National Board of Surgical Technology and Surgical Assisting (NBSTSA). The program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Accreditation Review Council of Surgical Technology and Surgical Assisting (ARCSTSA). The curriculum includes General Education requirements as well as in-depth instruction in professional behaviors, ethical and legal issues, pharmacology, pathophysiology, and surgical procedures. The clinical education component of the program is conducted at community partner facilities which include acute-care facilities, ambulatory surgery centers, specialty surgery centers, and physician offices that serve the four-county area. Program graduates may choose to continue their education at the university level, or further specialize in surgical services with a surgical first assistant certification (CSFA).

## ASSOCIATE IN SCIENCE DEGREE IN SURGICAL SERVICES

**20890 - 64 Credits**

### DEGREE REQUIREMENTS

#### General-Education - Communications/English

ENC 1101	English Composition I	3
----------	-----------------------	---

#### General-Education - Humanities/Fine Arts

Select 3 credits from the following:

ARH 1000	Art Appreciation	3
HUM 1020	Introduction to Humanities	3
LIT 1000	Introduction to Literature	3
MUL 2010	Music Appreciation	3
PHI 1010	Introduction to Philosophy	3
THE 1000	Introduction to Theatre (Drama)	3

#### General Education - Mathematics

Select 3 credits from the following:

MAC 1105	College Algebra	3
MAC 2311	Calculus I with Analytic Geometry	5
MGF 1106	Survey in Mathematics	3
MGF 1107	Explorations in Mathematics	3
STA 2023	Elementary Statistics I	3

#### General Education - Natural Science

BSC 2085	Anatomy & Physiology I	3
BSC 2085L	Anatomy & Physiology I Lab	1
BSC 2086	Anatomy & Physiology II	3
BSC 2086L	Anatomy & Physiology II Lab	1

Grade of "C" or higher required in Natural Science courses.

#### General Education - Social/Behavior Science

AMH 2020	American History: Reconstruction to the Present	3
	Or	

POS 1041	American Government	3
----------	---------------------	---

#### Major Field Required Courses - 44 credits

HSC 2531	Medical Terminology I	3
PSY 2012	Introduction to Psychology	3
MCB 2010	Microbiology for Health Sciences	3
MCB 2010L	Microbiology Lab for Health Sciences	1
STS 1302	Introduction to Surgical Technology	3
STS 1177C	Surgical Technique & Procedures	3
STS 1340C	Pharmacology & Anesthesia	3
STS 1380C	Central Service Fundamentals	3
STS 1947L	Surgical Services Clinical I	2
STS 2323C	Surgical Specialties & Procedures I	3
STS 2944L	Surgical Specialties Clinical I	5
STS 2365C	Professionalism in Surgical Services	4
STS 2945L	Surgical Specialties Clinical II	5
STS 2324C	Surgical Specialties & Procedures II	3

HSC 2531, MCB 2010, MCB 2010L, and all STS prefix courses require a grade of "C" or higher.

## CAREER AND TECHNICAL EDUCATION PROGRAMS

AUTOMOTIVE SERVICE TECHNOLOGY I (p. 140)  
 AUTOMOTIVE SERVICE TECHNOLOGY II (p. 140)  
 BARBERING (p. 141)  
 CARPENTRY (p. 141)  
 CENTRAL SERVICE TECHNOLOGY (p. 141)  
 CORRECTIONAL OFFICER - BASIC RECRUIT TRAINING (p. 142)  
 COSMETOLOGY (p. 142)  
 COSMETOLOGY SPECIALIST - FACIALS (ESTHETICS) (p. 143)  
 COSMETOLOGY SPECIALIST - NAILS (p. 143)  
 EARLY CHILDHOOD EDUCATION (p. 144)  
 FIRE FIGHTER - EMERGENCY MEDICAL TECHNICIAN - COMBINED (p. 144)  
 FIREFIGHTING - BASIC RECRUIT TRAINING (p. 145)G  
 FLORIDA LAW ENFORCEMENT ACADEMY (p. 145)  
 HEATING, VENTILATION, AIR-CONDITIONING/REFRIGERATION (HVAC/R) 1 (p. 146)  
 HEATING, VENTILATION, AIR-CONDITIONING/REFRIGERATION (HVAC/R) 2 (p. 146)  
 HOME HEALTH AIDE (p. 147)  
 LAW ENFORCEMENT OFFICER CROSSOVER FROM CORRECTIONAL OFFICER (p. 147)  
 MEDICAL ASSISTING (p. 148)  
 NURSING ASSISTANT (p. 149)  
 PHARMACY TECHNICIAN (p. 149)  
 PHLEBOTOMY (p. 150)  
 PRACTICAL NURSING (p. 150)  
 SPECIALIZED CAREER EDUCATION, BASIC (p. 151)  
 SPECIALIZED CAREER EDUCATION, ADVANCED (p. 151)  
 WELDING TECHNOLOGY (p. 151)

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 admission programs have special deadlines and admissions criteria, applicants to selective admission programs should consult with their assigned 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 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.

### APPRENTICESHIP PROGRAMS:

AIR CONDITIONING, REFRIGERATION & HEATING APPRENTICESHIP (p. 140)  
 AVIATION APPRENTICESHIP (p. 141)  
 CULINARY OPERATIONS APPRENTICESHIP (p. 143)  
 DIESEL TECHNICIAN APPRENTICESHIP (p. 143)  
 ELECTRICAL APPRENTICESHIP (p. 144)  
 MECHANICAL DRAFTER APPRENTICESHIP (p. 147)  
 MECHATRONICS TECHNICIAN APPRENTICESHIP (p. 148)  
 MEDICAL ASSISTING APPRENTICESHIP (p. 148)  
 PHARMACY TECHNICIAN APPRENTICESHIP (p. 149)  
 PLUMBING APPRENTICESHIP (p. 150)  
 SURGICAL TECHNOLOGY APPRENTICESHIP (p. 151)  
 WELDING APPRENTICESHIP (p. 151)

Apprenticeship programs at IRSC are a combination of on-the-job training and related classroom instruction. IRSC Apprenticeships are registered with the State of Florida, Department of Education.

Apprentices are required to work full-time during the day for a sponsor employer. In addition, apprentices attend classroom training, up to two nights per week. The evening

classes incorporate the theoretical and practical aspects of training for the professional occupation. A high school diploma or GED is required for some programs.

## AIR CONDITIONING, REFRIGERATION, AND HEATING APPRENTICESHIP – 50010

### 8400 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 0946	Apprenticeship HVAC On-the-Job Training (N)	655
		hours

ACR 0946: 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.

## AUTOMOTIVE SERVICE TECHNOLOGY I - 50700

### 1050 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>.

### DEGREE REQUIREMENTS

#### Required program:

AER 0010	Automobile Service Assistor (N)	300
		hours
AER 0360	Automobile Electrical/Electronic System Technician (N)	300
		hours
AER 0418	Automobile Brake System Technician (N)	150
		hours
AER 0453	Automobile Suspension and Steering (N)	150
		hours
AER 0110	Engine Repair Technician (N)	150
		hours

## AUTOMOTIVE SERVICE TECHNOLOGY II - 50710

### 750 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>.

### DEGREE REQUIREMENTS

#### Required program:

AER 0503	Automobile Engine Performance Technician (N)	300 hours
AER 0172	Automotive Heating and Air Conditioning Technician (N)	150 hours
AER 0257	Automatic Transmission and Transaxle Technician (N)	150 hours
AER 0274	Manual Drivetrain and Axle Technician (N)	150 hours

### AVIATION APPRENTICESHIP - 50770

**4290 hours**

**Selective admission**

### DEGREE REQUIREMENTS

#### Required program:

AMT 0790	Apprenticeship Aviation I	72 hours
AMT 0791	Apprenticeship 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 throughout the program to document on-the-job requirement for apprentices.

### BARBERING - 50820

#### 900 hours program # 50820

Upon successful completion, this program enables students to sit for the State Barber licensing exam.

Applicants must complete at least 600 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 900 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 600 barbering hours and the completion date. The current fee for the Barber application is \$223.50. For more information, please visit [https://www.myfloridalicense.com/CheckListDetail.aspx?SID=&xactCode=1010&clientCode=0301&XACT\\_DEFN\\_ID=5060](https://www.myfloridalicense.com/CheckListDetail.aspx?SID=&xactCode=1010&clientCode=0301&XACT_DEFN_ID=5060).

### DEGREE REQUIREMENTS

#### Required program:

COS 0502	Barbering I: Theory of Barbering (N)	450 hours
COS 0521	Barbering II: Applied Skills and Skillset Review (N)	450 hours

### CARPENTRY - 50060

(1200 hours)

This is a 1200 hour program in Residential Carpentry. Training activities include instruction in safety, and the processes found in the trade. This hands-on program prepares high-quality, entry level carpenters for the building construction industry.

### DEGREE REQUIREMENTS

#### Required program:

BCV 0130	Introduction to Carpentry (N)	75 hours
BCV 0131	Carpentry I (N)	325 hours
BCV 0132	Carpentry II (N)	400 hours
BCV 0133	Carpentry III (N)	400 hours

### CENTRAL SERVICE TECHNOLOGY - 50780

**(650 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 Healthcare (N)	90 hours
STS 0013L	Central Sterile Processing Clinical (N)	410 hours
STS 0019C	Central Sterile Processing/Materials Mgmt (N)	150 hours

Students must achieve a grade of "C" or higher in all courses.

## CORRECTIONAL OFFICER - BASIC RECRUIT TRAINING - 50120

**420 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

CJK 0031	First Aid for Criminal Justice Officers (N)	40 hours
CJK 0340	Officer Wellness and Physical Fitness (N)	30 hours

### Electives

CJK 0322	Practical Applications (N)	16 hours
CJK 0109	Review for Basic Corrections (N)	24 hours

## COSMETOLOGY - 50140

### 1200 hours

Upon successful completion, this program enables students to sit for the State Cosmetology licensing exam.

General Requirements for Cosmetology License:

- Applicant must be at least 16 years of age or have received a high school diploma.
- Applicant must possess a Social Security number to apply.
- Applicant must:
  - 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
  - Complete a minimum of 1,200 hours of training at a Florida cosmetology school.
- 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.
- 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?SI>

[D=&xactCode=1010&clientCode=0501&XACT\\_DEFN\\_ID=5236](https://www.myfloridalicense.com/CheckListDetail.asp?SID=&xactCode=1010&clientCode=0501&XACT_DEFN_ID=5236).

### 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 - 50830

#### 220 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 220 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](https://www.myfloridalicense.com/CheckListDetail.asp?SID=&xactCode=1030&clientCode=0508&XACT_DEFN_ID=5351).

### DEGREE REQUIREMENTS

#### Required program:

CSP 0100	Esthetics (N)	220 hours
----------	---------------	-----------

### COSMETOLOGY SPECIALIST - NAILS - 50840

#### 180 hours

A Florida specialty registration is required to perform manicure, pedicure and nail extension services. Applicants must complete 180 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](https://www.myfloridalicense.com/CheckListDetail.asp?SID=&xactCode=1030&clientCode=0507&XACT_DEFN_ID=5331).

### DEGREE REQUIREMENTS

#### Required program:

CSP 0010	Nail Specialist (N)	180 hours
----------	---------------------	-----------

### CULINARY OPERATIONS APPRENTICESHIP - 50080

#### 2346 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 0943 Apprenticeship – Culinary Arts: \*This course is repeated three (3) times throughout the program to document the on-the-job requirement for apprentices.

### DIESEL TECHNICIAN APPRENTICESHIP - 50880

#### 3051 hours

This program is delivered in partnership with State of Florida registered apprenticeship sponsors, and prepares students for advancement as a Diesel Technician in the Transportation, Distribution and Logistics trade. The program utilizes a cooperative method of learning, requiring on-the-job training and classroom instruction, providing the student with technical and practical skills necessary in the Transportation, Distribution and Logistics trades.

### DEGREE REQUIREMENTS

#### Required program

DIM 0004	Introduction to Diesel Mechanics (N)	150 hours
DIM 0102	Diesel Electrical and Electronics Technician (N)	300 hours
DIM 0104	Diesel Engine Technician (N)	300 hours
DIM 0105	Diesel Brakes Technician (N)	300 hours



DIM 0940	Diesel Technician On-the-Job- Training (N)	667 hours
----------	---	--------------

*DIM 0940 Diesel Technician On-the-Job Training: This course is repeated three (3) times throughout the program to document the on-the-job requirement for apprentices.*

## EARLY CHILDHOOD EDUCATION - 50190

### 600 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.

### DEGREE REQUIREMENTS

#### Required Program

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

If HEV 0870 is taken for less than 150 hours, student must

#### 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	6

	Screening in Child Care (N)	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

### 8220 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 I (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 0349	Apprenticeship - Electrical On-the- Job Training (N)	640 hours

BCA 0349 Apprenticeship Electrical: This course is repeated twelve (12) times throughout the program to document the on-the-job requirement for apprentices.

## FIRE FIGHTER - EMERGENCY MEDICAL TECHNICIAN - COMBINED - 50860

### 792 hours

#### Selective Admission



This program provides the training required for students to become certified fire fighters as well as licensed Emergency Medical Technicians. It is not intended for those who are currently certified/licensed as either Fire Fighters or Emergency Medical Technicians. Students wishing to add an additional certification to an existing credential must enroll in either the Firefighting - Basic Recruit Training (p. 145) program or the Emergency Medical Technician (EMT) (p. 119) program.

This is a selective admission program. applicants must complete and pass a multi-step application process to be accepted.

Please note, each academy has a preliminary application time frame. All dates are subject to change and classes may fill prior to the end of the Preliminary Application Dateline.

### DEGREE REQUIREMENTS

#### Required program

FFP 0030	Firefighting Academy I (N)	191 hours
FFP 0031	Firefighting Academy II (N)	301 hours
EMS 0110C	Emergency Medical Technician	300 hours

### FIREFIGHTING - BASIC RECRUIT TRAINING - 50220

**492 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 0030	Firefighting Academy I (N)	191 hours
FFP 0031	Firefighting Academy II (N)	301 hours

### FLORIDA LAW ENFORCEMENT ACADEMY - 50250

**770 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 the Florida Department of Law Enforcement. It 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. For more information, please visit <https://www.fdacs.gov/Business-Services/Private-Security-Licenses>.

### DEGREE REQUIREMENTS

#### Required program:

CJK 0002	Intro to Law Enforcement (N)	12 hours
CJK 0016	Communications (N)	24 hours
CJK 0018	Legal (N)	64 hours
CJK 0019	Interviewing and Report Writing (N)	56 hours
CJK 0063	Fundamentals of Patrol (N)	40 hours
CJK 0096	Criminal Justice Officer Physical Fitness Training (N)	60 hours
CJK 0021	Serving Your Community (N)	34 hours

CJK 0072	Crimes Against Persons (N)	48 hours
CJK 0073	Crimes Involving Property and Society (N)	12 hours
CJK 0079	Crime Scene Follow-up Investigations (N)	34 hours
CJK 0020C	Law Enforcement 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 0421	Conducted Electrical Weapon/Dart Firing Stun Gun (N)	4 hours
CJK 0400	Traffic Incidents (N)	12 hours
CJK 0401	Traffic Stops (N)	24 hours
CJK 0402	Traffic Crash Investigations (N)	30 hours
CJK 0403	DUI Traffic Stops (N)	24 hours
CJK 0093	Critical Incidents (N)	44 hours
<b>Electives</b>		
CJK 0322	Practical Applications (N)	16 hours
CJD 0939	Law Enforcement Basic Recruit Review (N)	30 hours

## HEATING, VENTILATION, AIR CONDITIONING/REFRIGERATION (HVAC/R) 1 – 50680

### 750 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>.

## 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
----------	----------------------------	----------------------

## HEATING, VENTILATION, AIR CONDITIONING/REFRIGERATION (HVAC/R) 2 - 50690

### 600 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>.

## 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

## HOME HEALTH AIDE - 50810

**165 hours**

### (Selective Admission)

Home Health Care entails multiple types of health care services entering private residences to support patient's needs. The Home Health Aides are part of the team providing essentials skills needed to assist patients regain their independence. The Home Health Aide program introduces students to the topics and skills relevant to provide patient care assistance in the home care setting.

## DEGREE REQUIREMENTS

### Required program

HSC 0003	Introduction to Healthcare (N)	90 hours
HCP 0330C	Home Health Aide (N)	75 hours

## LAW ENFORCEMENT OFFICER CROSSOVER FROM CORRECTIONAL OFFICER - 50420

**518 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 0002	Intro to Law Enforcement (N)	12 hours
CJK 0016	Communications (N)	24 hours
CJK 0018	Legal (N)	64 hours
CJK 0019	Interviewing and Report Writing (N)	56 hours
CJK 0063	Fundamentals of Patrol (N)	40 hours
CJK 0021	Serving Your Community (N)	34 hours
CJK 0072	Crimes Against Persons (N)	48 hours
CJK 0073	Crimes Involving Property and Society (N)	12 hours
CJK 0079	Crime Scene Follow-up Investigations (N)	34 hours
CJK 0400	Traffic Incidents (N)	12 hours
CJK 0401	Traffic Stops (N)	24 hours
CJK 0402	Traffic Crash Investigations (N)	30 hours
CJK 0403	DUI Traffic Stops (N)	24 hours
CJK 0093	Critical Incidents (N)	44 hours
CJK 0393	Crossover Program Updates (N)	8 hours
CJK 0020C	Law Enforcement Vehicle Operations (N)	48 hours
CJK 0421	Conducted Electrical Weapon/Dart Firing Stun Gun (N)	4 hours

## MECHANICAL DRAFTER APPRENTICESHIP - 50890

**2451 hours**

This program is delivered in partnership with State of Florida registered apprenticeship sponsors, and prepares students for advancement education and careers in the Architecture and Construction. The program utilizes a cooperative method of learning, requiring on-the-job training and classroom instruction, providing the student with technical and practical skills necessary in the Architecture and Construction trades.

## DEGREE REQUIREMENTS

### Required program

TDR 0321	CAD & Modeling I (N)	450 hours
----------	----------------------	--------------

TDR 0940 Mechanical Drafter On-the-Job-Training (N) 667 hours

TDR 0940 Apprenticeship - Mechanical Drafter On-the-Job Training: This course is repeated three (3) times throughout the program to document the on-the-job requirement for apprentices.

## MECHATRONICS TECHNICIAN APPRENTICESHIP - 50900

### 2401 hours

This program is delivered in partnership with State of Florida registered apprenticeship sponsors, and prepares students for advanced education and careers in the manufacturing trade. The program utilizes a cooperative method of learning, requiring on-the-job training and classroom instruction, providing the student with technical and practical skills necessary in the manufacturing trades.

### DEGREE REQUIREMENTS

#### Required program

EEV 0753	Mechatronic Technician (N)	400 hours
EEV 0940	Mechatronics Technician On-the-Job-Training (N)	667 hours

EEV 0940 Apprenticeship - Mechatronics Technician On-the-Job Training: This course is repeated three (3) times throughout the program to document the on-the-job requirement for apprentices.

## MEDICAL ASSISTING - 50260

### 1300 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, 9355—113<sup>th</sup> St. N, #7709, Seminole, FL 33775, (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.

### DEGREE REQUIREMENTS

#### Required program:

HSC 0003	Introduction to Healthcare (N)	90 hours
MEA 0500	Medical Office Receptionist (N)	80 hours
HCP 0750C	Basic Concepts of Phlebotomy (N)	75 hours
MEA 0200C	Medical Assisting Clinical Procedures I (N)	150 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)	105 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)	75 hours
HCP 0720C	Electrocardiograph Technical Skills (N)	75 hours
MEA 0334	Medical Office Procedures (N)	75 hours
MEA 0952	Medical Assisting Seminar (N)	75 hours
MEA 0800	Medical Assisting Practicum (N)	170 hours

## MEDICAL ASSISTING APPRENTICESHIP - 50870

### 2344 hours

#### (Selective Admission)

### DEGREE REQUIREMENTS

#### Required Program

All required courses must be completed with a C or better.

MEA 0821: This course is taken three (3) times throughout the program to document on-the-job requirement for apprentices.

MEA 0001	Medical Assisting Apprenticeship (Related Technical Instruction) (N)	144 hours
MEA 0204	Clinical Experience for the Medical Assisting Apprenticeship (N)	200 hours
MEA 0821	On-the-Job-Learning for the	300 -

Medical-Assisting Apprentice (N) 880  
hours

## NURSING ASSISTANT - 50740

**165 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

HCP 0122	Nursing Assistant - Classroom and Lab (N)	125 hours
----------	---	--------------

## PHARMACY TECHNICIAN - 50490

**1050 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)*.

### DEGREE REQUIREMENTS

#### Required program:

HSC 0003	Introduction to Healthcare (N)	90 hours
HSC 0540	Body Structure and Function (N)	80 hours
PTN 0000	Pharmacy Technician Orientation (N)	75 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)	200 hours
PTN 0031	Introduction to Institutional Pharmacy (N)	205 hours
PTN 0093	Pharmacy Technician Review Course (N)	75 hours

## PHARMACY TECHNICIAN APPRENTICESHIP - 50790

**2369 hours**

### (Selective Admissions)



**DEGREE REQUIREMENTS****Degree Requirements**

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 Pharmacy Technician Apprentice (N)	165 hours

Note:

PTN 0051 is taken twice in the program.

**PHLEBOTOMY - 50630**

**165 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**

**8220 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 1 (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 0441 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 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/>.

### 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

### SPECIALIZED CAREER EDUCATION, BASIC - 50750 (SELECTIVE ADMISSIONS)

#### 450 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-based 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 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 APPRENTICESHIP - 50850

#### 2640 hours

### DEGREE REQUIREMENTS

#### Required Courses

STS 0850	Surgical Technology Apprenticeship: Fundamentals (N)	180 hours
STS 0851	Surgical Technology Apprenticeship: Healthcare Sciences (N)	180 hours
STS 0852	Surgical Technology Apprenticeship: Perioperative Concepts & Techniques (N)	180 hours
STS 0853	Surgical Technology Apprenticeship: Seminar (N)	100 hours
STS 0854	Surgical Technology Apprenticeship: On-the Job Clinical Experience (N)	180 - 600 hours

### WELDING APPRENTICESHIP - 50800

#### 6573 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

PMT 0870 is repeated 9 times during program.

### WELDING TECHNOLOGY - 50570

**1050 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)	100 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 must 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 purpose 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 purpose 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<sup>®</sup>, 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<sup>®</sup> 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](http://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. 24) 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](http://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 forward recommendations to the Vice President of Academic Affairs for approval.
5. Once approved by the Vice President, the request will be forwarded to the Graduation and Articulation office for review and submitted to Records to have credits(s) placed on the transcript.

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 of courses and sample examination questions, is available at: [www.collegeboard.com/ap](http://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/](http://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](http://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>.

## COURSE MODALITIES AT INDIAN RIVER STATE COLLEGE

Indian River State College offers several types of courses, referred to as "delivery methods" or "course modalities."

### **Fully Online Modalities**

- **Online:** Course is delivered through asynchronous online instruction **without** regularly scheduled, live class meetings online. Online courses are conducted via flexible, asynchronous web-based instruction and collaborating using various technologies.
- **Synchronous - Online:** Course is delivered through synchronous online instruction **with** regularly scheduled, live class meetings online.

### **Partially Online Modalities**

- **Hybrid:** Course requires both classroom attendance and online instruction in a blended format.

### **Traditional Modality**

- **In-Person:** Courses have required classroom attendance and meet on a regularly scheduled basis in-person on campus. All on-campus courses have a learning management system (LMS) shell that instructors utilize to post the course syllabus, grades, and to deliver the course evaluation.



## COURSES

The Student Success 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 Student Success advisor 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 Student Success Division (p. 23) or [www.irsc.edu](http://www.irsc.edu).

## 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 with grade of C or higher.

### 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 is a study of 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, all 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)**

In this course students explore 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 0523.

**ACR 0431 - HVAC/R9 (N) (150 hours)**

In this course students explore 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 0523, ACR 0100, ACR 0525, ACR 0548, ACR 0607, ACR 0701, ACR 0571, ACR 0578.

**ACR 0523 - HVAC/R1 (N) (150 hours)**

In this course students explore the history of refrigeration, tools of the trade, refrigeration cycle, installation and service procedures, safety and service management.

**ACR 0525 - HVAC/R3 (N) (150 hours)**

In this course students explore 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 0523.

**ACR 0548 - HVAC/R4 (N) (150 hours)**

**In this course students explore 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 0100 ACR 0523, ACR 0525 .

**ACR 0571 - HVAC/R7 (N) (150 hours)**

In this course students explore 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 0523, ACR 0100, ACR 0525, ACR 0548, ACR 060., ACR 0701.

**ACR 0578 - HVAC/R8 (N) (150 hours)**

In this course students explore the 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 0523, ACR 0100, ACR 0525, ACR 0548, ACR 0607, ACR 0701, ACR 0571.

**ACR 0607 - HVAC/R5 (N) (150 hours)**

In this course students explore combustion-type heating servicing and testing equipment and troubleshooting techniques used for gas valves and regulators.

Prerequisite: ACR 0523, ACR 0100, ACR 0525, ACR 0548.

**ACR 0701 - HVAC/R6 (N) (150 hours)**

In this course students explore 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: ACR 0523, ACR 0100, ACR 0525, ACR 0548, 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) (655 hours)**

This course uses on-site training of skills and theoretical concepts introduced in the classroom components of the HVAC 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 HVAC industry.

Prerequisite: Permission of instructor.

**ACR 1008 - Principles of A/C and Refrigeration (N) (3 credits)**

In this course, students explore the refrigeration history, refrigeration cycle, tools of the trade, tubing skills, charging techniques, safety, and principles of service management.

Prerequisite: Pre/corequisite: ACR 1112.

**ACR 1101 - Applied Electricity I (Air Conditioning) (N) (3 credits)**

In this course, students explore testing equipment usage, circuit protection, practical circuits and power, energy, motors, controls, and service management.

Prerequisite: ACR 1008, ACR 1112 with grade of C or higher.

**ACR 1103 - HVAC Control Systems (N) (3 credits)**

In this course, students explore 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 with grade of C or higher.

**ACR 1112 - Basic Electricity for A/C and Refrigeration (N) (3 credits)**

In this course, students explore the principles of electricity sources, measurement devices, Ohm's law, circuits, and service management.

Prerequisite: Pre/corequisite: ACR 1008.

**ACR 1113 - Applied Electricity II (Air Conditioning) (N) (3 credits)**

In this course, students explore the advanced theory of electrical motors, transformers, control devices, circuit reading, and service management.

Prerequisite: ACR 1008, ACR 1112 with grade of C or higher.

**ACR 1208 - Refrigerant Recovery and Reclaim (N) (1 credit)**

In this course, students explore the basic overview of the fundamental issues and concerns involved in deciding to purchase and install geothermal heat pumps.

**ACR 1611 - Heat (N) (3 credits)**

In this course, students explore the fundamentals, maintenance and repair of electrical, gas, and oil heating systems, and service management.

Prerequisite: ACR 1008, ACR 1112 with grade of C or higher.

**ACR 1612 - Heat Pump Systems (N) (3 credits)**

In this course, students explore the principles of heat pumps and their applications. Topics include installation, service, and maintenance skills on heat pumps.

Prerequisite: ACR 1008, ACR 1112 with grade of C or higher.

**ACR 1730 - R-410A Certification (N) (1 credit)**

In this course, students explore the training and practical knowledge to safely perform service on systems containing R-410A. Students can take the R-410A safety certification test at the end of the course.

**ACR 1731 - Green Mechanical Awareness Certification (N) (1 credit)**

In this course, students explore the basic skills of Green mechanical technology and Green alternatives relating to air conditioning and heating systems. Students prepare to complete the Green Awareness Certification exam.

**ACR 1740 - Components of Refrigeration (N) (3 credits)**

In this course, students explore the knowledge of compressors, condensers, evaporators, metering devices, service procedures, and service management.

Prerequisite: ACR 1008, ACR 1112 with grade of C or higher.

**ACR 1760 - Alternative Energy Applied to HVAC (N) (4 credits)**

In this course, students explore the principles of alternative energy for HVAC, including solar power, geothermal, maximum SEER rated units, and general energy-saving practices. Students prepare to take the Mechanical Green Awareness Certification exam.

Prerequisite: ACR 1008, ACR 1112 with grade of C or higher.

### **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)**

In this course, students explore the cooperative agreement between the student, the employer, and IRSC. The students create a training plan that covers the chosen course of study during the semester to help meet their 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.

### **ACR 2067 - Heating and Cooling Load Calculations (N) (3 credits)**

In this course, students delve into the calculating of heating and cooling loads and service management.

### **ACR 2071 - Air Conditioning and Heating Service Management (N) (3 credits)**

In this course, students explore 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)**

In this course, students explore the construction layout, balancing to a duct system of service management.

### **ACR 2745 - Light Commercial Refrigeration and A/C (N) (3 credits)**

In this course, students explore the various commercial refrigeration systems. Students focus on supermarket refrigeration systems, applications, components, defrost systems, accessories, refrigerant, reclamation, troubleshooting and service.

Prerequisite: ACR 1008, ACR 1112 with grade of C or higher.

## **ADV - BUSINESS ADMINISTRATION AND MANAGEMENT**

### **ADV 2000 - Advertising and Sales Promotion (3 credits)**

In this course, the student delves into basic advertising terminology and strategy. The focus is on target analysis, media analysis, ad development, scheduling, and budgets; resulting in the individual development of an advertising campaign.

## **AER - AUTOMOTIVE SERVICE TECHNOLOGY**

### **AER 0010 - Automobile Service Assistor (N) (300 hours)**

In this course students study the automotive service industry. Students explore career opportunities and requirements of a professional auto mechanic. Students study equipment skills, safety regulations, routine maintenance, and customer service.

### **AER 0110 - Engine Repair Technician (N) (150 hours)**

In this course students explore the automotive service industry. Students explore career opportunities and requirements of a professional auto mechanic. Students study diagnostics and repair of general engine, cylinder heads, valve trains, engine block, lubrication, and cooling systems.

Prerequisite: AER 0010.

### **AER 0172 - Automotive Heating and Air Conditioning Technician (N) (150 hours)**

In this course students examine the automotive service industry. Students explore career opportunities and requirements of a professional auto mechanic. Students study the diagnosis, service and repair of heating and air conditioning, refrigeration, compressors, compressor clutches, evaporators, receiver driers, accumulators, condensers, heating and engine cooling, related control systems, refrigerant recovery, and recycling and handling.

Prerequisite: AER 0010.

### **AER 0257 - Automatic Transmission and Transaxle Technician (N) (150 hours)**

In this course students examine the automotive service industry. Students explore career opportunities and requirements of a professional auto mechanic. Students study diagnostics, repair, service, and operation of automatic transmission/transaxles.

Prerequisite: AER 0010.

**AER 0274 - Manual Drivetrain and Axle Technician (N) (150 hours)**

In this course students explore the automotive service industry. Students explore career opportunities and requirements of a professional auto mechanic. Students study diagnostics and repair of drive train, clutch, transmission, transaxle, half shaft universal, constant-velocity joint, rear axle, ring and pinion gears, differential case assemble, limited slip differential, drive shaft, and four-wheel drive/all-wheel drive.

Prerequisite: AER 0010.

**AER 0360 - Automobile Electrical/Electronic System Technician (N) (300 hours)**

In this course students explore basic and advanced electrical systems theory, operation & testing. Students study basic & advanced diagnostics and repair of electrical/electronics, battery, starting, charging, lighting, gauges, warning devices, driver information, horn, wiper/washer and accessory systems.

Prerequisite: AER 0010.

**AER 0418 - Automobile Brake System Technician (N) (150 hours)**

In this course students examine the automotive service industry. Students explore career opportunities and requirements of a professional auto mechanic. Students study diagnostics and repair of brake systems, drum brakes, disc brakes, power assist units, electronic brakes, traction, and stability control.

Prerequisite: AER 0010.

**AER 0453 - Automobile Suspension and Steering (N) (150 hours)**

In this course students examine the automotive service industry. Students explore career opportunities and requirements of a professional auto mechanic. Students study diagnostics and repair of general suspension, steering systems, front suspensions, rear suspensions, wheel alignment, and tires.

Prerequisite: AER 0010.

**AER 0503 - Automobile Engine Performance Technician (N) (300 hours)**

In this course students examine basic and advanced engine performance. Students study basic and advanced engine performance diagnosis, service and repair of engines, ignition, fuel, air induction, exhaust, computer, engine and emission control systems.

Prerequisite: AER 0010.

**AER 1070 - Automotive Service Management (N) (3 credits)**

In this course student explore the operation and management of an automotive service facility. Students visit facilities and meet with service managers and other personnel to create reports.

Prerequisite: AER 1081C, AER 1694C.

**AER 1081C - Introduction to Automotive Technology (N) (4 credits)**

In this course students explore an overview of modern automotive systems, outline important safety practices, and describe the uses of common shop tools and diagnostic equipment.

**AER 1198C - Engine Overhaul, Repair and Testing (N) (4 credits)**

In this course students study the process of testing and repairing engine mechanical problems. The student measures various engine parts and components and compares those measurements to manufacture's specification to determine in the part must be replaced.

Prerequisite: AER 1081C.

**AER 1498C - Suspension, Steering, and Alignment (N) (4 credits)**

In this course students investigate tire repair, removal/installation, and balancing. Students also explore tire wear and vehicle alignments including lane assist and other safety features. .

Prerequisite: AER 1081C, AER 1694C.

**AER 1598C - Automotive Brake Systems (N) (4 credits)**

In this course students focus on automotive braking systems. Drum, disc and parking brakes systems are covered along with Anti-Lock (ABS) systems. Students learn to bend and flare brake pipes and machine rotors and drums.

Prerequisite: pre/coreq: AER 1081C, AER 1694C.

**AER 1694C - Introduction to Automotive Electrical Systems (N) (4 credits)**

In this course students delve into the theory and application of electricity and electronics as applied to the modern automobile electrical systems.

Corequisite: AER 1081C.

**AER 1810 - Automotive Work Experience (N) (1 - 3 credits)**

In this course students participate in an internship or on-the-job training. Students are required to be employed in an approved job in the automotive field. Students submit timecards and flat rate sheets weekly.

Prerequisite: AER 1198, AER 2758.

**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 2298C - Automatic Transmissions and Transaxles (N) (4 credits)**

In this course students examine how automatic transmissions work, are serviced and repaired, and how hydraulics and planetary gearsets work in combination to achieve various gear ratios and transmit power.

Prerequisite: AER 1081C, AER 1694C.

**AER 2398C - Manual Drive Train and Axles (N) (4 credits)**

In this course students explore manual transmissions and drivetrain components. Students work on clutches and transfer cases with along with propeller shafts and differentials.

Prerequisite: AER 1081C.

**AER 2695C - Advanced Automotive Electrical Systems (N) (4 credits)**

In this course students delve into basic electricity, introducing electronics used in sensors and computer control circuits, and diagnosis of sensor and control circuits with DVOMs and oscilloscopes.

Prerequisite: AER 1081C, AER 1694C.

**AER 2758C - Automotive Air Conditioning and Heating (N) (4 credits)**

In this course students explore passenger comfort systems and their operation. Students explore coolant and how the heater system delivers warm air to the vehicle cabin; the air condition portion, which includes how a refrigeration system operates and are diagnosed; and 609 refrigerant handling certification. Students have the option to become 609 refrigerant handling certified.

Prerequisite: AER 1081C, AER 1694C.

**AER 2895C - Advanced Engine Performance (N) (4 credits)**

The course introduces emission control devices while building on skills acquired in the previous engine performance course. It focuses on sensor diagnosis and the exhaust system.

Prerequisite: AER 1081C, AER 1198, AER 1694C, AER 2898C.

**AER 2898C - Engine Performance (N) (4 credits)**

In this course students focus on ignition, fuel, and computer control systems. Students use on board diagnostics to view engine operating parameters and analyze how computers control ignition timing and fuel delivery to achieve a balance between fuel economy, emissions, and performance. Students examine how diagnostic tools and service information are used to determine component or circuit operating characteristics and failures.

Prerequisite: AER 1081C, AER 1694C.

## AGR - LANDSCAPE TECHNOLOGY

**AGR 1540C - Fundamental Principles of Arboriculture (3 credits)**

Students explore 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)**

In this course students explore the political, economic, social, cultural, and intellectual development of the United States from the European discovery of the Americas to Reconstruction.

**AMH 2020 - American History: Reconstruction to the Present (3 credits)**

In this course students explore the political, economic, social, cultural, and intellectual development of the United States from Reconstruction to the present. It fulfills the civic literacy course requirement for Florida college students.

## AML - ENGLISH

### AML 2010 - American Literature through Reconstruction (3 credits)

This course introduces American literature from colonial times through Civil War Reconstruction. Students demonstrate college-level writing skills in multiple assignments.

Prerequisite: ENC 1101 with a grade of "C" or higher.

### AML 2020 - American Literature from Reconstruction to Present (3 credits)

This course surveys American literature from Civil War Reconstruction to the present. Students demonstrate college-level writing skills through multiple assignments.

Prerequisite: ENC 1101 with a grade of "C" or higher.

### AML 2600 - Introduction to African American Literature (3 credits)

This course is a survey of literature by African American writers from the 18th century to the present. This course provides students with an understanding of African American literature and its relationship to mainstream culture and oral and musical traditions. Students demonstrate college-level writing skills through multiple assignments.

Prerequisite: ENC 1101 with a grade of C or higher.

## AMT - AVIATION APPRENTICESHIP

### AMT 0790 - Apprenticeship Aviation I (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 - Apprenticeship 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 General 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.

## 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 Desktop (1 credit)

This course teaches the computer applications packet Quickbooks, which includes A/R, A/P, inventory, invoicing, payments, payroll, graphs, and reports.

### APA 2144 - Intuit QuickBooks (3 credits)

This course covers how to work effectively in QuickBooks. QuickBooks accounting software is used to manage income and expenses to track the financial health of a business. Learn to use the features of accounts payable and receivable, check writing, payment processing and how to generate reports.

Prerequisite: ACG 2001 or ACG 2011 with grade of C or higher.

## 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.

## ART - DIGITAL MEDIA

### **ART 3252 - 3D Media Art and Illustration (3 credits)**

Students examine 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.

## ASC - AERONAUTICAL SCIENCE

### **ASC 1560 - Intro to Small Unmanned Aircraft Systems (3 credits)**

This course presents an overview of small unmanned aircraft systems (sUAS), their military and commercial history, most popular applications, and importance of this technology for modern society. Students discuss recreational and commercial uses of drones, main types of drone flight systems, drone program risks, privacy concerns, and other topics relevant for this technology.

### **ASC 1571C - Remote Pilot Simulator (0.5-5 credits)**

This course focuses on the hands-on training on a virtual remote pilot simulator through which the students develop fundamental dexterity and coordination skills necessary to start flying a small aircraft system. In addition, this course familiarizes the students with practical and regulatory aspects necessary to operate small aircraft system in the United States such as the drone registration, licensed remote pilot requirements, and similar.

Prerequisite: ASC 1560.

### **ASC 1572L - sUAS Indoor Flight Training (0.5 - 5 credits)**

In this course, students gain hands on experience in unmanned aircraft systems in a controlled indoor environment. Through a sequence of carefully planned exercises, the students build their muscle memory and get used to navigating a small recreational drone through various types of obstacles. Other skills developed in this course are depth perception, roll, pitch, yaw, and attitude controls, and similar.

Prerequisite: ASC 1571C.

### **ASC 2561C - sUAS Autonomous Mission Applications (3 credits)**

This course prepares students to operate a small unmanned aircraft system in autonomous mode for a whole range of commercial applications. The students are exposed to the basics of geographical mapping, data collection for 3D photogrammetry, remote sensing using LiDAR, construction project tracking, surveying, and public safety monitoring and similar. In the practical portion of the course, the students collect data using autonomous flight mode of a drone and then analyze the data using professional software.

Prerequisite: ASC 2563C, ASC 2573C.

### **ASC 2563C - Applications in Aerial Photo- and Videography (3 credits)**

This course familiarizes the students with guidelines, regulatory standards, and practical considerations for aircraft photography and videography with intent to be trained to produce professional quality photos and videos using small aircraft systems. The students learn the basic principles of optics and photography, types of equipment used in aerial photo and video production, how to capture photos and videos with a drone, and the basic principles of image and video editing, correction, and enhancement using professional software.

Prerequisite: ASC 2573C.

### **ASC 2565 - FAA-107 Commercial Remote Pilot Ground School (3 credits)**

This course presents a variety of subjects from aviation with the intent of preparing the student for the FAA Part 107 commercial remote pilot test. Topics covered include airspace classification, airport operations, weather effects, sUAS loading, emergency procedures, radio communication, physiological factors, test sites, UTM, sectional charts, and so on.

Prerequisite: ASC 1560.

### **ASC 2573C - sUAS Outdoor Flight Training (0.5 - 5)**

This course familiarizes the students with all the regulatory standards and practical aspects of operating a small unmanned aircraft system for commercial purposes. The students learn how to perform pre-flight and post-flight inspection of the aircraft, how to maintain drone logbook, how to establish a safe environment during flight mission, what the emergency procedures are, and how to deal with spectators. In the practical portion of the course, the students continue to build on the skills acquired through indoor flight training; they learn how to operate a professional commercial drone in an outdoor setting.

Prerequisite: ASC 1572L.

## 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 covers 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.

Prerequisite: Student must score into college-level English and reading on placement test.

### **AST 1002L - General Astronomy Laboratory (1 credit)**

This course covers practical lessons and exercises in astronomy and scientific observations of astronomical phenomena related to the General Astronomy curriculum.

Prerequisite: Student must score into college-level English and reading on placement test. . Corequisite: AST 1002.

### **AST 1931 - Introduction to Planetarium Operations (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 with a grade of C or higher.

## ATF - BUSINESS ADMINISTRATION AND MANAGEMENT

### **ATF 1941 - Professional Development in Aviation II (2 - 9 credits)**

Students complete 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)**

Students complete a private pilot ground school and/or instrument ground school and pass an FAA licensing exam. 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).

## BCA - BUILDING CONSTRUCTION APPRENTICESHIP

### **BCA 0349 - Apprenticeship - Electrical On-the-Job Training (N) (640 hours)**

This course uses on-site training of skills and theoretical concepts introduced in the classroom components of the Electrical 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 electrical industry.

Prerequisite: Permission of instructor.

### **BCA 0350 - Apprenticeship - Electrical I (N) (90 hours)**

Students develop 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.

Corequisite: BCA 0349.

**BCA 0351 - Apprenticeship - Electrical II (N) (90 hours)**

This course is a continuation of BCA 0350 and is taught in conjunction with the work activities of BCA 0349 (p. 170). This course enhances the competencies related to safety practices, the direct-current electrical circuit, communication, math applications, electric codes and employability skills.

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.

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.

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.

Corequisite: BCA 0349.

**BCA 0355 - Apprenticeship - Electrical VI (N) (90 hours)**

This course is a continuation of BCA 0354 (p. 171) and is taught in conjunction with the work activities of the BCA 0349 (p. 170). This course teaches an in-depth knowledge of the installation of residential wiring.

Corequisite: BCA 0349.

**BCA 0441 - Plumbing On-the-Job Training (N) (640 hours)**

In this course students explore on-site training of skills and theoretical concepts introduced in the classroom components of the Plumbing 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 plumbing industry.

Prerequisite: Permission of instructor required.

**BCA 0450 - Introduction to Pipe Trades 1 (N) (90 hours)**

In this course students develop 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.

Corequisite: BCA 0441.

**BCA 0451 - Introduction to Pipe Trades 2 (N) (90 hours)**

In this course students develop the competencies essential to pipe trades. These competencies include safety, pipe trade related math applications, basic science, standards and codes, employability skills, and communication.

Corequisite: BCA 0441.

**BCA 0452 - Introduction to Pipe Trades 3 (N) (90 hours)**

In this course students develop the essential competencies relating to blueprint and job specifications, building codes in pipe trades, employability skills, and entrepreneurship.

Corequisite: BCA 0441.

**BCA 0453 - Plumbing Technology 4 (N) (90 hours)**

In this course students develop the essential competencies including basic plumbing and pipe-cutting and joining skills.

Corequisite: BCA 0441.

**BCA 0454 - Plumbing Technology 5 (N) (90 hours)**

In this course students develop essential competencies including basic plumbing and pipe-cutting and joining skills.

Corequisite: BCA 0441.

**BCA 0455 - Plumbing Technology 6 (N) (90 hours)**

In this course students develop the essential competencies in job layout and coordination and first and second rough installation.

Corequisite: BCA 0441.

**BCH - BIOLOGY****BCH 4053 - Biochemistry I (3 credits)**

This course examines the structure and function of proteins, membranes and cellular constituents, enzyme catalysts, and basic metabolic pathways.

Prerequisite: BSC 2011, BSC 2011L, CHM 2210, CHM 2210L, PCB 3063, PCB 3063L with a grade of "C" or

higher. Corequisite: BCH 4053L, pre/corequisite: CHM 2211, CHM 2211L.

### **BCH 4053L - Biochemistry I Laboratory (1 credit)**

This course is the laboratory component for BCH 4053 (p. 171) and examines the structure and function of proteins and enzyme catalysts.

Prerequisite: BSC 2011, BSC 2011L, CHM 2210, CHM 2210L, PCB 3063, PCB 3063L, all with a grade of "C" or higher. Corequisite: BCH 4053, pre/corequisite: CHM 2211, CHM 2211L.

### **BCH 4054 - Biochemistry II (3 credits)**

This course is a continuation of BCH 4053 (p. 171) 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)**

In this course students explore how various materials and construction methods associated with site construction; concrete, masonry, metals, and wood and plastics (Master Format 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. Students focus on a builder's perspective emphasizing proper installation procedures and processes.

### **BCN 1215 - Materials & Methods of Construction - Finishes & Systems (3 credits)**

In this course students explore how various materials and construction methods associated with thermal and moisture protection; doors and windows, interior finishes, specialties and equipment, electrical, mechanical (Master Format sections 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. Students explore these topics 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)**

In this course students plot job progress, draw schedules; study 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. Students explore 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)**

In this course students explore OSHA regulations and the Florida 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 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)**

In this course students explore emerging green building concepts, energy systems, and cost benefit analysis. Students also investigate 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)**

In this course students explore reading and interpreting 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)**

In this course students explore concrete formwork for residential, light commercial, and heavy construction, using ACI recommended practices and OSHA shoring recommendations. Students also explore panel systems, prefabrication, reinforcing steel, form ties, openings, residential foundations, flatwork, precast concrete, concrete mix, and placement.

#### **BCN 2592 - Residential Energy Fundamentals (3 credits)**

In this course students explore the relationship between energy use and the many components of the building shell for residential structures, with a focus on the various energy rating systems and codes. Students learn energy systems, energy calculations, and alternative energy methods.

#### **BCN 2598 - Sustainable Building Systems (3 credits)**

In this course students explore the integration, interaction, and interdependence of HVAC, plumbing, and lighting systems to reduce energy consumption. Students analyze factors including site selection, intelligent building controls, and how other systems affect performance, with a focus on enhancement of indoor air quality and the use of sustainable/green building materials.

#### **BCN 2599 - Green Building and Energy Efficiency (3 credits)**

In this course students explore fundamental concepts and guidelines related to green building construction. Students prepare for the Leadership In Energy and Environmental Design (LEED) Green Associate Certification and other industry credentials. Students analyze acquisition, installation, and management of green building materials, resources, and systems.

### **BCT - BUILDING CONSTRUCTION TECHNOLOGY**

#### **BCT 1562 - Plumbing and Electrical Systems (3 credits)**

In this course students explore residential, commercial, and industrial wiring and plumbing practice. Students will participate in concentrated instruction and lab activities associated with how to wire and plumb a residential home. Practical application is combined with theory so that students can analyze and compare the function of common plumbing and electrical components and materials.

#### **BCT 1700 - Construction Office Practices (3 credits)**

In this course students explore 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. Students will study the general laws pertaining to contracts, warranties, guaranties, 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)**

In this course students explore how to locate information in building codes. Students will learn how to apply basic definitions, fire zones, construction types, construction regulations, and selected specialized subjects to local building. Topics include National Electrical Code, Standard for Hurricane.

#### **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)**

In this course students explore critical path methods, job cost accounting, OSHA requirements, draw schedules, percentage of completion, record keeping, inventory control, scheduling, organization, and management theory. Students will also study elements of leadership and human relations.

#### **BCT 2770 - Construction Estimating - Foundation to Basic Structure (3 credits)**

**In this course students explore the bid-contract system used by the construction industry and develop the skills necessary to estimate residential and commercial work in the following areas: excavation 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)**

In this course students explore the bid-contract system used by the construction industry and develop 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**

**BCV 0130 - Introduction to Carpentry (N) (75 hours)**

This course introduces the competencies essential to the carpentry industry. Topics include introduction to safety practices, fundamental tool operation and safety (manual and power), equipment utilization, identification of building materials, fasteners and hardware, basic math and math applications, basic carpentry communication and blueprint reading.

**BCV 0131 - Carpentry I (N) (325 hours)**

This course develops the competencies essential to the carpentry industry. Topics include safety practices, tools (manual and power), equipment utilization, identification of building materials, fasteners and hardware, basic math and math applications, communication and blueprint reading, and the background of the construction industry in America.

**BCV 0132 - Carpentry II (N) (400 hours)**

This course develops in-depth skills and knowledge needed for trim and finish carpentry. Specifically, utilizing blueprints and understanding specifications to install exterior coverings and trims, interior doors, interior walls, and ceiling coverings.

**BCV 0133 - Carpentry III (N) (400 hours)**

This course develops the skills needed for frame and form carpentry. Topics include blueprints, specifications, site preparation, framing members, walls and partition framing, roof framing, roof trusses, sheathing and hurricane code compliance. Doors, stairs, windows, structural timber, rigging and scaffolding, and roofing components are also covered.

**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 covers history and impact of plants on people and environment. Structural and functional relationships of structures, and ecological adaptations of plants are emphasized. The evolutionary relationships with among plants, fungi, selected Protista, and prokaryotes are also discussed.

Prerequisite: 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.

**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.

Corequisite: BSC 1005.

### **BSC 1020 - Introduction to Human Biology (3 credits)**

This General Education science course introduces students to the basic chemistry, biology, and anatomy that underlies human physiology. Content includes the nature of science and scientific literacy in today's world, a review of the chemistry that underpins life, an introduction to the structure and function of cells, the organization of the human body, and an exploration of body systems through the lens of common diseases and disorders

Prerequisite: Must score into college-level English and reading. Corequisite: BSC 1020L.

### **BSC 1020L - Introduction to Human Biology 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.

Prerequisite: Must score into college-level English and reading. Corequisite: BSC 1020.

### **BSC 1084 - Survey of the Human Body (3 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. 175).

Prerequisite: Student must score into college-level English and reading on placement test. Corequisite: BSC 2010L with a grade of C or higher.

### **BSC 2010L - General Biology I Lab (1 credit)**

This is the lab component for BSC 2010. Lab experiences include metric system, using microscopes, parts of cells, respiration and fermentation, and introduction to genetics.

Prerequisite: Student must score into college-level mathematics and reading on placement test. Corequisite: BSC 2010.

### **BSC 2011 - General Biology II (3 credits)**

This course is a continuation of General Biology I. Topics include an introduction to bacteria, viruses, fungi, and protists, as well as a survey of the plant and animal kingdoms. The course ends with an introduction to anatomy and physiology.

Prerequisite: BSC 2010, BSC 2010L with grade of C or higher. Corequisite: BSC 2011L.

### **BSC 2011L - General Biology II Lab (1 credit)**

This is the lab component for BSC 2011. Lab experiences include protists, fungi, a survey of the plant and animal kingdoms, comparative physiology of vertebrate systems, as well as plant and animal development.

Prerequisite: BSC 2010, BSC 2010L with grade of C or higher. Corequisite: BSC 2011.

### **BSC 2085 - Anatomy & 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. Course begins with an overview of general biology concepts including simple chemistry, cell structure, biochemistry metabolism and molecular genetics. Emphasis is placed on histology and the integumentary, skeletal, muscular, and nervous systems.

Corequisite: BSC 2085L.

### **BSC 2085L - Anatomy & Physiology I Lab (1 credit)**

This is the lab component for BSC 2085. Lab experiences includes microscope work, cell structure and function, histology, the skeletal, muscular and nervous system.

Corequisite: BSC 2085.

### **BSC 2086 - Anatomy & Physiology II (3 credits)**

This is a continuation of BSC 2085, studying the anatomy and physiology of human systems. Topics covered are the circulatory, digestive, respiratory, excretory, endocrine, and reproductive systems.

Prerequisite: BSC 2085 and BSC 2085L, or BSC 2093 and BSC 2093L, all with C or better. Corequisite: BSC 2086L.

### **BSC 2086L - Anatomy & Physiology II Lab (1 credit)**

This is the lab component for BSC 2086. Lab experiences include circulatory, digestive, respiratory, excretory, endocrine, and reproductive systems.

Prerequisite: BSC 2085 and BSC 2085L, or BSC 2093 and BSC 2093L, all with C or better. Corequisite: BSC 2086.

### **BSC 3312 - Marine Biology (3 credits)**

This course examines the ocean environment, the abiotic and biotic factors that control marine populations, and the

physical and behavioral adaptations of various organisms to their liquid environment.

Prerequisite: BSC 2011, BSC 2011L.

### **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 2011, BSC 2011L, 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 2011, BSC 2011L, 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 recombinant microorganisms. Molecular biotechnology of eukaryotic systems for transgenic plants and animals are examined. Regulation and social aspects of molecular biotechnology are included.

Prerequisite: BSC 3464, BSC 3464L, 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. 176) and is the laboratory component of BSC 3465 (p. 176).

Prerequisite: BSC 3464, BSC 3464L with a grade of "C" or higher. Corequisite: BSC 3465.

### **BSC 3931 - Junior Seminar (1 credit)**

This course is a required course for junior biology majors. Students read and discuss selected examples of the scientific literature in biology, prepare an oral presentation, construct a curriculum vitae and identify a topic area for their subsequent senior capstone series.

Prerequisite: BSC 2011, BSC 2011L, CHM 1046, CHM 1046L with a grade of 'C' or higher and pre/corequisite: PCB 3063, PCB 3063L with 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, with a grade of "C" or higher.

### **BSC 4434 - Introduction to Bioinformatics (3 credits)**

This course covers 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, PCB 3063, PCB 3063L, all with a grade of "C" or higher.

## **BUL - BUSINESS ADMINISTRATION AND MANAGEMENT**

### **BUL 2241 - Business Law I (3 credits)**

In this course, the student explores American Law, Contract Law, and Article II of the Uniform Commercial Code (UCC), which deals with the sale of goods. Through the study of content and cases, the student learns 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)**

In this course, students explore a business's social, legal political, and ethical responsibilities to internal and external groups. Topics include state, and federal laws, contract law, intellectual properties, product liability, safety issues, environmental regulations, and the Uniform Commercial Code (UCC).

### **BUL 4310 - The Legal Environment of Business (3 credits)**

In this course, students explore the legal environment of business and the Uniform Commercial Code (UCC). Emphasis is placed on public and regulatory law and the social, political, and ethical aspects of legal issues in business. Subjects include: the nature of law and 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)**

In this course, students explore advanced principles and theories of video game production, including project planning, scripting, 3D modeling and texturing, level



design, and audio. Students immerse in the initial stages of an eight-week game development project with heavy emphasis on teamwork as well as project planning and documentation. Students examine agile production methodologies and best practices of game production. Student complete assignments that 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)**

In this course, students design and implement casual video games using professional tools and interactive design techniques. Students create casual games in a short amount of time and design to appeal to the casual gamer playing games online for short periods of time.

Prerequisite: CAP 3052.

### **CAP 4056 - Game Design II (3 credits)**

In this course, students explore advanced principles and theories of video game design, including software, content, interaction, and game play design. Students examine 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.

### **CAP 4304 - Text Mining (3 credits)**

In this course the students are introduced to the knowledge discovery process and its direct application using data mining methodologies. Students also address concepts such as the extraction of information from data sets, its transformation into a useable structures, text mining, topic mining, and clustering models.

Prerequisite: CTS 3470.

### **CAP 4744 - Data Visualization and Reporting (3 credits)**

In this course the students are enabled to utilize the tools and techniques required to present complex data in visually meaningful representations. Students are instructed on 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.

### **CAP 4793 - Advanced Data Analytics (3 credits)**

In this course the students address advanced data analytic methodologies and techniques, such as neural networks, unsupervised learning, and emerging modes of data acquisition and aggregation. Students also develop the skillset to manage complex data analytics applications.

Prerequisite: CTS 3470.

## **CCJ - CRIMINAL JUSTICE TECHNOLOGY**

### **CCJ 1600 - Deviant Behavior (3 credits)**

Within this course the student examines the basic sociological perspectives on and theories of deviance, with an emphasis on understanding basic behavioral patterns that are unique in a traditional and conventional society.

### **CCJ 2020 - Introduction to Criminal Justice (3 credits)**

During this course, the student is exposed to the historical and philosophical background of criminal justice and agencies involved in the administration of criminal justice, including an emphasis on the development and objectives of criminal justice systems together with the organization, administration, and technical problems of local, state, and federal agencies.

### **CCJ 2022 - Contemporary Issues in Criminal Justice (1-3 credits)**

Within this course the student examines current issues and problems of interest and concerns in the criminal justice system.

### **CCJ 3612 - Criminal and Delinquent Behavior (3 credits)**

Within this course, the student examines patterns of criminal and delinquent behaviors through theoretical concepts and their influence on public policies, including the development of evidence-based approaches for preventing and mitigating crime and delinquency.

### **CCJ 3641 - Organized Crime (3 credits)**

Within this course, the student 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 framework for understanding the importance of how the world economy expands and is shadowed by a criminal economy.

**CCJ 4054 - Criminal Justice Ethics and Liability (3 credits)**

Criminal Justice Ethics and Liability allows the student a critical examination of conduct and ethics of criminal justice supervisors, managers, and leaders that may give rise to civil liability. The student additionally conducts a critical examination of decision-making and human relations within criminal justice agencies.

**CCJ 4450 - Criminal Justice Administration and Management (3 credits)**

During the duration of this course, the student examines leadership styles, techniques in supervision, theories, practices, and skills associated with managing personnel, including budgeting, organizational behavior, civil service, unions, manpower distribution, policy development, and execution as applied in both small and large law enforcement agencies.

**CCJ 4651 - Drugs and Crime (3 credits)**

Drugs and Crime allows the student a critical examination of 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.

**CCJ 4666 - Victimology (3 credits)**

Students taking this course are provided 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.

**CCJ 4678 - Race, Gender, Ethnicity and Crime (3 credits)**

Within this course the students examines issues of 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.

**CCJ 4700 - Methods of Research in Criminal Justice (3 credits)**

Within this course, the student examines how research is conducted in criminology and criminal justice. The student explores the research process, ethical issues, different types of quantitative and qualitative research designs, data analysis, and the reporting of research results.

Prerequisite: Permission required from the Criminal Justice Department Chair to enroll.

**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.

Corequisite: EET 1215C.

**CET 1113C - Logic Circuits II (3 credits)**

This course teaches the logic circuitry used in digital electronic systems. Topics covered are Counters (ripple, synchronous, up/down, etc), Shift registers (left, right, parallel, rotate), arithmetic (full and half adder/subtractors, ripple vs parallel computation, multiplication), 2's complement notation, the 74181 ALU, memories (static, dynamic, RAM, ROM, PROM, EPROM, EEPROM, magnetic, non-volatile), digital systems (clock, counter, etc), computer system architecture (CPU, decoding, data registers, microcontrollers, PLA, PAL, DSP), connection to analog devices (A/D comparators, flash, successive approximation, integration based, sigma-delta), D/A, R-2R ladder, specification, op-amps, filters .

Prerequisite: Prerequisite: CET 1112C.

**CET 1178 - A+ Certification Hardware (3 credits)**

In this course the students prepare for a career in the personal computer industry. Students also prep for the A+ Certification examination, which measures the competencies required by a service technician with six months of on-the-job experience. Specifically, students are instructed on how to install, configure, upgrade, troubleshoot, and repair microcomputer hardware.

**CET 1179C - A+ Certification Software (3 credits)**

In this course the students prepare for a career in the personal computer industry. Students also prep for the A+ Certification examination, which measures the competencies required by a service technician with six months of on-the-job experience. Specifically, students are instructed how to install, configure, upgrade, and troubleshoot mobile devices, networks, hardware, virtualization, cloud computing, operating systems, security, software, and operational procedures.

**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)**

In this course the students are presented with 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 before taking this course.

### **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)**

In this course students are introduced to microcomputer applications for academic purposes. Students explore topics such as the Windows® operating system, word processing, electronic spreadsheets, searching of electronic databases, and production of presentation graphics.

### **CGS 1100 - Introduction to Computer Applications for Business (3 credits)**

In this course students are introduced to computer applications for business use. Students explore topics such as computer concepts, the Windows® operating system, word processing, electronic spreadsheets, electronic databases, presentation graphics, and the Internet.

### **CGS 1500 - Microsoft Word (3 credits)**

This course covers beginner to advanced topics in Microsoft Word.

### **CGS 1522 - Microsoft PowerPoint (3 credits)**

This course covers beginner to advanced topics in Microsoft PowerPoint.

### **CGS 1540 - Database Fundamentals (3 credits)**

In this course the students are taught relational database design and how to create powerful applications using the Microsoft Access software package. Students are presented with topics such as designing, creating, and modifying tables, queries, forms, and reports with emphasis on business application.

### **CGS 1700 - Introduction to Operating Systems (3 credits)**

In this course the students are introduced to hardware, software, and operating system concepts used with computer systems. Students gain exposure to popular operating systems such as Windows, and Linux. Specifically, the student is presented with topics such as how to copy, format, delete, and use subdirectories to customize their computer system. Students focus on utility commands, kernel software, shell programs, and connectivity.

### **CGS 1821 - Website Development (3 credits)**

In this course the students are taught how to create, publish, and manage web sites with visual HTML tools and graphic editing software.

## **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)**

In this course students explore 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 setting.

**CHD 1332 - Creative Experiences for Children (3 credits)**

In this course students explore the creative activities enjoyed by preschool children in language arts, math, science, social studies, art, and music. Physical Education techniques the teacher can use to stimulate creativity are identified.

**CHD 2334 - Early Childhood Language Arts and Reading (3 credits)**

In this course the students explore 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)**

In this course students explore the development and administration of a Child Care Center at the foundational level. Topics include 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.

**CHM 1032 - Biochemistry for Health Professionals (1 credit)**

Students learn 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 biologically important compounds including lipids, carbohydrates, proteins, and nucleic acids.

Prerequisite: Student must score into college-level English, mathematics and reading on placement test.

**CHM 1045 - General Chemistry I (3 credits)**

CHM 1045 is the first semester of a two-course sequence covering general chemistry. This course is designed for students pursuing careers in the sciences or who need a more rigorous presentation of chemical concepts than is offered in an introductory course. This course involves the study of the principles of chemistry including atomic and molecular structure, stoichiometry, chemical bonding, thermochemistry, liquids, solids and the properties of

gases.

Prerequisite: MAT 1033 with a "C" or higher, and student must score into college-level English and reading on placement test. Corequisite: CHM 1045L.

**CHM 1045L - General Chemistry I Lab (1 credit)**

This course is the laboratory for CHM 1045 (p. 180). Lab experiments include the topics of principles of chemistry, atomic and molecular structure, chemical bonding, properties of gases, stoichiometry, liquids, and solids.

Prerequisite: MAT 1033 with a grade of "C" or higher, and student must score into college-level English and reading on placement test. Corequisite: CHM 1045.

**CHM 1046 - General Chemistry II (3 credits)**

CHM 1046 is the second semester of a two-course sequence covering general chemistry. This course is designed for students pursuing careers in the sciences or who need a more rigorous presentation of chemical concepts than is offered in an introductory course. This course involves the study of thermodynamics, equilibrium, kinetics, and electrochemistry.

Prerequisite: CHM 1045, CHM 1045L with a grade of "C" or higher. Corequisite: CHM 1046L.

**CHM 1046L - General Chemistry II Lab (1 credit)**

This course is the laboratory for CHM 1046 (p. 180). Lab experiments include the topics of equilibrium, kinetics, electrochemistry, and descriptive chemistry of some elements.

Prerequisite: CHM 1045, CHM 1045L with a grade of "C" or higher. Corequisite: CHM 1046.

**CHM 2210 - Organic Chemistry I (3 credits)**

Students are introduced to the electronic and structural features of carbon-containing compounds. The relationship between chemical structures and geometry to chemical reactions and product formation are covered. Reactions of major focus are the following: Acid-base reactions, radical halogenations of alkanes,  $S_N1$ ,  $S_N2$ , E1 and E2. IUPAC nomenclature of alkanes, alkenes and alkyl halides is also a major focus.

Prerequisite: CHM 1046, CHM 1046L with a grade of C or higher. Corequisite: CHM 2210L.

**CHM 2210L - Organic Chemistry I Lab (1 credit)**

Students are introduced to the fundamental separation and identification techniques used in the organic chemistry laboratory. The techniques covered include melting point, recrystallization, simple distillation, fractional and steam distillation, column chromatography, thin layer

chromatography, solvent partitioning, acid-base extraction, rotary evaporation and IR spectroscopy.

Prerequisite: CHM 1046, CHM 1046L all with grade of C or higher. Corequisite: CHM 2210.

### **CHM 2211 - Organic Chemistry II (3 credits)**

Students are introduced to the concepts of nomenclature, preparations, reactions, mechanisms, and the electronic and structural features of carbon-containing compounds. Classes of compounds studied include alkenes and alkynes, alcohols, aromatics, aldehydes, ketones, carboxylic acids, amines and phenols. Chemical structure is determined using infrared spectra, mass spectra and nuclear magnetic resonance spectra.

Prerequisite: CHM 2210, CHM 2210L all with grade of C or higher. Corequisite: CHM 2211L.

### **CHM 2211L - Organic Chemistry II Lab (1 credit)**

Students are introduced to the concepts of nomenclature, preparations, reactions, mechanisms, and the electronic and structural features of carbon-containing compounds. Classes of compounds studied include alkenes and alkynes, alcohols, aromatics, aldehydes, ketones, carboxylic acids, amines and phenols. Chemical structure is determined using infrared spectra, mass spectra and nuclear magnetic resonance spectra.

Prerequisite: CHM 2210, CHM 2210L all with grade of C or higher. Corequisite: CHM 2211.

## **CIS - COMPUTER SCIENCE**

### **CIS 1000 - Introduction to Information Technology (3 credits)**

In this course the students establish an understanding of the fundamentals required for further study in the field through a general survey of the methods and techniques of processing data. Students focus on the general purpose computer and its use in business and industry.

### **CIS 1210 - Cybersecurity 101: Living Safely in a Digital World (3 credits)**

In this course the students are prepared to understand how cybersecurity affects them in their personal and career lives. Student are introduced to topics such as best practices and behaviors related to laptop/desktop systems and mobile devices, accessing free Wi-Fi, utilizing social media, working with personal and work-related email accounts, utilizing the cloud for storage, and cybersecurity terminology.

### **CIS 2381 - Network Forensics (3 credits)**

In this course the students are presented with forensic concepts and techniques related to information security. Students cover concepts such as 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.

### **CIS 4200 - Penetration Testing (3 credits)**

This course helps prepare students for real world penetration testing in a hands-on and gamified manner. Students discover methodologies to seek vulnerabilities in machines and learn how to use industry standard tools to exploit those vulnerabilities.

## **CJC - CRIMINAL JUSTICE TECHNOLOGY**

### **CJC 2000 - Introduction to Corrections (3 credits)**

Within this course, the student examines the historical events and social issues that have shaped the corrections system in the United States, 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)**

During this course the student is exposed to 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.

## **CJD - CRIMINAL JUSTICE TECHNOLOGY**

### **CJD 0939 - Law Enforcement Basic Recruit Review (N) (30 hours)**

In this course, students participate in the review of course content in the Law Enforcement Basic Recruit Training

Program and participate in a State Officer Review Exam to prepare for the State Officer Certification Exam for Law Enforcement Officers. Prerequisite: Law Enforcement Basic Recruit Training.

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) (1 - 99 hours)**

In this course, students receive remedial instruction in the use of law enforcement and correctional officer firearms.

Prerequisite: CJK 0040C.

## **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 - Foundations of Law Enforcement Leadership (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 1641 - Intro to Crime Scene Technology (3 credits)**

This is an introductory course in Crime Scene Technology. Students learn the techniques, materials, and instrumentation used in securing, searching, recording, collecting, and examining physical evidence. There is special emphasis on the tools, instruments, and techniques used in the studies of crime scene reconstruction, fingerprints, firearms, tool marks, and blood stain pattern analysis.

### **CJE 1642 - Crime Scene Technology 2 (3 credits)**

This is the second course in Crime Scene Technology. Students continue to examine and develop the techniques, materials and instrumentation used in securing, searching, recording, collecting, and examining physical evidence. There is special emphasis on the tools, instruments, and techniques used in the studies of crime scene reconstruction, fingerprints, firearms, tool marks, and blood stain pattern analysis.

Prerequisite: CJE 1641 with a grade of C or higher.

### **CJE 1772 - Crime Scene Photography II (3 credits)**

This course expands upon concepts, knowledge and skills taught in Crime Scene Photography 1. Students learn to include specialty light sources, lighting techniques, shutter speed, depth of field, filters and utilizing of specialized equipment.

Prerequisite: CJE 1673 with a grade of C or higher.

### **CJE 1673 - Crime Scene Photography 1 (3 credits)**

This course is an introductory study of the history of photography including basic photography skills, camera operation, exposure control, relational photographs and flash control for crime scene and evidentiary documentation.

### **CJE 1772 - Crime Scene Photography II (3 credits)**

This course expands upon concepts, knowledge and skills taught in Crime Scene Photography 1. Students learn to include specialty light sources, lighting techniques, shutter speed, depth of field, filters and utilizing of specialized equipment.

Prerequisite: CJE 1673 with a grade of C or higher.

### **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 2604 - Courtroom Presentation of Evidence (3 credits)**

In this course students learn how to be an effective courtroom witness. The course addresses how to speak and listen during courtroom proceedings. Students learn how to prepare visual aids and presentations of scientific evidence. Mock trial exercises are employed.

**CJE 2644 - Crime Scene Safety (3 credits)**

This course is a study of how to properly handle crime scene safety and hazardous crime scene safety as it relates to various hazardous materials to include chemical and biological evidence.

**CJE 2671 - Latent Fingerprint 1 (3 credits)**

This course provides a foundation in basic fingerprinting. Students learn topics which include classification, identification, filing and rolling of fingerprints, problems and practices associated with post mortem fingerprinting and proper presentation of fingerprint evidence.

**CJE 2677 - Latent Fingerprint Development 2 (3 credits)**

This course provides a continuation of CJE 2671 Basic Fingerprinting. Students learn different methods involved in detection, enhancement, and recovery of latent fingerprints. Techniques involve chemical and mechanical methods on substrates and evaluation for proper application in both theory and practices.

Prerequisite: CJE 2671 with a grade of C or higher.

**CJE 3065 - Police and Society (3 credits)**

During this course the student is provided a examination of 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.

**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)**

During this course the student 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.

**CJK - CRIMINAL JUSTICE TECHNOLOGY****CJK 0002 - Intro to Law Enforcement (N) (12 hours)**

This course teaches on overview of the law enforcement certification process in Florida and a basic introduction to expectations during the academy. This course is part of the FDLE Mandated curriculum for the basic Law Enforcement Academy.

**CJK 0322 - Practical Applications (N) (16 hours)**

Students participate in hands-on practical application in the areas of de-escalation, report writing, cell searches, officer safety, employment interviewing, and financial awareness.

**CJK 0016 - Communications (N) (24 hours)**

This course includes five (5) lessons in communication, communication styles, types of listening. Covered are the basic fundamentals for communication in Law Enforcement. This course is part of the FDLE mandated Law Enforcement Basic Recruit Academy.

**CJK 0018 - Legal (N) (64 hours)**

This course provides a solid legal foundation from which students may function as law enforcement officers. Students learn federal, state, and local laws and application of same. This course is included in the FDLE mandated Law Enforcement Academy.

**CJK 0019 - Interviewing and Report Writing (N) (56 hours)**

This course teaches note taking, interviewing, and report writing principles for law enforcement officers. This course is part of the FDLE Mandated curriculum for the basic Law Enforcement Academy.

**CJK 0020C - Law Enforcement Vehicle Operations (N) (48 hours)**

This course helps students understand a vehicle's limits, as well as their personal limits. An officer's awareness of the

effects of physiological and psychological stressors on their driving is critical. Officers also should understand how the public views them as drivers. This course helps officers develop the skills required to operate a motor vehicle safely. This is one course of the FDLE Mandated courses for Law Enforcement.

Prerequisite: Acceptance into the Law Enforcement Basic Recruit Training Program.

#### **CJK 0021 - Serving Your Community (N) (34 hours)**

This course teaches fundamentals of serving the community to include: vulnerable adults, elderly, juveniles, veterans, homeless, disabled, physically, emotionally, or mentally impaired, or people in crisis, for law enforcement officers. This course is part of the FDLE Mandated curriculum for the basic Law Enforcement Academy.

#### **CJK 0031 - First Aid for Criminal Justice Officers (N) (40 hours)**

This course helps students understand the basics of first aid for Criminal Justice Officers. This is one course of the FDLE Mandated courses for Law Enforcement.

Prerequisite: Acceptance into the Law Enforcement Basic Recruit Training program.

#### **CJK 0040C - Criminal Justice Firearms (N) (80 hours)**

This course provides law enforcement, correctional, and correctional probation basic recruit students with instruction on the basic knowledge and proficiency skills needed to safely handle and shoot a handgun (semiautomatic pistol or revolver) and long gun (shotgun or rifle/carbine). Students are instructed on firearm safety, ammunition use, handgun and long gun use, use of cover and concealment, and survival shooting. Firearms instructors have some flexibility in teaching basic principles but may not alter proficiency skill requirements.

Prerequisite: Acceptance into the Law Enforcement Basic Recruit Training program.

#### **CJK 0051 - Defensive Tactics (N) (80 hours)**

This course provides law enforcement, correctional, and correctional probation basic recruit students with instruction on the basic knowledge and proficiency skills needed to give recruits a basic level of proficiency in defensive tactics and meets local agency needs.

Prerequisite: Acceptance into the Law Enforcement/Corrections Basic Recruit program.

#### **CJK 0063 - Fundamentals of Patrol (N) (40 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 arrest. This course is part of the FDLE Mandated curriculum for the basic Law Enforcement Academy.

#### **CJK 0072 - Crimes Against Persons (N) (48 hours)**

This course teaches students to conduct an initial investigation of crimes against persons, society, property, and economic crimes. . This course is part of the FDLE Mandated curriculum for the basic Law Enforcement Academy.

#### **CJK 0073 - Crimes Involving Property and Society (N) (12 hours)**

This course teaches students to conduct an initial investigation of crimes against property, economic crimes, animal cruelty and crimes against society. This course is included in the FDLE mandated curriculum for basic Law Enforcement Academy training.

#### **CJK 0079 - Crime Scene Follow-up Investigations (N) (34 hours)**

This course teaches students appropriate procedures for processing a crime scene, handling a criminal investigation and preparing the case for court. This course is part of the FDLE mandated basic Law Enforcement Academy training.

#### **CJK 0093 - Critical Incidents (N) (44 hours)**

This course enables students to identify the crowd control procedures in order 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) (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 0109 - Review for Basic Corrections (N) (24 hours)**

In this course, students participate in the review of course content in the Corrections Basic Recruit Training Program and participate in a State Officer Review Exam to prepare for the State Officer Certification Exam for Correctional Officers.

Prerequisite: Basic Corrections Recruit Training.



**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 0322 - Practical Applications (N) (16 hours)**

Students participate in hands-on practical application in the areas of de-escalation, report writing, cell searches, officer safety, employment interviewing, and financial awareness.

**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 0400 - Traffic Incidents (N) (12 hours)**

This course teaches students the basic of traffic incidents to include legal implications, licensing, insurance requirements, ticketing/citations, and unoccupied vehicles. It also covers directing pedestrian and vehicular traffic. This course is part of the FDLE mandated basic Law Enforcement Academy training curriculum.

**CJK 0401 - Traffic Stops (N) (24 hours)**

This course teaches students the basic rules for conducting safe and legal traffic stops. This course is part of the FDLE mandated basic Law Enforcement Academy training.

**CJK 0402 - Traffic Crash Investigations (N) (30 hours)**

This course teaches traffic crash investigations, laws pertaining to traffic crashes, and procedures for responding to a traffic crash. This course is part of the FDLE mandated curriculum for basic Law Enforcement Academy training.

**CJK 0403 - DUI Traffic Stops (N) (24 hours)**

This course teaches identification and general strategies for deterring and solving the problem of impaired driving.

**CJK 0421 - Conducted Electrical Weapon/Dart Firing Stun Gun (N) (4 hours)**

At the end of this course, students know the legal and use of force aspects of using a stun gun or CEW, how using a stun gun or CEW affects the human body, and how to operate a stun gun or CEW safely.

**CJK 0461 - Basic Recruit Wellness Program (N) (40 hours)**

In this course, students develop the physical fitness necessary to fulfill the role of a Police Officer through enhancing the cardiovascular conditioning of the Basic Recruit.

Prerequisite: Must be enrolled in the Law Enforcement Academy Track program or receive the permission of Criminal Justice Department Chair.

**CJK 0701C - Law Enforcement Practical Applications (N) (40 hours)**

Students participate in hands-on practical application in the areas of report writing, high liability, patrol procedures, employment interviewing and financial literacy.

**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)**

Students taking this course are provided 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.

**CJL 3510 - The American Court System (3 credits)**

Students taking this course are exposed to an examination of 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.

**CJL 4415 - Law and Social Control (3 credits)**

Students taking this course receive lessons focused 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.

**CJT - CRIMINAL JUSTICE TECHNOLOGY****CJT P445 - Community Safety (N) (24 hours)**

The Community Safety class introduces the Basic Law Enforcement academy students to the importance of Procedural Justice & Legitimacy, De-escalation and Bias Based Policing. They gain an understanding of the impact on the public's confidence and cooperation.

**CLP - HUMAN SERVICES****CLP 2140 - Abnormal Psychology (3 credits)**

The course content includes a comprehensive overview and inquiry into psychological disturbances within the human condition. An integrative approach is utilized with specific emphasis on etiology, symptom presentation, assessment methods and therapeutic approaches

## 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.

## COP - COMPUTER SCIENCE

### **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, and arrays. This course 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 fundamental programming 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)**

In this course the students are taught how to design and analyze simple algorithms and data structures as a continuation of COP 2000. Students are introduced to object-oriented programming concepts such as, data abstraction and encapsulation, classes and objects, inheritance, polymorphism, and template functions, classes, and libraries.

Prerequisite: COP 2000 with grade of C or higher.

### **COP 2030 - Introduction to Python (3 credits)**

This course covers 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 2332 - Visual Basic Programming (3 credits)**

In this course the students gain experience with Microsoft Visual Basic.NET for Windows at an introductory level. Students are instructed how to create applications which operate in a Microsoft Windows environment using Visual Basic.NET. Students are presented topics such as 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 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)**

In this course the students are presented with 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 covers 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 2830 - Web Programming (3 credits)**

This course covers 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, XML, and scripting languages such as JavaScript and VBScript.

## COS - BARBERING

### **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 0521 - Barbering II: Applied Skills and Skillset Review (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. Effective Summer 2021, Students return to the classroom for theory review in preparation for their state board exam.

Prerequisite: COS 0502.

### **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 - 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 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.

## CRW - ENGLISH

### **CRW 2001 - Creative Writing I (3 credits)**

This is an introductory creative writing course. Students analyze major characteristics of various genres, such as poetry, short fiction, and non-fiction, and will also practice basic techniques of writing in major genres.

Prerequisite: ENC 1101 with a grade of "C" or higher.

### **CRW 2002 - Creative Writing II (3 credits)**

This course builds on skills developed in the prerequisite course, CRW 2001. Students practice creative forms of writing, such as poetry, short fiction, and non-fiction. Coursework will focus on improvement in language and style through the use of appropriate literary devices.

Prerequisite: CRW 2001 with grade of C or higher.

### **CRW 2003 - Creative Writing III (3 credits)**

This course builds on skills developed in the prerequisite course, CRW2002. Students practice creative forms of writing, such as poetry, short fiction, and non-fiction. Coursework focuses on editing, proofreading, and rewriting methods.

Prerequisite: CRW 2002 with grade of C or higher.

### **CRW 2004 - Creative Writing IV (3 credits)**

This course builds on skills developed in prerequisite course, CRW 2003. Students practice creative forms of writing, such as poetry, short fiction, and non-fiction. A significant writing project/presentation is also required.

Prerequisite: CRW 2003 with grade of C or higher.

## CSP - COSMETOLOGY

### CSP 0010 - Nail Specialist (N) (180 hours)

This course develops competencies in manicuring, pedicuring and artificial nails including selection of supplies and equipment, sanitation procedures, performing designated procedures, safety rules and procedures.

### CSP 0100 - Esthetics (N) (220 hours)

The successful completion of the esthetics course prepares the student to be registered in the state of Florida as a Skin Care Specialist. This registration enables the student to pursue many avenues of employment. Some of these are to work as a skin care specialist in a salon, work closely with dermatologists and plastic surgeons, or in a merchandising capacity for major cosmetic companies. Subject areas are sanitation, physiology, histology of the skin, skin disorders and diseases, client consultation and skin analysis. Also included are facial treatments and make up application, professional massage techniques, electricity and light therapy, machines, chemical procedures, microdermabrasion and Florida Law.

## CTS - COMPUTER SCIENCE

### CTS 1104 - Windows Operating Systems Fundamentals (3 credits)

This course examines how to perform Windows tasks such as planning, installing, and repairing Windows; managing updates; managing and implementing file system security; configuring backup and recovery; and implementing a VPN client.

### CTS 1155 - Introduction to Help Desk Concepts (3 credits)

In this course the students are prepared with the business, technical, and interpersonal skills needed to succeed in a Help Desk setting. Students are taught to address all major aspects of Help Desk operations including customer support, processing and resolving incidents, and knowledge management. Students are also presented with the basics of Project Management and the Systems Development Life Cycle.

### CTS 1205 - Excel I (3 credits)

In this course the students gain hands-on experience with the Microsoft Excel software application. Using an exercise-oriented approach, students become proficient in the application of Microsoft Excel. Students are recommended to have basic keyboarding skills.

### CTS 1334 - Windows Server (3 credits)

In this course the students are introduced to concepts and techniques pertaining to Microsoft Windows Server. Student are presented with topics such as installation, configuration, and administration of the Microsoft Windows Server operating system in a networked environment.

Prerequisite: recommended: CTS 1104.

### 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 the industry certification exam leading to the Cisco Certified Networking Associate (CCNA) certification.

### 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 to assess the security posture of an enterprise environment and recommend and implement appropriate security solutions; monitor and secure hybrid environments, including cloud, mobile, and IoT; operate with an awareness of applicable laws and policies, including principles of governance, risk, and compliance; identify, analyze, and respond to security events and incidents.

Prerequisite: CET 1179C.

### CTS 2145 - AWS Cloud Practitioner (3 credits)

In this course the students are presented with a detailed overview of cloud concepts, Amazon Web Services, security, architecture, pricing, and support. Students are taught to recognize and explain basic AWS cloud architectural principles and key services on the AWS platform.

Prerequisite: COP 2700, COP 2840.

**CTS 2423 - .NET Application Development (3 credits)**

In this course the students are introduced 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. Students also review object-oriented programming concepts in VB and C#, and are then introduced to Windows Forms for desktop application development and ASP .NET Web Forms and MVC for web application development. Students are also exposed to ADO .NET technologies and the Entity Framework for implementing the data access layer.

Prerequisite: COP 2700, COP 2800, COP 2830 .

**CTS 2651 - CCNA2: Switching, Routing, & Wireless Essentials (3 credits)**

The second course in the CCNA curriculum focuses on switching technologies and router operations that support small-to-medium business networks and includes wireless local area networks (WLANs) and security concepts. Students learn key switching and routing concepts. They can perform basic network configuration and troubleshooting, identify and mitigate LAN security threats, and configure and secure a basic WLAN.

Prerequisite: CTS 1650.

**CTS 2652 - CCNA3: Enterprise Networking (3 credits)**

This course describes the architectures and considerations related to designing, securing, operating, and troubleshooting enterprise networks. Wide area network (WAN) technologies, quality of service (QoS) mechanisms, software-defined networking, virtualization, and automation concepts are some of the topics covered. This is the third of a series of courses designed to prepare students for the industry certification exam leading to the Cisco Certified Networking Associate (CCNA) certification.

Prerequisite: CTS 2651.

**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 2000.

**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 2000.

**DAA - THEATRE****DAA 1500 - Jazz Dance (2 credits)**

This course teaches the fundamental skills, techniques, steps, and terminology in jazz dance.

**DAA 1520 - Tap Dance (1 credit)**

This course introduces students to beginning tap steps including basic barre, centre floor exercises, step combinations and choreography.

**DAA 1580 - Musical Theatre Dance I (3 credits)**

This course introduces students to beginning ballet, jazz, and tap technique as necessary for a musical theatre performer, including basic barre, centre floor exercises, step combinations and choreography.

**DAA 1610C - Dance Composition I (1 credit)**

This course covers the fundamental skills, techniques, steps, and terminology in the art of choreographing dances. The course culminates with a dance performance.

**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 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 English .

**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 provides an introduction to 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 provides an overview of 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 2085, BSC 2085L. Corequisite: BSC 2094, BSC 2094L or BSC 2086, BSC 2086L.

**DEH 1800 - Clinical Dental Hygiene I (2 credits)**

This course is a continuation of clinical dental hygiene skills. Beginning patient care is emphasized as it applies to clinical policy, safety practices, assessment procedures, practice management, radiographic interpretation, instrumentation, stain removal and fluoride. 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: DES 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 (1 credit)**

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 provides an overview of 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 2086, BSC 2086L, along with MCB 2010, MCB 2010L, DEH 1130.

**DEH 2602 - Periodontology (2 credits)**

This course provides an overview of 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 provides an overview of additional non-surgical periodontal therapies and equipment available in the treatment of periodontal disease. Periodontal examination, treatment planning and the dental hygienists' 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 is included.

Prerequisite: DEH 1130, DEH 2602.

**DEH 2702 - Community Dental Health (2 credits)**

This course provides an overview of 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: SPC 1608.

### **DEH 2702L - Community Dental Health Lab (1 credit)**

This course provides an overview of 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 service learning projects' 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 activity chart.

Prerequisite: SPC 1608, DEH 2702.

### **DEH 2804 - Clinical Dental Hygiene III (2 credits)**

This course allows 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 the practice and demonstration of 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)**

The course content includes theories of mental, emotional, and social development of children from infancy, through adolescence. This 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 is a basic introduction to human development from conception to death. Physical, cognitive, social, and emotional changes are examined during infancy, childhood, adolescence, and adulthood. The stages of development are also examined from the different perspectives of the current major theories in human development.

Prerequisite: Student must score into college-level English and reading on placement test.



## DES - DENTAL HYGIENE

### DES 2051C - Pain Control and Anesthesia (2 credits)

This course provides an overview of pain perception, pain reaction, methods of pain control, and the administration of local anesthetic. 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 provides the dental hygiene student with the knowledge to perform expanded functions permitted by the Florida State Board of Dentistry. 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 will be discussed.

## DES - DENTAL SCIENCE

### DES 1020 - Head, Neck & Dental Anatomy (3 credits)

The course provides an introduction to 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 provides an overview of 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 laboratory course provides an overview of the 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)

In this course students learn dental office professionalism, patient reception and positioning for the delivery of care. This course 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 credit)

In this course students learn 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 the delivery of care, 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 roles of dental health team are included.

Corequisite: DES 1800.

### DES 1840 - Preventive Dentistry (1 credit)

Students are given an overview of the dental auxiliary's role in patient care. The philosophy of preventative dentistry and methods of plaque (biofilm) control are emphasized in conjunction with patient education. Tooth stains, discolorations, hypersensitive teeth and fluoride are discussed.

## DIG - DIGITAL MEDIA

### **DIG 1000 - Introduction to Digital Media (3 credits)**

Students explore fundamentals of graphic design, color theories, technical skills, and industry standard tools in this course. Students practice creating 2 dimensional assets for various design industries.

### **DIG 1115 - Digital Imaging 1 (3 credits)**

Students explore fundamentals of image-editing, industry standard tools, technical skills, and other relevant technology such as cameras. Student create sophisticated photographic manipulations for print and digital media.

### **DIG 1143 - Video Making for Social Media (3 credits)**

In this course, students design and develop videos for online platforms. Students in this course explore topics such as streaming media, file formats, digital media creation, and publishing media to the internet. While gaining hands-on experience, students develop techniques and strategies for creating quality-rich content for social media and related applications. This course is for students who desire to design and develop videos for online platforms. Students in this course explore topics such as streaming media, file formats, digital media creation, and publishing media to the internet. While gaining hands-on experience, students develop techniques and strategies for creating quality-rich content for social media and related applications.

### **DIG 1930 - Special Topics in Digital Media (.5 - 3 credits)**

In this course, students explore selected topics in digital media and emerging technologies. Students examine technologies shaping current electronic media, such as introduction to digital video animation; pre-production, production, and post production processes including digital imaging, virtual reality, video, animation, simulation, and gaming.

### **DIG 2030 - Digital Video Fundamentals (3 credits)**

In this course, students explore the concise workflow of a Digital Video production, camera movements, audio needs, and other basic planning procedures. Students examine practical techniques, specialized language, and the dynamic nature of motion graphic aesthetics. 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 - Digital Imaging 2 (3 credits)**

Students explore advanced techniques using digital image manipulation software. In addition, tools to create, edit, and enhance digital images for print and digital content are covered.

Prerequisite: DIG 1115.

### **DIG 2203 - Digital Video 2 Production (3 credits)**

In this course, students delve into intermediate to advanced 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 or DIG 1143.

### **DIG 2251 - Digital Audio Fundamentals (3 credits)**

In this course, students explore how to create and edit audio with current Adobe, Apple, and other standard software. Students focus on 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 dialogue tracks and sound effects while learning how to modify existing audio files.

### **DIG 2302 - 3D Modeling & Animation 1 (3 credits)**

In this course, students explore the fundamentals in 3D modeling, shading, lighting, animation, rendering, and navigating a digital 3D workspace. Student begin creating digital 3D assets for film and games.

### **DIG 2303 - 3D Digital Animation 2 (3 credits)**

In this course, students explore fundamentals in complex 3D modeling, 3D painting, texture map creation, and UV layout. This course is an intermediate introduction to creating digital 3D assets for film and games.

### **DIG 2430 - Visual Story Development (3 credits)**

Students explore pre-production of game and film through storytelling, screenwriting, storyboarding, and development of concept art. Students present final story ideas as an animatic and pitch it to the class.

Prerequisite: GRA 1129.

### **DIG 2500 - Fundamentals of Interactive Web Design (3 credits)**

Students take a systematic approach to designing interactive visual communications for the Internet in this course. Students focus on refining website design from the foundation up. Students use coding languages and software necessary to create contemporary, functional, and dynamic web pages. While completing projects students focus on control, placement, scale, and design of images and type, as well as the navigation of pages within a range of Internet browser possibilities. As their final project students create and develop a user-experience focused website.

### **DIG 2581 - Digital Media Portfolio (3 credits)**

In this course, students create a portfolio of work representative of the curriculum in Digital Media or

Graphic Design Technology at IRSC with assistance from faculty. Students include their best projects from coursework at the school, capstone/internship projects, and professional projects in the portfolio. Working together with faculty, students add projects which represent their overall best skill sets. Portfolios reflect the design process. Design principles and creative expression are the primary factors in the development of a representative body of work aligned to a career path. Work for this portfolio may be produced in any media and with any tools covered by course work at IRSC. The final portfolio is presented online and in public.

### **DIG 3253 - Digital Audio Production (3 credits)**

Students explore 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.

### **DIG 3362 - 3D Character Animation (3 credits)**

Students delve into 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.

### **DIG 3375 - Modeling Vehicles and Structures (3 credits)**

Students explore advanced tools, concepts and techniques for the development of 3D vehicles and structures. Topics include hard surface modeling, procedural modeling, polygonal topology, UV layout, and texture painting.

### **DIG 3713 - Gaming and Simulation Principles (3 credits)**

Students explore 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.

### **DIG 3823 - Visual Communication 2 (3 credits)**

In this course, students explore practical tools to enhance the creative process in the development of novel, and useful ideas for digital media. Students focus on 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.

Prerequisite: GRA 3102.

### **DIG 4354 - Character Modeling (3 credits)**

Students explore advanced tools, concepts and techniques for the development of 3D characters. Topics include organic modeling, 3D sculpting, polygonal topology, UV layout, and texture painting.

### **DIG 4355 - Artificial Effects and Environments (3 credits)**

Students explore advanced tools, concepts, and techniques used to achieve artificial dynamic effects within a virtual environment. Using industry standard software students apply a practical visual aesthetic to dynamic simulations and environments. Topics include particle effects, motion graphics, and advanced fluid simulations.

Prerequisite: DIG 3375 or DIG 4354.

### **DIG 4394 - Motion Graphics: Advanced Compositing (3 credits)**

Students examine digital post-production techniques used for film, animation, video, video games, and the web. Students learn fundamental concepts of video compositing, tracking, and chroma key to create content for use in digital media video projects.

### **DIG 4433 - Advanced Animation Techniques (3 credits)**

Students delve into advanced processes in animation for use in film and video games. Topics emphasized include character acting, facial animation, video referencing, rotoscoping, motion capture, and cinematography.

Prerequisite: DIG 3362.

### **DIG 4792 - Textures and Lighting (3 credits)**

Students explore advanced tools, concepts, and 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 material attributes and other parameters. Emphasis is placed on creating scenes with specific moods, styles, and visual narratives using light and color in a virtual 3D space.

Prerequisite: DIG 3375 or DIG 4354.

### **DIG 4931 - Special Topics in Digital Media (3 credits)**

Advanced students pursue individualized projects with the guidance of supervising faculty. Students explore methodology, technical concerns, and/or aesthetics of curricular importance to digital media as well as themselves.

**DIG 4950 - Portfolio-Animation, Gaming, & Modeling (3 credits)**

Students delve into development and execution of an advanced animation, gaming, and modeling portfolio. Individual assignments are given to strengthen and round out each portfolio and expand student skills. Topics include self-promotion and creating work for continuation as professionals in the field and continued study. Interview and job search skills are discussed and developed. Students interact with industry professionals; student work is critiqued, and career opportunities and options are discussed. Students present their work in an appropriate public forum as a component of this course.

Prerequisite: DIG 3362, DIG 3375, DIG 4354.

**DIG 4951 - Capstone Project - Animation, Gaming, and Modeling (3 credits)**

In this course, students collaborate in the creation of an extensive digital media project to showcase individual skill-sets in a team environment.

Prerequisite: DIG 3362, DIG 3375, DIG 4354.

**DIM - AUTOMOTIVE SERVICE TECHNOLOGY****DIM 0004 - Introduction to Diesel Mechanics (N) (150 hours)**

In this course students explore 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 0102 - Diesel Electrical and Electronics Technician (N) (300 hours)**

Students prepare for entry into the Diesel Engine Service industry. Content emphasizes beginning skills and concepts as a recommended requisite. Students study general electrical systems, batteries, starting, charging, lighting, gauges, warning devices, and related electrical system diagnostics, service, and repair.

Corequisite: DIM 0940.

**DIM 0104 - Diesel Engine Technician (N) (300 hours)**

Students prepare for entry into the Diesel Engine Service industry. Content emphasizes beginning skills and concepts as a recommended requisite. Students study engine, cylinder head, valve train, engine block, lubrication, cooling, air induction, exhaust, fuel, and engine brakes diagnostics, service, and repair.

Corequisite: DIM 0940.

**DIM 0105 - Diesel Brakes Technician (N) (300 hours)**

Students prepare for entry into the Diesel Engine Service industry. Content emphasizes beginning skills and concepts as a recommended requisite. Students study diagnostic, service, and repair of air, and hydraulic brakes. Students prepare for ASE T4 brake certification.

Corequisite: DIM0940.

**DIM 0940 - Diesel Technician On-the-Job-Training (N) (667 hours)**

In this course, students use the state required documentation of on-site training of skills and theoretical concepts introduced in the classroom components of the Diesel Technician 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 diesel technician industry.

**DIM 2021C - Diesel Service (N) (3 credits)**

Students explore diesel fuel systems and learn to differentiate gasoline from diesel exhaust systems. Students replace tires and diagnose/repair steering and suspension components. They are also introduced to air brakes and how to service wheel ends (bearing and hubs) along with drum and disk brake repairs.

Prerequisite: AER 1081C, AER 1198, AER 1694C, AER 2695C,, AER 2885C.

**DIM 2250C - Hybrid and Alternative Fuel Vehicles (N) (3 credits)**

In this course students explore hybrid powertrains and alternative fuels, used in current vehicles, through classroom and hands on training. Students focus on reducing environmental impact of vehicles and promoting the use of renewable energies.

Prerequisite: AER 1081C, AER 1198, AER 2695C.

**DSC - EMERGENCY ADMINISTRATION MANAGEMENT****DSC 1002 - Terrorism and U.S. Security (3 credits)**

In this course, students study the foundations of national security as it relates to international and domestic terrorism and the United States' engagement in the war against terrorism. This course is a survey of the history and development of terrorist organizations and extreme political militancy both in the United States and the world.

**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 introduces concepts related to the psychological management of disasters. The course provides an overview on the effect that disasters have on the impacted population, how to plan ahead to manage those impacts and how to identify those most vulnerable within the population.

**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 introduces students to Homeland Security Exercise and Evaluation Program (HSEEP) processes, principles, and resources. The course content covers the development, delivery and evaluation of both discussion based and operational based exercises.

**DSC 2063 - Risk Communications (3 credits)**

This course emphasizes the principles of Crisis Emergency Risk Communications (CERC). Students develop effective report writing and public communications skills related to risk communications.

**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 an 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 2941 - Emergency Management Capstone (3 credits)**

This course provides a complete overview of emergency management. The course focuses on the integration of knowledge, skills, and abilities learned in the program through a capstone project. The course should be taken during the last semester of the program.

**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 threats, hazards, vulnerabilities, and capabilities. Students use this information to develop basic components of an emergency operations plan.

**DSC 4218 - Emergency Planning II (3 credits)**

Students conduct assessments to identify risk, threats, vulnerabilities, and capabilities within a given community. Using this information, students develop an emergency operations plan. Students also review and evaluate an emergency operations plan identifying opportunities for improvement.

**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.

**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. 198) 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. 198) 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. 198) does not satisfy the university requirement for either ECO-2013 (p. 198) or ECO-2023 (p. 198).

**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)**

In this course, students explore statistical techniques developed through the use of business and economics problems. Time-series and index number analysis, simple and multiple linear 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)**

In this course students explore health education 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 with grade of C or higher.

### **EDE 4223 - Integrated Music, Art and Movement (3 credits)**

In this course students develop a critical understanding of art, music, and movement. Emphasis is placed on the effective integrative lesson planning and modeling techniques to art, music, and movement in elementary schools.

Prerequisite: EDF 3214 with grade of C or higher.

### **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: EDG 3620, EDG 4377, EEX 4601, EEX 4066, EDG 4940, LAE 4416, EDG 4376 with a grade of C or higher and permission on instructor. Corequisite: EDE 4940 or EDE 4941.

### **EDE 4940 - Internship in Elementary Education (10 credits)**

In this course students 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 register required.

Prerequisite: Senior level status, all program requirements must be met, and permission of department. EDG 3620, EDG 4377, EDG 4376, EDG 4940, EEX 4066, LAE 4416, all with grade of C or higher. . Corequisite: EDE 4936.

### **EDE 4941 - Internship for Elementary Education (9 credits)**

In this course students demonstrate pre-professional competencies during a 12 week (or 60 days), full-time internship in grades K-6, in a public school approved by the department and the school district. Permission to register required.

Prerequisite: Senior level status, all program requirements must be met, and permission of clinical education coordinator. EDG 3620, EDG 4377, EDG 4376, EDG 4940, EEX 4066, LAE 4416 all with a grade of C or higher. Corequisite: EDE 4936.

## **EDF - CHILD DEVELOPMENT AND EDUCATION**

### **EDF 1021 - Social Elements in Early Childhood Education (3 credits)**

In this course students explore 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 introduces the historical, sociological, and philosophical foundations of education with 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.

### **EDF 3214 - Human Development and Learning (3 credits)**

In this course students examine 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 districts.

Prerequisite: pre/coreq: SLS 3318L.

### **EDF 4430 - Measurement, Evaluation and Assessment (3 credits)**

This course involves the study of principles of traditional and alternative assessment strategies, which helps students obtain skills relevant to the development and use of

classroom assessments. Students develop a basic understanding of the principles of measurement, formative and summative assessment strategies, test construction, performance assessments, and reading and interpreting data from state achievement tests. This course helps students examine the content measured by state tests and how to use the data to improve student achievement.

#### **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, 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 introduces, through various educational topics, the importance of the role of the educator, including knowledge, skills and attitude. Professional development activities vary based upon current issues and initiatives in education.

#### **EDG 2301 - Introduction to General Teaching Skills (3 credits)**

In this course students explore 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 includes 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: for EPI Only: EDF 3214, EDG 3949; for Middle Grades Only: MAE 4941 or SCE 4942; for Secondary Only: MAE 3940 or SCE 3940 .

#### **EDG 3620 - Curriculum and Instruction (3 credits)**

In this course students explore major concepts, assumptions, debates, processes of inquiry, 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 matter knowledge. Pre-service teachers evaluate the suitability of content against learners' intellectual, social, emotional, and physical characteristics.

Prerequisite: pre/corequisite: EDF 3214, SLS 3318L.

#### **EDG 3949 - EPI Practicum (1 credit)**

Through this practicum course, students observe highly effective teachers in their approved certification area, and practice teaching various concepts to students in local area school districts. Topics include Florida Standards, subject matter competencies, and pedagogy pertinent to the discipline and required for certification. Students are placed with a qualified teacher in their certification area, for a minimum of 30 school-based hours in the classroom setting.

Prerequisite: Pre/corequisites: EDF 3214, EDG 3343.  
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 is provided. This course addresses Florida Standards, Florida Educator Accomplished Practices (FEAP's), Florida Teacher Competency Exam (FTCE) competencies and pedagogy pertinent to specific disciplines required for certification.

Prerequisite: If program of study is Elementary Education: EDG 3620 with a grade of C or higher, and pass GK English Language Arts (ELA) and Writing. If program of study is ESE: pass GK English Language Arts (ELA) and Writing. Corequisite: RED 3342.

#### **EDG 4377 - Integrating Mathematics and Science (3 credits)**

This course focuses on specialized methods for the creation of instructional curricula and appropriate pedagogic methods for diverse learners in grades K-12. The development of integrated science and mathematics elementary curricula and the use of inclusive instructional approaches that correspond to the capabilities and styles of the various learners are emphasized.

Prerequisite: If program of study is Elementary Education: EDF 3214 and EDG 3620 and pass GK Math. If program of study is ESE: EDF 3214 and pass GK Math. All courses require grade of C or higher. . Corequisite: EDG 4940.

#### **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. Attitudes, language patterns, values and behaviors are emphasized. This course



also includes methods and strategies for consulting with other school professionals and parents. A minimum of 15 hours of early field experience in a classroom and an additional fee for a background check by the school district are required.

### **EDG 4930 - Seminar in 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-12 public school setting to demonstrate professional competencies.

Prerequisite: All program requirements met, permission required. Corequisite: EDG 4945.

### **EDG 4940 - Integrating Mathematics and Science Practicum (1 credit)**

This course supports students in practical applications, including teaching math and science lessons, in a K-12 public school setting. Students are assigned a cooperating teacher to provide supervision and feedback, with opportunities to integrate content and pedagogical knowledge in the K-12 classroom. Current background check (fingerprinting) acceptable to the district in which the field experience takes place is required for this course.

Prerequisite: If program of study is Elementary Education: EDF 3214 and EDG 3620 and pass GK Math. If program of study is ESE: EDF 3214 and pass GK Math. All courses require a grade of C or higher. . Corequisite: EDG 4377.

### **EDG 4945 - Internship in Teaching (9 credits)**

This course requires a teacher candidate to demonstrate pre-professional competencies during a full-time paid internship in a public school approved by the department and the school district. Permission to register required.

Prerequisite: All program requirements met, permission required. Corequisite: EDG 4930.

## **EDM - EDUCATION**

### **EDM 3001 - Introduction to Middle School (3 credits)**

In this course students examine 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 introduces psychology as it applies to teaching and learning with a focus on the characteristics of physical, social, cultural, emotional, and intellectual differences among learners. Major topics include the study

of the teaching/learning process, problem-solving, motivation and assessments.

Corequisite: ENC 1101.

## **EEC - CHILD DEVELOPMENT AND EDUCATION**

### **EEC 1202 - Principles of Early Childhood Curriculum (3 credits)**

In this course students explore 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 Leadership And Organizational Mgmt (3 credits)**

In this course students participate in 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)**

In this course students develop skills for advanced early child care administration. This course counts toward director re-certification.

### **EEC 1601 - Observing and Recording Behavior (3 credits)**

In this course the students develop observing and recording techniques as it relates to the early childhood classroom.

### **EEC 1734 - Basic Childhood Nutrition (3 credits)**

In this course students explore appropriate health, safety, and nutritional practices implemented in developmentally appropriate educational programs for children ages birth through eight. Topics include 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)**

In this course students explore supervised participation in a Child Development Center. Students are introduced to trends and issues in Early Childhood Education in preparation for the Florida Child Care Professional Credential (FCCPC) Assessment. An approved field experience is required.

### **EEC 1947 - Practicum in Teaching Strategies (3 credits)**

In this course students explore trends, issues and practices in Early Childhood Education as they relate to teaching

strategies in the classroom. An approved field experience is required.

**EEC 2948 - Practicum in Early Childhood Curriculum (3 credits)**

In this course students explore trends, issues and practices in designing and implementing Early Childhood curriculum. An approved field experience is required.

**EEC 2949 - Practicum Child Care Center Management (3 credits)**

In this course students explore trends, issues and practices in child care center management. An approved field experience is required.

## **EET - ELECTRONIC ENGINEERING TECHNOLOGY**

**EET 1015C - DC Circuits (3 credits)**

This course introduces the fundamental theories of DC circuits with emphasis on circuit operation and troubleshooting. Topics covered are electronic components, Ohm's law, Power law, and series DC circuits, parallel DC circuits, electromagnetic devices, and DC test instruments.

**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.

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.

## **EEV - ELECTRICAL-ELECTRONIC VOCATIONAL**

### **EEV 0753 - Mechatronic Technician (N) (400 hours)**

In this course students explore logical troubleshooting of industrial machines and equipment, PLC (programmable logic controllers) programming, automated work cell programming and operation, servo precision robot operation and programming, integrated manufacturing work cell troubleshooting and maintenance.

Corequisite: EEV 0940.

### **EEV 0940 - Mechatronics Technician On-the-Job-Training (N) (667 hours)**

In this course, students use the state required documentation of on-site training of skills and theoretical concepts introduced in the classroom components of the Mechatronics Technician 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 manufacturing industry.

## **EEX - CHILD DEVELOPMENT AND EDUCATION**

### **EEX 2010 - Introduction to Special Education (3 credits)**

This course introduces 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 students labeled exceptional.

## **EEX - EDUCATION**

### **EEX 2030 - Teaching Exceptional Learners in Inclusive Setting (1 credit)**

In this course students develop the 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 styles of the various learners are emphasized. This course meets 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 explores major communication disorders and supportive strategies as well as normal language and speech development for classroom teachers.

### **EEX 4066 - Educational Programming in Exceptional Student Education (3 credits)**

This comprehensive course includes curriculum, methods, and materials required as part of the K-12 Exceptional Student Education (ESE) continuum of services. Topics include eligibility; assessment; Individual Education Plans (IEP's); Universal Design for Learning (UDL); High Leverage Practices (HLP's); differentiation; inclusive instructional models; collaborative consultation; transition and functional living skills used in programs for individuals with mild to moderate disabilities.

**EEX 4094 - Educating Students with Autism (3 credits)**

This course includes characteristics, etiology, and prevalence of autism spectrum disorders. Additionally, this course covers 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 examines 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 included.

**EEX 4232 - Identification and Assessment of Individuals with Autism (3 credits)**

This course includes the knowledge and skills necessary to critically analyze the processes in place to identify students with low incidence disabilities. The complexity of learning needs in a least restrictive environment, co-morbidity of different developmental disabilities along with the influences of societal and environmental issues are explored. Students appropriately assess the skills and abilities of K-12 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 examines the 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 State Standards, and local county curriculum guides. Focus is on specialized methods for the creation of instructional materials 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: Pre/corequisite: EDF 3214.

**EEX 4265 - Curriculum and Instruction for Students with Disabilities 6-12 (3 credits)**

This course examines the knowledge and skills necessary for special educators to meet the needs of students with disabilities in grades 6-12, including transition planning. Students identify the scope and sequence of the general education curriculum including State Standards, and local county curriculum guides for students in grades 6-12.

Focus is on specialized methods for the creation of instructional materials 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: Pre/corequisite: EDF 3214.

**EEX 4601 - Effective Behavioral Interventions and Practices in Exceptional Students (3 credits)**

This course explores the behavioral management of exceptional learners, including Functional Behavioral Assessments (FBA) and Behavior Intervention Plans (BIP). 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 explored.

Prerequisite: Pre/corequisite: EDF 3214.

**EEX 4603 - Positive Behavior Support (3 credits)**

This course includes the knowledge and skills necessary to develop, implement, and evaluate the impact of positive behavior support. Emphasis is placed on the communicative function of challenging behaviors, teaching new skills, 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 aligned with the Individuals with Disabilities Education Act.

**EEX 4760 - Assistive Technology for Students with Autism (3 credits)**

This course introduces educational and Assistive Technology (AT) used for instruction of students with low incidence disabilities including students with autism. Opportunities for special educators and others to analyze and apply research-based strategies in the application of AT in classrooms, schools, and school districts is included. Teachers 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)**

In this course students demonstrate pre-professional competencies during a full-time internship in a public school approved by the department and the school district. Permission to register required.

Prerequisite: Senior level status, all program requirements must be met, and permission of clinical education coordinator. EEX 3103, EEX 4221, EEX 4601, EEX 4264, EEX 4265, all with grade of C or higher.

### **EEX 4941 - Internship in Exceptional Student Education (9 credits)**

In this course teacher candidates demonstrate pre-professional competencies during a full-time internship in a public school approved by the department and the school district. Permission to register required.

Prerequisite: Senior level status, all program requirements must be met, and permission of department EEX 3103, EEX 4221, EEX 4601, EEX 4264, EEX 4265., all with grade of C or higher. Corequisite: EEX 4945.

### **EEX 4945 - Seminar in Exceptional Student Education (3 credits)**

In this course pre-service teachers are supported in instructional strategies, planning techniques, evaluation procedures, and classroom management skills during their full-day internship in a K-12 Exceptional Student Education (ESE) public school setting to demonstrate professional competencies.

Prerequisite: Senior level status, all program requirements must be met, and permission of department; EEX 3103, EEX 4221, EEX 4601, EEX 4264, EEX 4265, all with a grade of C or higher. Corequisite: EEX 4941.

## **EGN - ENGINEERING**

### **EGN 1002 - Introduction to Engineering (3 credits)**

In this course, students explore engineering and technology professions with emphasis on the spectrum of professionalism, opportunities, and careers. Students explore 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 word-processing and spreadsheets is recommended.

### **EGN 1111 - Engineering Graphics (3 credits)**

In this course, students delve into 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 learner with a sound approach of online course management systems and technologies.

Prerequisite: EDG 1011, EME 1013.

### **EME 1310 - Media in Instruction (3 credits)**

This course includes skills to assist educators in developing resources to integrate media into instruction.

Prerequisite: Permission of instructor.

### **EME 2040 - Introduction to Technology for Educators (3 credits)**

This course introduces theoretical and empirical research and current trends in Educational Technology as they apply to practical application in the K-12 classroom. Students create collaborative online technological artifacts indicative of mastery of the basic tenants of meaningful technology integration in the modern K-12 Classroom. This course addresses specific Florida Department of Education Standards, subject matter competencies, and pedagogy pertinent to the discipline.

**EME 3410 - Integrating Technology in the Classroom (3 credits)**

This course examines established theoretical and empirical research and current trends in Educational Technology as they apply to practical application in the K-12 classroom. Students analyze theories behind modern Educational Technology and the use of a project-based learning curriculum. Students design and create artifacts to meet the needs of today's technology rich classroom. This course addresses specific Florida Department of Education Standards, subject matter competencies, and pedagogy pertinent to the discipline.

**EMS - EMERGENCY MEDICAL SERVICES****EMS 0110C - Emergency Medical Technician (300 hours)**

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, laboratory skills, and scenario-based applications. In addition, 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.

**EMS 1119 - Emergency Medical Technician (9 credits)**

Instruction is provided in basic life support emphasizing the theory 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. Must maintain EMT program eligibility throughout the course.

Corequisite: EMS 1119L, EMS 1431.

**EMS 1119L - Emergency Medical Technician Lab (2 credits)**

Instruction is provided 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 scenario-based lab practice and application.

Requires acceptance to the EMT program. Students must maintain EMT program eligibility throughout the course.

Corequisite: EMS 1119, EMS 1431.

**EMS 1431 - EMT Clinical/Field Experience (1 credit)**

EMT theory and skills are reinforced as students participate as members of the emergency medical services (EMS) team in both 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

Corequisite: EMS 1119, EMS 1119L.

**EMS 2601C - Paramedic I (12 credits)**

In this course, students explore introductory-level instruction in advanced life support emphasizing the theory and skills required to recognize, assess, plan, and comprehensively manage acutely ill or injured patients. Students participate in a combination of classroom discussions and scenario-based skills lab practice and application as well as physical conditioning.

Corequisite: EMS 2664.

**EMS 2602C - Paramedic II (12 credits)**

In this course, students explore introductory-level instruction in advanced life support emphasizing the theory and skills required to recognize, assess, plan, and comprehensively manage acutely ill or injured patients. Students participate in a combination of classroom discussions and scenario-based skills lab practice and application as well as physical conditioning. Areas of focus include: Cardiology, Neurology, Medical Emergencies, Obstetrics, Pediatrics, and Electrophysiology.

Prerequisite: EMS 2601C, EMS 2664 with grade of C or higher. Corequisite: EMS 2665.

**EMS 2659 - Paramedic III (6 credits)**

In this capstone course, students participate as team leaders onboard an advanced life support (ALS) ambulance under the direct supervision of a single preceptor. Additionally, this course utilizes classroom lectures, lab exercises and scenario-based practice to review and reinforce the application of all prior knowledge and skills obtained through the program.

Prerequisite: EMS 2602C, EMS 2665 with grade of C or higher.

**EMS 2664 - Paramedic Clinical/Field Experience I (6 credits)**

In this course, students explore 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.

Corequisite: EMS 2601C.

### **EMS 2665 - Paramedic Clinical/Field Experience II (6 credits)**

In this course, students reinforce paramedic theory and skills. Students participate as part of the multi-disciplinary healthcare team during rotations through various departments of local hospitals, health departments, clinics, and specialty centers. During this phase of the program, students are expected to have chosen a specific 911 agency to focus their attention and look to find a clinical preceptor for their capstone internship. The Program Director can assist in the selection, but the student must feel comfortable with their chosen preceptor.

Prerequisite: EMS 2601C, EMS 2664 with grade of C or higher. Corequisite: EMS 2602C.

## **ENC - ENGLISH**

### **ENC 0017 - Integrated Reading and Writing (N) (1 credit)**

This co-requisite course is intended to be taken concurrently with a linked section of English Composition I (ENC 1101) and provides foundational and individualized support for ENC 1101. This course supplements skills in reading, grammar, and composition. In addition to introducing students to institutional resources, the course aids in developing the comprehension, organization, and editing skills needed for reading and writing at the college level. Simultaneous successful completion of both linked courses is required.

Credit does not apply toward degree.

Prerequisite: Placement score. Corequisite: ENC 1101.

### **ENC 1101 - English Composition I (3 credits)**

This course introduces the necessary components of college-level writing by addressing process, form, and content. Students learn and follow basic form and style guidelines and review and apply standard grammar and punctuation. This course contains a required speech component. Students demonstrate college-level writing skills through multiple assignments.

Prerequisite: Student must meet the reading and writing requirements in State 6A-10.0315 (by course, placement score, or eligible exemption).

### **ENC 1102 - English Composition II (3 credits)**

An extension of ENC 1101, this composition course emphasizes textual interpretation and research methods. Students read a variety of texts and demonstrate analytical and critical thinking skills through multiple writing assignments.

Prerequisite: ENC 1101 with a grade of "C" or higher.

### **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, technology, and women's studies. This course requires text analysis, argumentation, and research-based college-level writing skills through multiple assignments. ENC 1107 is an intensive writing course.

Prerequisite: ENC 1101 with a grade of "C" or higher.

### **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.

## **ENL - ENGLISH**

### **ENL 2012 - English Literature: Medieval to Romantic Era (3 credits)**

This course surveys English literature from the Medieval to the Romantic era. Students demonstrate college-level writing skills through multiple assignments.

Prerequisite: ENC 1101 with a grade of "C" or higher.

### **ENL 2022 - English Literature: Romantic Era to present (3 credits)**

This course surveys English literature from the Romantic era to the present. Students demonstrate college-level writing skills through multiple assignments.

Prerequisite: ENC 1101 with a grade of "C" or higher.

### **ENL 2330 - Introduction to Shakespeare (3 credits)**

This course surveys Shakespearean works. Students demonstrate college-level writing skills through multiple assignments.

Prerequisite: ENC 1101 with a grade of "C" or higher.

## ENY - AGRICULTURE PRODUCTION TECHNOLOGY

### ENY 1002 - Fundamentals of Entomology (3 credits)

In this course, students are introduced to the structure and growth patterns of the grass plant and how this information can be used to sustain a dynamic and complex turfgrass community.

## ETD - DRAFTING AND DESIGN TECHNOLOGY

### ETD 1320 - Introduction to AutoCAD (3 credits)

In this course, students explore AutoCAD software for 2-Dimensional technical drawings. Students focus on elementary procedures, use of menus and ribbons, and demonstration of drawing commands. Students use 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)

Students explore 3D Studio VIZ, a 3D visualization software. Students delve into the creation of 3D models combined with intuitive multimedia tools for the creation of presentation graphics. Students practice methods of modeling, creation of lighting systems, application of materials and production of rendered images along with special effects.

### ETD 2340 - AutoCAD Level 2 (3 credits)

In this course students create highlighted 3D drawings and renderings using intermediate-level techniques in industry-standard computer aided drafting (CAD) software. Students focus 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)

Students in this course investigate mechanical design utilizing advanced computer-aided drafting techniques with the current Solidworks software. Students focus on three-dimensional coordinate systems, parametric modeling, wire frame development, surface generation, and multiple-part/assembly construction techniques.

Prerequisite: ETD 1320.

### ETD 2365 - Computer Aided Drafting - Mechanical (3 credits)

In this course students explore computer aided drafting 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. Students generate 2D views and 3D animations from the drawings and models. Students explore 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)

In this course students construct architectural drawings using current Autodesk software with specialized CAD commands applicable to the architectural field. Students explore real world architectural modules using industry standard CAD software.

Prerequisite: BCN 1250 and ETD 1320 .

### ETD 2551 - Computer Aided Drafting - Civil (3 credits)

In this course students explore how to develop civil engineering drawings using the current AutoCAD Civil Engineering application software. Students learn terminology and complete tutorials and drawing assignments that 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 .

### ETD 2554C - Computer Aided Drafting - Surveying (3 credits)

In this course students explore 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)

In this course students explore computer-aided drafting topics of special and current interest. Students focus on 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 learn 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 2943 - Practicum in Technical Industry (3 - 21 credits)

Students provide valid evidence of technical or industrial competencies to receive an award of PLA credits. The number of credits awarded are determined by faculty of Indian River State College.

Prerequisite: must be accepted in the Supervision and Management for Industry A.S. degree.

## 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)**

In this course students explore Green Home certification, the house as a system, exterior wall finishes, interior systems, mechanical systems, plumbing, and renewable energy.

**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 1100C - Safe Work Practices (3 credits)**

Students demonstrate knowledge of the National Electrical Safety Code, FECA Safe Work Practices Handbook or the APPA Safe Work Practices Handbook and OSHA (CFR 29) Section 1910.269 Electric Power Generation and Transmission and Distribution and related sections. Students demonstrate industry practices for rescuing injured co-workers aloft from structures, from bucket trucks or aerial devices and from manholes. Students identify dangers in planning rescue and how to coordinate, and the aspects of command and control rescue procedures.

**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 - Intro 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 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.

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. 212) 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/corequisite: ETS 2542.

**FAS - AGRICULTURE PRODUCTION TECHNOLOGY****FAS 1400 - Introduction to Hydroponics (3 credits)**

In this course, students explore the principles of plant production. Topics include system designs, site considerations, equipment components, and nutrient delivery and testing.

## 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)**

In this course, the students examine 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 over a multi-disciplined response to large-scale incidents. Emphasis is placed on the vertical coordination among federal, state, and local and non-governmental resources.

## FFP - FIRE SCIENCE

### **FFP 0030 - Firefighting Academy I (N) (191 hours)**

This course presents the history of the fire service, firefighter safety and health, communications, building construction, the science of fire, personal protective equipment, fire extinguishers, ropes and knots, ladders ventilation, water supply, hose handling, fire streams and fire control, property conservation, scene safety, forcible entry, and fire and life safety initiatives. This course is the first part of the Firefighting Basic Recruit Academy and is followed by FFP 0030 (p. 213) Firefighting II. Students must first have successfully completed the Emergency Medical Technician Program before enrolling in this course.

Prerequisite: Successful completion of the Emergency Medical Technician Program .

### **FFP 0031 - Firefighting Academy II (N) (301 hours)**

This course presents information on fire department communications and reporting requirements, building construction hazards and structural collapse, rescue and extrication, maintenance of electric generators and lighting equipment, service testing fire hose, fire fighting foam, coordinating fire ground operations, advanced origin and cause, fire protection systems, conducting private dwelling fire safety surveys, Incident Command System, Florida Statewide Emergency Response Plan (SERP), air

monitoring, emerging challenges for firefighters, and firefighter safety and survival.

Prerequisite: FFP 0030 and successful completion of Emergency Medical Technology Program.

### **FFP 1000 - Principles of Emergency Services (3 credits)**

This course provides an overview of the philosophical and historical backgrounds of fire service including the organization and function of federal, state, county, and private fire protection agencies; a review of municipal fire defenses; fire prevention principles; and professional fire protection career opportunities.

### **FFP 1040 - Private Fire Brigade (3 credits)**

This course provides the 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 provides the basic principles and history related to the 16 national fallen firefighter life safety initiatives, focusing on the need for cultural, and behavioral change throughout emergency services.

### **FFP 1120 - Building Construction for Fire Service (3 credits)**

This course provides an overview of the various types and methods of building construction and their influence on fire travel and life safety. Fire resistance of building materials and problems inherent in new construction, as well as existing buildings, are examined closely.

### **FFP 1505 - Fire Prevention (3 credits)**

This course provides an overview of the structure and organization of the fire prevention entities including fire prevention principles, application of codes, laws, and ordinances, methods of developing fire prevention programs, recognition and elimination of fire hazards, problems of public relations, public education, inspection practices, and fire "risk" analyses and practices.

### **FFP 1521 - Plans Examination and Blueprint Reading (3 credits)**

This course provides an overview of building construction blueprints and plans and how to integrate information contained in construction working drawings, and specifications, interpreting conventional graphic communications and accepted standards and conventions related to fire protection and prevention inspections.

**FFP 1610 - Fire Behavior and Combustion (3 credits)**

This course provides an overview of the theories and fundamentals of how and why fires start, spread, and how they are controlled.

**FFP 1812 - Engine Company Fireground Operations (3 credits)**

This course reviews the operations of the engine company on the firegrounds and the objectives of fireground operations, duties of company personnel, apparatus positioning, and building coverage.

**FFP 2510 - Building and Fire Codes I (3 credits)**

This course provides an overview of building and life safety codes in relation to types of occupancies, building design, fire resistance of building materials, fire problems inherent in structures, and life safety considerations. Problem-solving is used to provide opportunities for the application of building and life safety code enforcement methods to prevent and correct building design problems.

**FFP 2720 - Company Officer Leadership (3 credits)**

This course provides an overview of the leadership skills including the topics of management systems and theories, motivation, communication, and individual behavior for advancement in the fire service.

**FFP 2740 - Fire Service Course Delivery (3 credits)**

This course provides an overview of techniques used for teaching fire service curricula, as well as teaching devices for specific fire service disciplines.

**FFP 2741 - Fire Service Course Design (3 credits)**

This course provides an overview of how to develop courses based on nationally applicable performance standards for uniformed fire service personnel and provides the knowledge, skill, and ability to develop a training curriculum.

**FFP 2801 - Incident Command System (3 credits)**

This course introduces the essential skills and principles associated with the Incident Command System (ICS). Emphasis is placed on the organizational development of 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 provides an overview of the basic concepts involved in firefighting, including the behavior; firefighting fundamentals; principles of extinguishment; the proper role for utilization of various fire companies, and pre-planning fire problems.

**FFP 2820 - Principles of Emergency Management (3 credits)**

This course introduces students to the principles of emergency management. Along with interactive and experiential learning, students develop knowledge of community planning, coordination, and management functions. Emphasis is placed on an all hazards approach where emergency management is the function of coordination within all levels of government and the private sector to support preparedness, mitigation, response and recovery efforts.

**FFP 2840 - Disaster Operations (3 credits)**

This course introduces aspects of disaster operations with an emphasis on disaster response. Tactics, techniques and procedures for meeting the needs of disaster victims, providing mass care, and organizing and maintaining response operations are examined.

**FFP 2949 - Fire Science Observation (4 credits)**

During this course the student has the opportunity to observe the daily operations of a local fire service agency.

**FIN - ACCOUNTING****FIN 1100 - Personal Finance (3 credits)**

In this course, students gain the expertise to make informed financial decisions. This process 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 various personal finance decisions are interrelated.

**FIN 2001 - Introduction to Finance (3 credits)**

In this course, students explore 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. Students gain preparation for employment in areas such as business development, installment, credit, commercial loans, or public relations.

**FIN 3400 - Financial Management (3 credits)**

In this course, students explore the elements of organizational finance, from budget development to finance management, and from procurement to accounting and auditing. In addition, students learn about alternative sources of financing 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)**

In this course, students explore 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)**

In this course, students explore 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. 215) 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)**

In this course, the student is introduced to fundamental concepts, skills and techniques with the management of culinary resources, use and care of equipment; identification and evaluation of food products. Practical demonstrations in breakfast cookery, salad making, salad dressings, starch and vegetable cooking will occur. The foundational components of sanitation and kitchen safety are emphasized.

**FSS 1240C - Classical Cuisine (3 credits)**

In this course, students develop 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 with C or higher.

**FSS 1246C - Baking and Pastries I (3 credits)**

In this course, students are introduced to baking fundamentals, baking ingredients, baking equipment use, scaling of ingredients and mixing methods. Special emphasis is given to demonstration and practical baking of yeast doughs and non-yeast doughs, assorted desserts and decorating desserts and kitchen sanitation.

Prerequisite: FOS 2201 with a grade of C or higher.

**FSS 2204C - Quantity Food Production II (4 credits)**

In this course, students are introduced to techniques and methods for vegetable, starch, meat, fish and poultry cookery, including the basic cooking techniques of sautéing, roasting, poaching, braising, sauces, center of the plate concept and deep-frying.

Prerequisite: FSS 1203C with grade of C or higher.

**FSS 2206C - Quantity Food Production III (4 credits)**

In this course, students are introduced to identification of primal cuts of beef, veal and lamb; how they are processed into restaurant portion-sized cuts; identification of fish and seafood quality; cooler management techniques; and butchery techniques. Speed scratch and hot food preparations are reviewed and practiced.

Prerequisite: FSS 2204C with grade of C or higher.

**FSS 2242C - International and Regional Foods (3 credits)**

In this course, students are introduced to the use of various condiments and seasonings that are indigenous to different parts of the world in food preparation. Topics may include Far East cuisine, South American, Middle Eastern, Mediterranean, North African cuisine, and Continental cuisine. Lectures, demonstrations and preparations will also cover American regional cooking.

**FSS 2248C - Pantry and Garde Manger (4 credits)**

In this course, students are introduced to three main focuses of the cold kitchen: reception food, -à 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 sculpt centerpieces using various mediums and techniques.

Prerequisite: FSS 1246C, FSS 2204C with grade of C or higher.

**FSS 2251 - Food & Beverage Management (3 credits)**

In this course, students are introduced to principles in commercial and institutional food and beverage facilities including marketing, menu development, effective cost control in purchasing, pricing, labor and service techniques. Procedures, approaches, and techniques of management are developed as they relate to commercial and institutional food and beverage facilities.

**FSS 2284C - Catering and Banquet Management (3 credits)**

In this course, students are introduced to the logistics of preparation, production, transportation, and implementation of catered events, including analysis of typical banquet/event contracts. Emphasis is given to menu planning for various types of banquets, themed buffets, and physical management of floor layout and table set-up. Training techniques for supervisors in the dining room and banquet service are practiced. This course requires service-learning at actual events wearing a uniform.

Prerequisite: FOS 2201.

**FSS 2500 - Food and Beverage Cost Control (3 credits)**

In this course, students are introduced 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.

**FSS 2942 - Internship in Culinary Management (1-3 credits)**

In this course, students participate in a planned work-based experience to enhance workplace skills related to their career objectives.

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)**

Students are introduced to the principles of combined 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 Shop Management (3 credits)**

In this course, students explore 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)**

Students explore 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)**

Students study the 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)**

Students calculate and measure 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)**

Students analyze golf course and landscape operations, including personnel, planning, budgeting, purchasing, record keeping, labor management and other administrative functions.

**GCO 2944 - Golf Course Internship (3 credits)**

Students experience 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.

**GEB - BUSINESS ADMINISTRATION AND MANAGEMENT****GEB 1011 - Introduction to Business (3 credits)**

In this course, students explore an overview of the economic system, the private business sector and its major components.

**GEB 2214 - Business Communications (3 credits)**

In this course, students explore a comprehensive study of the various areas of business communication with emphasis on the writing of business letters and reports.

**GEB 2941 - Applied Internship (3-4 credits)**

In this course students employ classroom learning in an applied workplace setting to enhance their skills in their field of study. This course requires a minimum of 75 clock hours of work.

**GEB 3035 - Effective Career Management (3 credits)**

In this course, students develop a personal career plan and explore advanced management skills. Using a thorough self-assessment of personal values, interests and skills, students are introduced to the steps necessary for maximizing career advancement opportunities.

**GEB - ORGANIZATIONAL MANAGEMENT****GEB 3213 - Business Writing (3 credits)**

In this course, the student explores the essentials of effective business writing while reviewing the various kinds of written business correspondence. Students integrate business decision making and analytical thinking skills into the content. Students develop solutions to problem-based exercises.

**GEB 4891 - Strategic Planning (3 credits)**

In this course, students explore 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)**

In this course, students address current topics, issues, and trends pertinent to supervisors and managers. Students then compare alternative management approaches to those situations.

**GEB 4970 - Senior Management Project (3 credits)**

In this course, students develop a thesis for a business problem or opportunity. 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)

In this course students explore how to implement Geographic Information Systems (GIS) by utilizing ESRI's (Environmental Systems Research Institute) current ArcGIS software. Special focus in 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)

Students explore 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. 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.

## GRA - DIGITAL MEDIA

### GRA 1121 - Publication Design (3 credits)

In this course students create layouts and designs for publications and printed material using contemporary software applications. Students focus on the creation of text and image, typography, and copy in the context of printed material.

### GRA 1129 - Visualization Basics (3 credits)

In this course students develop a firm understanding of the process of drawing and sketching for ideas, concepts, and creative thinking. Students pursue an understanding of gesture, line, and perspective drawing to develop creative concepts for all media. Students explore the use of shading and tone, recognizing light sources, and working up concept drawings, which will be extremely useful in

communicating visual ideas clearly and with speed. Students delve into seeing people and object as they are, not as you think or assume they are, as a primary focus of this course. Additionally, students explore sketching ideas for layouts, logos, storyboards, concept development skills, and presenting their thought processes across interdisciplinary physical media.

### GRA 1151 - Vector Design 1 (3 credits)

Students navigate the 2D vector workspace, industry standard tools, and the vector editing workflow. This course is an introduction to creating scalable digital assets for various design industries.

### GRA 1206 - Typography (3 credits)

In this course students explore typography as a primary tool of graphic designers by creating expressive, technical, and visual aspects of type. These creations require the knowledgeable use of typeface, size, leading, line length, headlines, hierarchy, and overall development of typographic aesthetics. Student explore the importance of experimentation with typographic design in visual expression.

### GRA 2152 - Vector Design 2 (3 credits)

Students explore advanced vector editing workflows, raster / vector conversions, and managing complex vector designs. This course is an advanced introduction to creating scalable digital assets for various design industries.

### GRA 2160 - Digital Animation (3 credits)

Students explore processes and techniques associated with the creation of animated medium. Techniques and processes include the creation of assets to be used in an animation, the processes in creating an animation, animation to an audio track, and the 12 Principles of Animation.

Prerequisite: Pre/corequisite: DIG 1000 or DIG 1115.

### GRA 2161 - Introduction to Motion Graphics and Compositing (3 credits)

Students explore how to create motion graphics, 2d and 3d animation, video compositing, and rendering. These skills are used by digital media professionals, web designers, and video professionals. Fundamentals of design are combined with sophisticated visuals and audio effects for animations. Students explore the use of digital assets created in object-oriented and digital imaging software.

Prerequisite: GRA 2160.

### GRA 3102 - Visual Communication I (3 credits)

In this course students increase their 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 create visual work demonstrating a variety of major design influences.

### **GRA 3154 - Illustration Methods (3 credits)**

In this course students explore the theoretical and practical aspects of digital imaging in graphic design. Students focus on 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 portfolio pieces such as posters, CD covers, electronic collages, exploring how images are used to enhance the experience of other media such as audio and text.

Prerequisite: GRA 3512.

### **GRA 3209 - Advanced Typography (3 credits)**

In this course students are challenged to develop advanced skills in typography and communication design like those used in professional publications. An emphasis is placed on conceptualizing and creating complex typographic solutions to visual problems. In this course students examine type movements and contemporary type designers.

### **GRA 3512 - Branding and Corporate Identity (3 credits)**

In this course students explore 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)**

Students explore narrative and experimental forms of time-based graphics software and their uses in digital media projects. Time-based content is integrated into multimedia video projects for a variety of purposes. The emphasis is on creating cohesive portfolio-quality work.

### **GRA 3758 - Scripting for Web Sites (3 credits)**

Students explore the fundamentals of creating web pages with a focus on design and aesthetics. Students create several html-css-based projects using the latest developments for the creation of websites which may include other scripting languages. Students are encouraged to create professional-level websites in this class.

### **GRA 4591 - Art Direction and Creative Process (3 credits)**

In this course students explore the role of the art director in the production of multi-faceted design projects. Students work collaboratively on leadership, communication, and

negotiation skills. Emphasis is placed on coordinating creative effort from concept to finished product.

Prerequisite: GRA 3512.

### **GRA 4759 - Scripting for Websites 2 (3 credits)**

In this course students explore advanced concepts in Website design, including interactivity, animation, user interface (UI), user experience (UX), and trends in social media. 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 Website design. Students work with industry standard tools to produce aesthetically complex websites.

Prerequisite: GRA 3758.

### **GRA 4930 - Special Topics in Graphic Design (3 credits)**

In this course students pursue individualized projects with the guidance of supervising faculty. Students explore methodology, technical concerns, and/or aesthetics of curricular importance to graphic design as well as themselves.

### **GRA 4941 - Digital Media Internship/Practicum (3 credits)**

Students gain 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 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 - Portfolio-Graphic Design and Vis Com (3 credits)**

Students develop 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. Students organize a public exhibition of work. Industry professionals review student work and advise on career opportunities.

Prerequisite: GRA 3512 or permission of instructor.

**GRA 4954 - Capstone Project -GD and Vis Com (3 credits)**

The students in this course create an extensive graphic design project to showcase and for inclusion in a professional portfolio. Students publicly display their project in a suitable public forum prior to the completion of the course. Students are assessed on the appropriateness and level of completion of the project, and on the conceptual, formal and technical development of their portfolio.

Prerequisite: GRA 3512 or permission of instructor.

**GRA - GRAPHIC DESIGN****GRA 1121 - Publication Design (3 credits)**

In this course students create layouts and designs for publications and printed material using contemporary software applications. Students focus on the creation of text and image, typography, and copy in the context of printed material.

**GRA 1151 - Vector Design 1 (3 credits)**

Students navigate the 2D vector workspace, industry standard tools, and the vector editing workflow. This course is an introduction to creating scalable digital assets for various design industries.

**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 - Vector Design 2 (3 credits)**

Students explore advanced vector editing workflows, raster / vector conversions, and managing complex vector designs. This course is an advanced introduction to

creating scalable digital assets for various design industries.

**GRA 2160 - Digital Animation (3 credits)**

Students explore processes and techniques associated with the creation of animated medium. Techniques and processes include the creation of assets to be used in an animation, the processes in creating an animation, animation to an audio track, and the 12 Principles of Animation.

Prerequisite: Pre/corequisite: DIG 1000 or DIG 1115.

**GRA 2161 - Introduction to Motion Graphics and Compositing (3 credits)**

Students explore how to create motion graphics, 2d and 3d animation, video compositing, and rendering. These skills are used by digital media professionals, web designers, and video professionals. Fundamentals of design are combined with sophisticated visuals and audio effects for animations. Students explore the use of digital assets created in object-oriented and digital imaging software.

Prerequisite: GRA 2160.

**GRA 2170 - Introduction to Advertising Design and Graphics (3 credits)**

In this course students explore the conceptual skills needed to create advertisements and related graphics. A historical perspective covers the evolution of advertising trends, past and present. Student's primary focus is on designing within the specifications for print - trim size, live area, and bleed size for designing advertisements for magazines. Students examine topics such as 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.

**HCP - NURSING - PATIENT CARE TECHNICIAN - MEDICAL ASSISTING****HCP 0120 - Nursing Assistant - Clinical (N) (40 hours)**

This course introduces the clinical application of nursing assistant skills and laboratory practice to prepare the student for the state certification exam for the nurse assistant.

Prerequisite: HCP 0122 with a grade of C or higher.

**HCP 0122 - Nursing Assistant - Classroom and Lab (N) (125 hours)**

This course introduces 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 0330C - Home Health Aide (N) (75 hours)**

In this course students are introduced to topics related to caring for patients in the home. Students are familiarized with the responsibilities of the Home Health Aide. A focus on along an understanding of basic human needs, personal health, observation, record keeping, nutrition, household management, safety, and maintenance of activities of daily living. This course offers 25 hour of clinical and 50 hours of lab and lecture.

Prerequisite: HCP 0120, HCP 0122 or HCP 0410C, HSC 0003.

### **HCP 0410C - Nursing Assistant (N) (165 hours)**

This course provides practical knowledge of the responsibilities and work practices for a Nursing Assistant (NA) following the Florida Department of Education (FDOE) Student Performance Standards and provides the knowledge and laboratory skill practice necessary for successful completion of the Florida Nursing Assistance (NA) certification examination and employment as a Certified Nursing Assistant (CNA).

### **HCP 0720C - Electrocardiograph Technical Skills (N) (75 hours)**

The anatomy and physiology of the cardiovascular system and cardiac medications are reviewed. The care and maintenance of equipment is addressed. This course provides the student with the knowledge to perform basic electrocardiograph patient care techniques. Students learn to recognize artifact and identify cardiac rhythms.

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)**

In this course students examine 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)**

In this course students learn skills necessary to implement a developmentally-appropriate, anti-biased program for children ages birth to five.

### **HEV 0118 - Family Day Care Worker Training (N) (3 - 30 hours)**

In this course students explore 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)**

In this course students explore concepts necessary for an understanding of children with special needs and how to include them in a variety of child care settings.

### **HEV 0132 - Child Growth and Development (N) (6 hours)**

In this course students explore 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 0165 - Trauma-Informed Care for Child Care Program Directors (TICD) (N) (40 hours)**

This course assists child care programs in implementing trauma-informed care for the families they serve. This course can be used to meet the Florida Director Credential Renewal requirements. Consult the Office of Licensing for additional information.

### **HEV 0166 - Health, Safety and Nutrition (N) (8 hours)**

In this course students explore the characteristics of a safe and healthy environment and age-appropriate proper nutrition for children.

**HEV 0171 - Infant Toddler Appropriate Practices (N) (10 hours)**

In this course students explore 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. This course is designed for childcare providers who are responsible for the care of children birth through 36 months.

**HEV 0181 - Behavioral Observation and Screening in Child Care (N) (6 hours)**

In this course students explore 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)**

In this course students learn 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)**

In this course students explore the rules, regulations and laws governing child care centers' state and local licensing.

**HEV 0806 - Family Child Care Rules and Regulations (N) (6 hours)**

In this course students learn the rules, regulations and best practices governing a Family Child Care Home.

**HEV 0870 - Child Care Worker I (N) (110-150 hours)**

In this course students explore 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)**

In this course students explore the competencies of professionalism, community resources, the importance of relationship skills and communicating with children's families. The students also explore the use of technology in the child care profession, and observing and recording methods. Recommended prerequisite: HEV 0870.

Prerequisite: Recommended HEV 0870.

**HEV 0872 - Teacher Aide (Preschool) (N) (150 hours)**

In this course students explore 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. Students also explore components of working with students with special needs, classroom management techniques, and creating optimum environments for all children.

**HEV 0873 - Preschool Teacher (N) (150 hours)**

In this course students explore 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)**

In this course, students explore an introduction to many facets of the hotel-motel and food services industries. It includes a study of history, scope, and innovations in the 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)**

In this course, students explore the systematic approach to managing housekeeping operations in the hospitality industry. Emphasis is on the role of the housekeeping department and understanding the managerial skills necessary to efficiently operate the department.

**HFT 1410 - Front Office Management (3 credits)**

In this course, students explore front-office management in the hospitality industry. The course encompasses theory and simulation including reservations, arrival and departure of guests, night audit reports and procedures, yield management, and exception handling and reporting.

**HFT 2210 - Hospitality Mgmt & Leadership (3 credits)**

In this course, students examine managerial functions in the hospitality industry and training techniques 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)**

In this course, students examine 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 2245 - Guest Service Management (3 credits)**

This course provides strategies and tactics for managing service expectations and experiences. Delivering consistent, quality service requires the training and retraining of employees about the role of service professionals in the design, staffing, marketing, and management of the service system. Students learn how to create a favorable guest service climate that harnesses the natural talents of service professionals. This course offers unique and useful guidance on the hiring, training, supporting, retention, and empowerment of service professionals.

### **HFT 2500 - Marketing & Sales in the Hospitality Industry (3 credits)**

In this course, students focus on marketing and sales functions and concepts in the hospitality industry. Presented in this course are the principles for promoting hospitality organizations, including market segments, target markets, and niche markets. The students will learn to analyze various marketing and sales concepts as it relates to hotel and resorts, spas, casinos, and recreation operations. Specifically, the course focuses on the techniques and analysis of the effectiveness of marketing within the industry, decision-making processes for development, advertising, pricing, and promotion.

### **HFT 2600 - Hospitality Law (3 credits)**

In this course, students explore an awareness of rights and responsibilities that the law grants to or imposes upon a hotelkeeper and food service operator, and illustrate possible consequences of failure to satisfy legal obligations. An understanding of historical legal definitions and the court system, the legal obligations of a hotel to a guest, the “duty” owed to guests by the owner, and the liabilities of the operators are examined. Specific attention is given to innkeeper-guest relationships.

### **HFT 2630 - Security Issues in the Hospitality Industry (3 credits)**

In this course, students examine identification and control security issues concerning the restaurant and hospitality industries, including strategies employed in loss and theft protection efforts.

### **HFT 2942 - Internship in Hospitality (3 credits)**

In this course, students explore 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 (3 credits)**

In this course, students explore 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.

## **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 1444 - Pathopharmacology (4 credits)**

This course presents the nature, cause, and treatment of human diseases including a basic knowledge of the body's defense mechanism. This course will also present general pharmacological concepts and principles, drug mechanisms of action, therapeutic drugs and indications, contraindications associated with drug therapy and medications related to body systems, common signs, symptoms, and side effects. The course reviews the Food and Drug Administration (FDA), drug schedules, common medications, adverse effects, and relevant laws. There is a focus on the relationship between pathophysiology, pharmacology and medical coding.

### **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 1610 - Computer Applications for Health Information Technology (2 credits)**

This course introduces students to microcomputer applications used in healthcare. Major topics include Windows operating systems, word processing, financial spreadsheets, database applications, and the Internet with an emphasis on health information technology cases.

### **HIM 1722 - ICD-10-CM Coding (2 credits)**

In this course, students use 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.

### **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 2275 - Revenue Cycle Management (2 credits)**

This course focuses on how the revenue cycle is impacted by various departments within a health care facility, such as patient access/registration, case management/quality review, health information management, and patient accounting. The importance of revenue cycle management for fiscal stability is emphasized.

### **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 2085, BSC 2085L and BSC 2086, BSC 2086L; HSC 2531 .

### **HIM 2506 - Quality Assessment (3 credits)**

This course teaches the application of quality assurance, quality improvement, utilization management, risk management, recertification, 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 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.

### **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 are reviewed.

## **HLP - PHYSICAL EDUCATION RECREATION WELLNESS**

### **HLP 1081 - Personal Wellness (3 credits)**

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.

## **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)**

Students apply 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)**

Students are introduced to 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.

Corequisite: HMV 0943.

**HMV 0945 - Apprenticeship - Culinary Arts - Food Cost Accounting (N) (48 hours)**

In this course, students engage in 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.

Corequisite: HMV 0943.

**HMV 0946 - Apprenticeship - Culinary Arts - Garde Manger (N) (48 hours)**

In this course, students are introduced 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'oeuvres, and baking fundamentals. Registration with the American Culinary Federation Educational Foundation Apprenticeship and permission of instructor are required.

Corequisite: HMV 0943.

**HMV 0948 - Culinary Arts - Supervisory Management (N) (48 hours)**

Students are introduced to principles of leadership and management techniques. Registration with the American Culinary Federation Educational Foundation Apprenticeship and permission of the instructor are required.

Corequisite: HMV 0943.

**HOS - AGRICULTURE PRODUCTION TECHNOLOGY****HOS 1010 - Fundamentals of Horticulture (3 credits)**

Students are introduced to the fundamentals of plant structure, growth, and development. Students also explore the principles and methods of growing various ornamental, fruit, vegetable, and agronomic crops.

**HSA - HEALTH SERVICES MANAGEMENT****HSA 2102 - Introduction to Public Health and Health Navigation (3 credits)**

Students receive an overview of topics including the healthcare delivery system, public health, and wellness practices. Students learn the basics of ethical and legal responsibilities in healthcare as well as laws applying to the healthcare field.

**HSA 2182C - Health Services Management Concepts (3 credits)**

This online course provides students with an opportunity to develop and apply the healthcare management concepts and skills necessary to be a healthcare manager.

Corequisite: Pre/corequisite: HSC 1001C, HSC 1632C with grade of "C" or higher.

**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 health care 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 health care, 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.

**HSA 3184 - Leadership and Management in Healthcare Organizations (3 credits)**

This online course provides students an opportunity to develop leadership skills necessary to be a healthcare manager through an integration of theory and practice.

**HSA 4110 - Healthcare Management Competencies (3 credits)**

This online course is framed around the five American Colleges of Healthcare Executives competency domains including: Communication, Leadership, professionalism, Knowledge of the Healthcare Environment, and Business Skills. Students have an opportunity to gain knowledge and skills synthesis application through a series of course readings, assignments, and discussion questions in each domain.

**HSA 4160 - Healthcare Marketing (3 credits)**

This course addresses the concepts of marketing and customer service specific to health care. The focus is on

market principles and strategies as they apply to the health care industry and the unique constraints of federal health care 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.

#### **HSA 4170 - Healthcare Financial Management (3 credits)**

This online course broadens and deepens the student's understanding of financial activities in healthcare organizations. Emphasis is placed on principals and applications of healthcare finances relevant to entry-level managers and supervisors.

#### **HSA 4340 - Human Resources Management in Healthcare Organizations (3 credits)**

This online course provides knowledge and skills needed for identifying, monitoring, and managing human resources in health care organizations within standard policy and procedure requirements.

#### **HSA 4383 - Quality Improvement in Healthcare (3 credits)**

This online course provides knowledge and skill needed for healthcare managers to improve the quality and safety of healthcare delivery.

#### **HSA 4421 - Policy and Governmental Regulations in Healthcare (3 credits)**

This online course introduces students to current health policy issues, and the steps necessary to formulate a policy prospectus.

#### **HSA 4423 - Healthcare Law (3 credits)**

This online course provides an overview of legal issues students are likely to face in managing a healthcare organization. An overview of healthcare structure and ethical principles governing the healthcare industry are addressed.

#### **HSA 4817 - Practicum in Healthcare Management (3 credits)**

This online course delves into personal and professional development concepts and practices for a healthcare manager.

#### **HSA 4922 - Capstone Project in Healthcare Management (6 credits)**

This online course integrates the knowledge, skills and abilities learned throughout the Healthcare Management program through competency self-assessments, interface with a regional healthcare practitioner, and completion of an asynchronous cohort collaborative project. The course strengthens and synthesizes skills related to healthcare

trends, research, leadership, policy, communication, quality improvement, competencies, human resources, marketing, law and financial management.

Prerequisite: ACG 2001, ACG 2011, ACG 2071, ECO 2023, STA 2023, CGS 1060 OR CGS 1100, all with grade of C or higher; pre/corequisite: HSC 3661, HSA 3184, HSA 4340, HSA 4383, HSA 4423, HSA 4160, HSA 4170, HSA 4421, HSC 4730, HSA 4817, and permission of Program Director.

## **HSC - HEALTH SCIENCE**

### **V000**

#### **HSC 0003 - Introduction to Healthcare (N) (90 hours)**

Introduction to Healthcare provides the student with the knowledge and skills necessary for entry into a course of study in the healthcare field. It includes knowledge of the health care delivery system, health occupations, and communication skills. Safety, health promotion, and legal/ethical issues are also presented. This course also fulfills the state mandatory four hour blood borne 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) (80 hours)**

This course provides a general overview of anatomy and physiology of the human body, as well as the language used within each system. 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 0930 - Health Science Special Topics (N) (1 - 50 hours)**

Courses in the Health Sciences area provide individuals with a foundation of the information and/or skills related to specific areas of individual or public/community health including the management of health care resources, facilities, or programs. These courses may be designed to provide the necessary knowledge and skills for careers in health related areas, or to enhance individual knowledge about matters relating to health care.

**HSC 1001C - Introduction to Healthcare Management (4 credits)**

This online class explores 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 skills building exercises.

**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 1632C - Overview of Healthcare Delivery (3 credits)**

This online course provides students with an opportunity to develop and apply the healthcare management concepts and skills necessary to be a healthcare manager.

**HSC 1653 - Healthcare Ethics (3 credits)**

This course provides a basic overview of healthcare ethics, roles of the health team members, and the basic skills necessary for success in a health career. This course includes application of self-assessment, self-compassion, informed consent, doctor-patient relationships, responsibilities of healthcare managers, patient dignity and confidentiality, and disclosing healthcare information to a patient's family.

**HSC 1932 - Special Topics in Health Sciences (1 - 5 credits)**

This course provides various topics of special interest in the Health Science field. Permission of Health Science Department Chair required.

**HSC 2100 - Personal and Community Health (3 credits)**

This course examines a holistic approach to personal and community health with an emphasis on the interaction of the physiological, psychological, and sociological aspects of personal wellness.

**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 discussions, written assignments, presentations, and professional development service learning experiences in a health care environment. This course focuses on issues confronting healthcare managers seeking to improve their professional development and quality of healthcare delivery.

**HSC 3661 - Healthcare Communications (3 credits)**

This online class explores 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.

**HSC 4730 - Foundations of Health Science Research (3 credits)**

This online course introduces students to the applied 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 utilization of evidence-based practice is addressed.

**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. Approval of Health Science Division required.

**HUM - HUMANITIES****HUM 1020 - Introduction to Humanities (3 credits)**

This course examines philosophical problems in applied contexts such as the arts, religion, history, education, and the natural and social sciences. It explores the implications of views in logic, critical thinking, epistemology, ethics, philosophy of mind, and other areas of philosophy for everyday decision-making, social practices, the workplace, and other practical contexts.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. Degree.

## HUN - NUTRITION

### HUN 1201 - Nutrition (3 credits)

In this course, students study nutrients, their digestion and absorption, and the relationship of food to the development and maintenance of health. This course includes a study of the nutritional needs of patients and the interpretation of the Dietary reference intakes (DRIs).

## HUN - RESTAURANT MANAGEMENT

### HUN 1203 - Culinary Nutrition (3 credits)

In this class, the student is introduced to nutritional related information 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)

In this course, students examine the dynamics of the human services delivery system. Students describe the activities, duties, and training of human services workers. Students identify issues and problems relevant to the personnel employed in this field and the people they help.

### HUS 1200 - Group Dynamics (3 credits)

In this course, students examine the group experience. Essential characteristics of the effective group are presented as well as the tasks and techniques of the group facilitator. Students describe the dynamics of the group experience, including the various theoretical approaches.

### HUS 1400 - Introduction to Drugs of Abuse (3 credits)

In this course, students examine the dynamics of drug addiction and dependence, classification and origins of drugs, short and long-term effects, risk of dependence, and medical uses. Students also examine drug education, laws, treatment, and rehabilitation.

### HUS 1540 - Family Relations (3 credits)

In this course, students examine the dynamics and complexities of family relationships, including partnerships, cohabitation, marriage, marital/partnership problems, parenting, blended families, conflict resolution, divorce, and remarriage.

### HUS 2111 - Introduction to Interpersonal Communication (3 credits)

In this course, students examine the fundamental skills of interpersonal communication. Students also describe the theories and dynamics of both effective and dysfunctional

interactions, specifically in the context of mental health, human services, and counseling.

### HUS 2301 - Counseling Techniques (3 credits)

In this course, students examine individual, group, and family skills to prepare for roles as professionals 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)

In this course, students examine the basic techniques and theories of interviewing, evaluation, and intervention. Students engage in classroom skill-building exercises and role plays. Special attention is given to crisis theory and applied interventions.

### HUS 2401 - Substance Abuse and Treatment (3 credits)

In this course, students examine the theories of substance abuse and treatment. Students also describe the contributing factors to addiction including biological and environmental influences. Emphasis is placed on understanding the dynamics of successful treatment.

### HUS 2500 - Introduction to Ethics in Human Services (3 credits)

In this course, students examine ethical decision making in the human services arena. Exploration of professional and legal standards such as confidentiality, privileged communication, candor and informed consent, competence, loyalty, diligence, fairness, and due care. Students also examine moral issues in multicultural counseling, dual role relationships, suspected child abuse, third party harm, suicide, paternalism, and involuntary commitment.

### HUS 2820 - Internship in Human Services (3 credits)

In this course, students gain 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.

### HUS 3300 - Humanistic and Existential Therapy (3 credits)

In this course, students explore the theories and techniques of humanistic and existential approaches. Primary focus is on application of techniques.

### HUS 3314 - Cognitive and Behavioral Therapy (3 credits)

In this course, students examine 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.

**HUS 3340 - Trauma and Post-Traumatic Stress Disorder (3 credits)**

In this course, students examine 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. Students will also investigate the connection between PTSD and substance abuse.

**HUS 3350 - Issues in Intimate Partner Abuse and Family Violence (3 credits)**

In this course, students examine the theories explaining familial abuse and learn 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)**

In this course, students examine family systems theories and the roles of family members in “traditional” and “non-traditional” families. Students describe the theoretical bases for family therapy modalities. Role playing and skill-building exercises allow for practical application of techniques.

**HUS 3360 - Sexual Abuse of Children and Adolescents (3 credits)**

In this course, students prepare for 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.

**HUS 3409 - Addictive Experiences (3 credits)**

In this course, students examine 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. Students also compare non-addictive and addictive lifestyles and discuss the role of supervisors in addictions treatment.

**HUS 3575 - Human Services for Special Needs Families (3 credits)**

In this course, students examine human services programs, agencies, and interventions available to special needs populations. Students also describe issues of client empowerment and family decision making.

**HUS 3650 - Administration in Human Services (3 credits)**

In this course, students examine planning, evaluation, management, fund raising, community relations, and other activities that affect the operation of a human service agency.

**HUS 4319 - Introduction to Play Therapy (3 credits)**

In this course, students examine the theoretical bases for play therapy. Students also describe the basic elements of play therapy including the role of the play therapist and indications for using play therapy. Practical exercises include in-class application of play therapy techniques in simulated scenarios.

**HUS 4352 - Family Diversity in Human Services (3 credits)**

In this course, students examine how social, cultural, religious, ethnic, disability, and gender related factors influence family structure and dynamics. Students identify the theories, techniques, and strategies for evaluation, treatment, program planning, and intervention.

**HUS 4361 - High Risk and Offender Youth (3 credits)**

In this course, students examine the 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 given to the role of family, community, culture, and human services related resources. Students identify prevention and remediation strategies.

**HUS 4364 - Youth, Drugs, and Gangs (3 credits)**

In this course, students examine the reasons youth join gangs and the connections between substance abuse, child abuse, and violence. Focus includes prevention, outreach, and the application of intervention strategies and techniques.

**HUS 4407 - Substance Abuse and Aging (3 credits)**

In this course, students examine the problem of substance abuse in the aging population, including the abuse of prescription medicines, alcohol, and illegal drugs. Students discuss issues related to lack of independence, mobility, depression, and bereavement.

**HUS 4410 - Internet Addictions (3 credits)**

In this course, students examine the dynamics of Internet addiction. Focus includes identifying the issues related to diagnosis and treatment of this emerging problem. Various types of Internet addiction are examined including online gambling, online affairs, and pornography.

**HUS 4416 - Issues in Impulse Control (3 credits)**

In this course, students examine the dynamics of disordered eating, gambling, and other impulse control issues. Causal models, prevention, and treatment approaches are also identified.

**HUS 4442 - Addictions Family Counseling (3 credits)**

In this course, students examine the 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)**

In this course, students examine identity development in the context of gender related issues. Students discuss gender issues such as masculinity, femininity, gender fluidity, transgender identity, and how they impact the human services field.

**HUS 4574 - Issues of Aging and Family Dynamics (3 credits)**

In this course, students examine issues such as health, finances, and social roles that affect the elderly and ways in which this 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)**

The students gain on-the-job experience wherein they are given the opportunity to strengthen and further develop expertise in the Human Services field.

Permission of Instructor required.

Course must be taken during the final semester.

**IDS - INTERDISCIPLINARY STUDIES****IDS 1071 - Special Topics in STEM: Careers for Impact**

Students build connections into a variety of STEM careers including industry, entrepreneurial ventures, government labs, NGOs, health professions, and academia through guest speakers sharing about their career paths. Essential networking and communication skills are honed through application exercises. Students explore graduate-level education and career paths and express their interests through resumes and online profiles to open doors for experiential learning opportunities including internships.

Prerequisite: CHM 1045, CHM 1045L or MAC 1140 or MAC 1147.

**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.

**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 1019 - Interior Design Proxemics & Environmental (3 credits)**

In this course, students examine the use and psychology of space planning and the effect of environmental

factors. This involves the understanding of the space required for various functions in everyday life, as well as the specific functions of workers and the items used (furniture, machines, appliances, etc.) Students explore the basic environmental requirements to perform those functions.

Prerequisite: IND 1020, IND 1401.

### **IND 1020 - Principles of Interior Design (3 credits)**

In this course students explore the professional field of Interior Design. Students analyze career requirements and opportunities.

Prerequisite: pre/coreq: IND 1401.

### **IND 1301 - Interior Design Graphics (3 credits)**

Students explore basic graphic presentation techniques, including freehand sketch, floor plans, perspective, and materials boards. Students use pencil, pen/ink, and electronic media.

Prerequisite: IND 1020, IND 1401.

### **IND 1401 - Technical Design I (2 credits)**

In this course students explore the basic technical aspects of interior design. Students focus 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. Students will develop appropriate uses of tools and materials.

Prerequisite: pre/corequisite: IND 1020.

### **IND 1420 - Materials and Sources of Interior Design (3 credits)**

In this course students explore the non-textile construction materials of interior design. Wood, plastic, stone, masonry, glass, paint, wall coverings, and marble are a few of the materials students study. Students also study appliances and bathroom fixtures. Students learn the applications of materials and specifications recommended by professional trade associations.

### **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 (3 credits)**

In this course students prepare to identify and analyze fibers, fabrics and finishes. Students explore consumer

factors such as durability, care and price of various textile furnishings.

### **IND 1462 - Introduction to Architectural CAD (3 credits)**

In this course students explore CAD, focusing on using the computer as a drafting and design tool. Students learn Basic CAD drafting, 3 dimension viewing, detail drawings and creation of templates and symbols using AutoCad software for architectural/interior design applications.

Prerequisite: IND 1020, IND 1401, ETD 1320.

### **IND 1935 - Building Codes and Barrier Free (3 credits)**

Students focuses on contract documents and building interior systems that apply to the interior environments in this course. Standards relating to safety, building codes, barrier free and material/construction testing are examined.

Prerequisite: IND 1020, IND 1401, ETD 1320.

### **IND 2016 - Commercial Interior Design I (3 credits)**

This course presents with 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

Prerequisite: IND 1935, IND 1019.

### **IND 2100 - History of Interiors I (3 credits)**

Students examine a survey of historic interiors from the Ancient World through contemporary interior design throughout this course. Current trends in interior furnishings are also 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 2210 - Residential Interiors (3 credits)**

Students examine the development of residential Interior Spaces from conceptual phases to final design resolution in this course. Consideration of client needs regarding interior considerations and exterior influences are also reviewed. Emphasis is on three-dimensional design development, process and detailed graphic presentation of designed spaces.

Prerequisite: IND 2911, IND 1019, IND 1462.

**IND 2222 - Commercial Design II (3 credits)**

In this course, students examine an advanced study of non-residential projects. This includes client interview role play, design basics and planning. Materials and elements, textiles, lighting, human factors, furniture, schedules, plans and presentations are also covered at an intermediate level.

Prerequisite: IND 2016, IND 1462.

**IND 2432 - Lighting for Interior Design (3 credits)**

Students are introduced to the fundamentals of residential, commercial, and landscape lighting in this course.

Prerequisite: IND 1020, IND 1401, ETD 1320.

**IND 2500 - Interior Design Business Practices (3 credits)**

Throughout this course, students examine specialized information on establishing and maintaining a successful interior design business.

Prerequisite: IND 2911, IND 2016.

**IND 2523 - Interior Design Portfolio (2 credits)**

The advanced student's needs are addressed in this course to prepare for entry into the design profession by building a portfolio using a mature body of work ready for final packaging and presentation to prospective employers.

Prerequisite: IND 2016, IND 2911.

**IND 2608 - Sustainable Design for Interiors (3 credits)**

Students are introduced to the basic theories and practices of ecology relating to interior design products and practices are reviewed in this course. 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.

Prerequisite: IND 1020.

**IND 2910 - Kitchen and Bath Design I (3 credits)**

Students in this course are introduced to 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.

Prerequisite: IND 1020, IND 1401.

**IND 2911 - Kitchen and Bath Design II (2 credits)**

Students learn advanced kitchen design in this course. 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.

Prerequisite: IND 2910, ETD 1320.

**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 - Internship (3 credits)**

This course provides students with 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.

Prerequisite: IND 1019, IND 1935, IND 2910.

**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.

### **IND 2970 - Interior Design Thesis (3 credits)**

In this course, the students focus on preferred area of study to develop a major interior design project as the culmination of their course of study. Emphasis is placed on a high degree of complexity and challenge within the design project. Students create a project through conventional phases of design development, documentation and presentation.

Prerequisite: IND 1462, IND 2016, IND 2911.

## **INR - POLITICAL SCIENCE**

### **INR 2002 - Introduction to International Relations (3 credits)**

This course serves as an introduction to the study of important issues in modern international relations. The goal of the course is to teach students basic concepts and theories that are useful for making sense of contemporary debates and challenges in international politics. We study current events and the recent history that has shaped how states and other actors interact with each other across national borders. The class surveys majors topics in international relations to encourage further examination in more advanced classes. Major topics include international cooperation, security and conflict, trade, and international law and human rights. By the end of the class, students are able to critique common academic and policy arguments about global affairs and have acquired the tools to begin their own analyses.

Prerequisite: POS 1041, and 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)**

In this course students explore the safe handling of pesticides, selection of appropriate application equipment, calibration, and mixing of chemicals.

## **ISC - INTERDISCIPLINARY SCIENCES**

### **ISC 3426 - Health Professional Exam Preparation (1 credit)**

An introduction to concepts organization and its application to the biological sciences. Topics include biology, anatomy, chemistry and physics for standardized exams such as MCAT, PCAT, and DAT.

Prerequisite: BSC 2011, BSC 2011L, CHM 2211, CHM 2211L, and either PHY 1053 and PHY 1053L, or PHY2048 and PHY 2048L, all with C or higher.

Corequisite: BCH 4053, BCH 4053L, and either PHY 1054 and PHY 1054L, or PHY 2049 and PHY 2049L.

### **ISC 3940 - Community-Based Medical Shadowing (1 credit)**

This course presents democratic service in the venue of planned service-learning activities. Students engage in supervised health sciences career-exploration 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. Instructor approval required.

Prerequisite: CHM 2211, CHM 2211L, PCB 3063 and PCB 3063L, all with C or higher.

### **ISC 4910L - Senior Capstone I (2 credits)**

This course is for students conducting research projects, writing a review/analysis paper or participating in a service learning project under the supervision of an instructor and/or researcher. It is intended to help students in acquiring skills in literature search, applying research principles, interpreting data, reporting scientific information, and/or contributing to the local science/health sciences community through a service learning project. Permission required to register.

Prerequisite: BSC 3931, MCB 3023, MCB 3023L all with a grade of "C" or higher.

### **ISC 4911L - Senior Capstone II (1 credit)**

This course is for students conducting research projects, writing a review/analysis paper or participating in a service learning project under the supervision of an instructor and/or researcher. It is intended to help students in acquiring skills in literature search, applying research principles, interpreting data, reporting scientific information, and/or contributing to the local science/health sciences community through a service learning project. Permission required to register.

Prerequisite: ISC 4910L with a grade of "C" or higher.

## ISM - COMPUTER INFORMATION TECHNOLOGY

### **ISM 3011 - Introduction to Management Information Systems (3 credits)**

In this course the students are presented with an introductory use of information technology in the business environment. Students discuss the language, concepts, structures, and processes involved in the management of information systems. Students also incorporate an application component where software is used to support managerial decision-making.

### **ISM 3133 - Systems Analysis and Design (3 credits)**

In this course the students are introduced to the process of analyzing and designing high-quality enterprise information systems, emphasizing the dynamic role of today's system analysts in planning, developing, and maintaining these information systems. Students demonstrate how to gather, analyze, model, and ultimately translate business requirements into information systems that effectively support the needs of an organization. Students are also exposed to aspects of all stages of the Systems Development Life Cycle (SDLC): planning, analysis, design, implementation, and maintenance.

### **ISM 3212 - Database Design and Administration (3 credits)**

In this course the students are introduced to fundamental concepts of data modeling and database design. Students are presented with specific concepts pertaining to relational database model, manipulating data using SQL (Structured Query Language) and database administration.

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.

### **ISM 4117 - Data Mining and Data Warehousing (3 credits)**

In this course the students examine the 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. Students also analyze detailed case studies 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 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 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, risk management, disaster recovery, and personnel issues. Examples of information security management issues, practices, and applications are presented.

### **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 1650, ISM 3321.

### **ISM 4881 - Capstone in Information Systems Technology (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. .

## LAE - ELEMENTARY EDUCATION

### LAE 4416 - Children's Literature in Elementary Education (3 credits)

In this course students select, evaluate and use fiction, nonfiction and poetry for instructional, informational, and recreational purposes in Elementary Education. Topics include 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 credits)

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)

In this course are introduced to 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 - Information Literacy and Research Skills (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 - Research Strategies for College Students (1 credit)

In this course, students learn the knowledge, skills, and abilities to succeed in advanced college-level research by identifying, evaluating, and using diverse information sources from the internet and library databases.

Students learn about the research process, which includes developing topics and thesis statements, creating search strategies, and critically evaluating and ethically citing sources. These research and critical thinking skills are crucial for success in college and the workplace.

### LIS 2005 - Advanced Information Literacy and Research Skills (3 credits)

In this course, students learn advanced research skills which allow students to distinguish among different research types and access points according to the information cycle. Students apply critical thinking skills, information literacy techniques, and effective search strategies to develop an insightful and defensible thesis statement and an essay that uses ethical and documented source citations.

## LIT - ENGLISH

### LIT 1000 - Introduction to Literature (3 credits)

LIT 1000 surveys literature from a variety of genres, cultures, and time periods. This course introduces students to methods of literary analysis. Students demonstrate college-level writing skills through multiple assignments.

Prerequisite: ENC 1101 with a grade of C or higher. .

### LIT 2110 - World Literature from ancient through the Renaissance (3 credits)

This course surveys significant literature from ancient times through the Renaissance. Students apply critical thinking skills as they engage with literary texts in multiple genres. 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.

### LIT 2120 - World Literature from the Enlightenment through the present (3 credits)

This course surveys significant literature from the Enlightenment through the present. Students apply critical thinking skills as they engage with literary texts in multiple genres. 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.

### **LIT 2190 - Caribbean Literature (3 credits)**

This course is a survey of literature by Caribbean writers with a focus on its rich diversity of language and expressions. The course explores significant literary figures and movements associated with Caribbean cultures. Students demonstrate college-level writing skills through multiple assignments.

Prerequisite: ENC 1101 with a grade of C or higher.

### **LIT 2330 - Survey of 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 analyze a variety of different genres such as fables, poems, myths, fairy tales, picture books, and fiction for young readers. Topics 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 presents algebraic topics required in the study of calculus: properties of polynomial, rational, exponential

and logarithmic functions, polynomial and rational inequalities, conic sections, matrices and determinants, sequences and series, mathematical induction, and the Binomial theorem with applications.

A graphing 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 primarily 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)**

Students examine major topics that include limits, differentiation of algebraic, exponential, logarithmic, and trigonometric functions; and applications of derivatives. The student explores the definite and indefinite integral and investigates their applications. This course is for students who need calculus for engineering, math, and science programs.

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)**

Students explore the techniques of integration; applications of integration including arc length, volume, and work; parametric and 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)**

Students explore the 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 with a grade of "C" or higher.

## **MAD - MATHEMATICS**

### **MAD 2104 - Discrete Mathematics (3 credits)**

Students learn sets, functions, relations, combinatory, propositional logic, graphs and trees, and applications in 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.

## **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 2111 - Mathematics Content for the Elementary Grades (3 credits)**

In this course teacher candidates explore teaching conceptually and developmentally appropriate mathematics content for all students at the PK-6 grade level. Major topics include number sense, concepts, and operations; geometry and measurement; algebraic thinking and the coordinate plane; and probability, statistics, and data interpretation.

Prerequisite: pre/coreq EDF 2005, MAT 1100, MGF 1106, or higher math, with a grade of C or higher.

### **MAE 3816 - Elements of Geometry (3 credits)**

In this course students explore a variety of traditional and innovative geometric topics via a hands-on approach. This course includes 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: pre/coreq: MAC 2311, and either MTG 2204 or MTG 3212, with a grade of C or higher.

### **MAE 3940 - Teaching Middle School Mathematics Practicum (2 credits)**

In this course students 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 Florida Standards, subject matter competencies, and pedagogy pertinent to the discipline and required for certification.

Prerequisite: EDF 3214, nine (9) hours of math content courses. . Corequisite: pre/coreq: Middle Grades MAE 4363 or Secondary Mathematics EDG 3343.

### **MAE 4363 - Middle School/Secondary School Mathematics Methods (3 credits)**

In this course students explore the principles of effective curriculum design and assessment. It addresses the required methods, techniques, strategies, and resources for effective teaching of mathematics. It includes specific Florida 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)**

In this course students 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: pre/coreq: MAC 2311 with a grade of C or higher.

### **MAE 4932 - Seminar in Mathematics Education (3 credits)**

In this course students develop instructional strategies, planning techniques, evaluation procedures and class management skills.

Senior level status with all program requirements met, and permission of department.

Prerequisite: Senior level status with all program requirements met, and permission of department. MAE 4815, STA 2023, MAE 3816 and MHF 4404, all with a grade of C or higher. Corequisite: MAE 4945.

### **MAE 4941 - Teaching Secondary Mathematics Practicum (2 credits)**

In this course students 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 Florida State Standards, subject matter competencies, and pedagogy pertinent to the discipline and required for certification.

Prerequisite: EDF 2005, EDF 3214, nine (9) hours of math content courses, all with a grade of C or higher.

Corequisite: Middle Grades EDG 3343 or Secondary Mathematics MAE 4363.

### **MAE 4945 - Student Teaching in Mathematics (10 credits)**

In this course students 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.

Senior level status with all program requirements met, and permission of department.

Prerequisite: Senior level status with all program requirements met, and permission of department. Grade of C or higher required for MAE 4815, STA 2023, MAE 3816, MHF 4404. Corequisite: MAE 4932.

## **MAN - BUSINESS ADMINISTRATION**

### **MAN 2021 - Principles of Management (3 credits)**

In this is course, students explore management theories. Students focus on the functions of management-- planning,

organizing, staffing, leading, and controlling-- while integrating theories of major management leaders.

### **MAN 2043 - Quality Management (3 credits)**

This course provides an overview of the history and current practices related to the quality management movement. The course discusses contributions of quality experts, particularly in the supply chain environment, and introduces the concepts of team management, group processes and problem-solving. Various measurement tools for modeling, process improvement and control are examined.

### **MAN 2300 - Introduction to Human Resource Management (3 credits)**

In this course, students explore the functions of a modern Personnel/Human Resources Department. 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 2500 - Operations Management (3 credits)**

This course introduces students to operations management techniques including their application to functional areas of the business enterprise. The course emphasizes decision-making skills and problem resolution in the operations management environment and the role of operations management in the supply chain. Topics include: The design and management of production operations including productivity, strategy, capacity planning, location, layout, resource management, just-in-time systems, materials requirement planning and project management.

### **MAN 3063 - Organizational Ethics and Values (3 credits)**

In this course, students examine 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)**

In this course, students explore individual and group behavior within organizations. Students develop an understanding of how to manage organizations more effectively. Course content includes: motivation, group dynamics, conflict resolution, goal setting, job design, work stress, power/politics, and organizational change.

### **MAN 3303 - Management Concepts (3 credits)**

In this course, students review the 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 workplace. This course incorporates leadership

skill development as it relates to the core aspects of management.

### **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)**

In this course, students explore 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. Students also examine the process of team development including; motivation, communication techniques, attitudes, behaviors and effective interaction.

### **MAN 4442 - International Business (3 credits)**

In this course, students explore 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)**

In this course, students gain valuable practical experience under the guidance of a professional in a work setting, as well as a professor in a 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. Internships are on an "as available basis." Permission of department chair required.

### **MAN 4970 - Business Thesis (6 credits)**

In this course, students demonstrate their ability to apply theory and method in order to research unstructured problems relevant to activities in business administration. Permission to register required.

## **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)**

In this course, students explore relationship building strategies with customers. The impact of culture and diversity on business relationships, successful negotiation strategies, and promotion of the organization through media relations are examined and discussed.

### **MAN 4301 - Human Resource Management (3 credits)**

In this course, students explore the following functions of human resource management; hiring process, compensation, performance evaluation, development of employees, and formulation of human resource procedures. The strategic role of human resources is examined and discussed.

### **MAN 4504 - Operations Management (3 credits)**

In this course, students explore operational decision-making management techniques to improve the processes and productivity in organizations. Topics explored and discussed are quality and outcomes, efficiency, forecasting, work-flow processes, inventory control, design of goods and services, waiting lines, and critical path. Students address how to manage a project from beginning to end - including how to identify needs, and define, assign, and track items.

### **MAN 4900 - Capstone Project in Organizational Management (6 credits)**

In this course, students are tasked with focusing on the integration of knowledge, skills and abilities learned in the Organizational Management or Business Administration program through a Capstone project. Permission to register required.

## **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)

In this course, students explore 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)

In this course, students research current social media techniques and their application to the business marketing environment. Students examine current social media advertising platforms and explore techniques 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. Students evaluate current social media platforms for effective and appropriate use of specific demographic audiences. Students develop a business image management strategy.

### MAR 3023 - Marketing Management (3 credits)

In this course, students explore 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)

In this course, students construct a marketing research study. Students apply the steps of the marketing research process to current marketing issues and focus on primary (quantitative and qualitative) and secondary information to gain insight and experience in defining problems: methodology design, sampling, data collection, data analysis, and reporting on findings.

## MAS - MATHEMATICS

### MAS 3105 - Applied Linear Algebra (4 credits)

Students delve into a thorough treatment of linear algebra using a matrix-oriented approach, theory, and application projects. Students cover major topics including 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. Student in this course will develop 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 with a grade of "C" or higher.

### MAS 4203 - Number Theory (3 credits)

Students explore the relationships and formulate conjectures in the areas of divisibility, congruence, Diophantine equations, the Euclidean algorithm, and number theoretic functions. Students learn to develop formal proofs to support these conjectures. Students consider other topics including the Fundamental Theorem of Arithmetic and classical theorems of number theory.

Students focus on their development of mathematic thinking.

Prerequisite: MAC 2313 and MHF 3202 with a grade of "C" or higher.

## MAT - MATHEMATICS

### MAT 0018 - Developmental Math I (N) (3 credits)

This course teaches students to transition from arithmetic to algebra. Algebra concepts (variables, signed number, order of operations, and equations) are introduced early and then repeated with traditional arithmetic concepts (fractions, decimals, and percent).

Credit not applied toward degree.

Prerequisite: Placement Score.

### MAT 0028 - Developmental Math II (N) (3 credits)

This course prepares students to transition from arithmetic to algebra. Algebra concepts (variables, signed number, order of operations, and equations) are introduced early and then repeated with traditional arithmetic concepts (fractions, decimals, and percent).

Credit not applied toward degree.

### MAT 0055 - Elementary Algebra Modules (N) (1 credit)

This modularized basic algebra course strengthens the necessary skills needed to master the material and achieve college readiness in mathematics. Placement in the course material is determined upon course entry, and successful completion of any third (7) of the course topics will earn 1 credit of developmental mathematics.

Credit does not apply toward degree.

### MAT 1033 - Intermediate Algebra (3 credits)

Students solve a variety of mathematical problems across 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)**

Students demonstrate job skills such as working with spreadsheets, working in a collaborative environment, and applying practical math skills in daily decision making. Students develop mathematical maturity and self-efficacy through critical thinking skills, problem solving strategies, and communicating mathematically. Specific mathematical topics include algebra, set theory, logic, geometry, probability, and statistics.

## **MCB - BIOLOGY**

### **MCB 2010 - Microbiology for Health Sciences (3 credits)**

This course is a survey of the structure, physiology, genetics, metabolism, and control of microorganisms. It includes an overview of the medical importance of bacteria, protozoans, multicellular parasites, and viruses. Host-parasite interactions are explored, along with nonspecific and specific immunity.

Prerequisite: BSC 1020 and BSC 1020L, or BSC 2010 and BSC 2010L, or BSC 2085 and BSC 2085L, all with grade of C or higher. Corequisite: MCB 2010L.

### **MCB 2010L - Microbiology Lab for Health Sciences (1 credit)**

This is the lab component for MCB-2010 (p. 242). 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, or BSC 2085 and BSC 2085L, all with grade of C or higher. 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 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. 242). Lab experiences include the structure, physiology, and ecology of bacteria, protists, viruses, and fungi.

Prerequisite: BSC 2011, BSC 2011L, CHM 2210, CHM 2210L with a grade of C or higher. Corequisite: MCB 3023.

## **MEA - MEDICAL ASSISTING**

### **MEA 0001 - Medical Assisting Apprenticeship (Related Technical Instruction) (N) (144 hours)**

This course provides instruction on the structure and function of the human body, related medical language, pathophysiology, specimen collection, and general pharmacological concepts. Included in this course is instruction on the administrative and clinical procedures that are performed in an ambulatory setting.

### **MEA 0200C - Medical Assisting Clinical Procedures I (N) (150 hours)**

The medical assisting clinical procedures course (MEA 0200C) identifies the phases of patient care in the clinical areas of a physician office. Basic principles related to infection control, vital signs, physical examination, and diet therapy are studied. Patient communication and legal-ethical concepts are also presented.

Corequisite: Pre/corequisite: HSC 0003 .

### **MEA 0201C - Medical Assisting Clinical Procedures II (N) (105 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 0204 - Clinical Experience for the Medical Assisting Apprenticeship (N) (200 hours)**

This course provides instruction on the structure and function of the human body, related medical language, pathophysiology, specimen collection, and general pharmacological concepts. Included in this course is

instruction on the administrative and clinical procedures that are performed in an ambulatory setting.

**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 with the associated medical language. 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. This course also exposes students to 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.

**MEA 0234 - Pathophysiology and Disease (N) (75 hours)**

This course provides an overview of the disease process, infectious diseases, disorders, neoplasms, and congenital diseases. Each common disease/disorder within a body system is described including its etiology, signs and symptoms, diagnostic procedures, treatment, prognosis, and prevention. Pain management and the holistic approach to patient care are also discussed.

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 provides the student with 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 calculations are 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) (75 hours)**

This course provides an overview of different radiological imaging including; basic radiology, Magnetic Resonance Imaging (MRI), ultrasound, fluoroscopy, nuclear medicine, and Computed Tomography (CT). Students receive instruction on patient preparation, safety procedures, and information for each of the diagnostic modalities. The fundamentals of x-ray production, basic knowledge of the equipment used in radiography, radiation protection, film handling, and film processing are covered.

Prerequisite: . Corequisite: Pre/corequisite: MEA 0234.

**MEA 0334 - Medical Office Procedures (N) (75 hours)**

This course provides students with knowledge related to medical insurance, diagnostic, and procedural coding. Students are provided with procedures on banking, billing, collections, and payroll. Students are able to analyze and employ third party guidelines for reimbursement. This course covers the legal aspects related to billing and medical records.

Prerequisite: MEA 0200C. Corequisite: MEA 0201C, MEA 0254C, MEA 0258, HCP 0720C, MEA 0234.

**MEA 0500 - Medical Office Receptionist (N) (80 hours)**

The medical office receptionist (MOR) course provides the medical assistant student with the basic clerical skills necessary for the operations of a medical office. Techniques, methods and procedures covered include: patient reception, record management, billing, and scheduling and human resource management. The concepts of medical law, ethics, and bioethics in the ambulatory health care setting are also the focus of this course. This course prepares the student to perform medical secretarial duties utilizing knowledge of medical terminology and medical office procedures.

**MEA 0800 - Medical Assisting Practicum (N) (170 hours)**

This course provides a general overview of the operation of a medical practice. Students are assigned to physician's office or clinic for a total of 170 hours to observe and under the supervision of a physician perform basic administrative, laboratory, and clinical duties. This is an unpaid practicum experience. Students are responsible for their own transportation.

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 0821 - On-the-Job-Learning for the Medical-Assisting Apprentice (N) (300 - 880 hours)**

This course provides instruction on the structure and function of the human body, related medical language, pathophysiology, specimen collection, and general pharmacological concepts. Included in this course is instruction on the administrative and clinical procedures that are performed in an ambulatory setting.

**MEA 0952 - Medical Assisting Seminar (N) (75 hours)**

This course provides the fundamentals of the professional role as a Medical Assistant. This course prepares the student through group discussion and individual conferences on clinical experiences during internship for workplace readiness. Study techniques and preparation for students planning to test for the American Association of Medical Assistants (AAMA) certification examination are also presented.

Prerequisite: pre/corequisite: MEA 0201C, MEA 0254C, MEA 0258, HCP 0720C; and MEA 0334.

**MGF - MATHEMATICS****MGF 1106 - Survey in Mathematics (3 credits)**

The purpose of this course is to present the utility of mathematics to students who do not intend to take STEM-track mathematics courses. Students are presented with just a preview of what they might see in an entire course for each topic. Topics include Reasoning Patterns, Sets and Venn Diagrams, Logic, Measurement, Geometry, Right Triangle Trigonometry, Probability and Counting Principles, and Descriptive Statistics.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. and A.S. Degree.

NOTE: Students cannot take MGF1106 and MGF1107 in the same semester.

Prerequisite: MAT 1033 or MAT 1100 with a grade of "C" or higher, or placement scores.

**MGF 1107 - Explorations in Mathematics (3 credits)**

The purpose of this course is to present the utility of mathematics to students who do not intend to take STEM-track mathematics courses. Students are presented with just a preview of what they might see in an entire course for each topic. Topics include Elementary Number Theory, Numbers and Number Systems, Financial Mathematics, Linear and Exponential Growth, Voting Techniques, Graph Theory and a History of Mathematics.

Gordon Rule course - must achieve a grade of "C" or higher for the A.A. and A.S. Degree.

NOTE: Students cannot take MGF 1106 and MGF 1107 in the same semester.

Prerequisite: MAT 1033 or MAT 1100 with a grade of "C" or higher, or placement scores.

**MGF 1130 - Mathematical Thinking (3 credits)**

Students utilize multiple means of problem solving through student-centered mathematical exploration. Students are led to think more effectively and vastly increase their problem-solving ability through practical application and divergent thinking, making this course appropriate for students in a wide range of disciplines/programs.

Prerequisite: MAT 0028 with a grade of "C" or higher, or MAT 0055 with grade of "S", or placement scores.

**MHF - MATHEMATICS****MHF 3202 - Sets & Logic (3 credits)**

Students cover the use of language in mathematics, set theory, function, relations, and logic, with additional topics at the discretion of the professor (e.g. Boolean algebras, symmetries of the plane, wallpaper patterns). Students examine examples of sets, operations on sets, set algebra, Venn diagrams, truth tables, tautologies, applications to mathematical arguments and mathematical induction.

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)**

In this course, students identify and examine the stages of crisis response, types of crises, and techniques of crisis

intervention. Focus includes an examination of the psychological and physical responses to crisis situations, identification of at-risk individuals, and prevention of crises.

## **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)**

In this course, the student explores and develops effective sales techniques such as qualifying, presentation, and follow-up skills.

## **MLT - MEDICAL LABORATORY TECHNOLOGY**

### **MLT 1040C - Introduction to Medical Technology (3 credits)**

This course provides a general overview and update 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)**

This course focuses on 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 (3 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 teaches the basic hematology concepts. Included is the study of normal blood cell maturation, blood cell disorders, and recognition of normal and abnormal blood cells.

Corequisite: MLT 1040C, MLT 1362L.

### **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 studies 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 explores the history, social impact, forms, and techniques of such media as newspapers, radio, television, advertising, and other expressions of mass culture especially as they converge onto the internet. The course provides a context for developing the critical thinking skills necessary for successfully navigating mediated environments.

### **MMC 2100 - Writing for Mass Communications (3 credits)**

This course focuses on producing and analyzing 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, or advertising to the Internet and social media. The course considers a wide variety of story forms

like photojournalism, podcasts, cartooning, long form journalism, editorial essays, PSAs, and so on with an emphasis on the value of ethics and empathy in gathering and portraying information.

Prerequisite: ENC 1101 with a grade of C or higher.

## **MNA - BUSINESS ADMINISTRATION AND MANAGEMENT**

### **MNA 1821 - Electronic Commerce (3 credits)**

In this course, students explore 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. The students develop a strategic understanding of the electronic marketplace based on fundamental economics of the digital economy.

### **MNA 2216 - Inventory Management (3 credits)**

This course presents an analysis of inventory control problems and methods. Topics include demand forecasting, independent demand inventory systems, inventory models and aggregate planning. Inventory management is presented within the context of sustainable, efficient, and effective supply chain management.

### **MNA 2345 - Supervision (3 credits)**

In this course, which is primarily designed for practicing or aspiring supervisors who hold first-line or middle-level management positions, the student explores the topics of goal setting, giving effective praise/reprimands, and practical, low-cost methods of motivation.

### **MNA 2932 - Professional Development (.5 - 5 credits)**

In this course, the student explores and refines the skills necessary to maximize career success and to be an effective leader in an identified employment setting. The student 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. This course may be custom designed each time offered.

## **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 of 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)**

Students solve a variety of mathematical problems across the following geometrical topics: lines and angle relationships, properties of parallel lines, congruency and similarity in triangles, types of quadrilaterals, area, volumes, and properties of circles, with an emphasis on methods of proof using logic principles and compass and straight-edge construction.

Prerequisite: MAT 1033 with a grade of "C" or higher, or placement scores.

**MTG 3212 - Modern Geometries (3 credits)**

Students explore 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 with grade of C or higher.

**MUL - MUSIC****MUL 2010 - Music Appreciation (3 credits)**

Students are introduced to music from a historical, cultural, and societal perspective. Music appreciation is an introduction to basic music terminology, musical styles, musical instruments, and music history.

**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.

**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**

Private instruction designed for music majors needing maximum proficiency on their principal instrument. One half hour lesson is required each week in addition to five hours of practice. Recital is required. Permission of music faculty required.

### **MVB 2321 - Principal Applied Trumpet**

Private instruction designed for music majors needing maximum proficiency on their principal instrument. One half hour lesson is required each week in addition to five hours of practice. Recital is required. Permission of music faculty required.

### **MVB 2322 - Principal Applied French Horn**

Private instruction designed for music majors needing maximum proficiency on their principal instrument. One half hour lesson is required each week in addition to five hours of practice. Recital is required. Permission of music faculty required.

### **MVB 2323 - Principal Applied Trombone**

Private instruction designed for music majors needing maximum proficiency on their principal instrument. One half hour lesson is required each week in addition to five hours of practice. Recital is required. Permission of music faculty required.

### **MVB 2324 - Principal Applied Baritone Horn**

Private instruction designed for music majors needing maximum proficiency on their principal instrument. One

half hour lesson is required each week in addition to five hours of practice. Recital is required. Permission of music faculty required.

### **MVB 2325 - Principal Applied Tuba**

Private instruction designed for music majors needing maximum proficiency on their principal instrument. One half hour lesson is required each week in addition to five hours of practice. Recital is required. Permission of music faculty required.

## **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. 250).

Prerequisite: MVK 1111.

### **MVK 2321 - Principal Applied Piano**

Private instruction designed for music majors needing maximum proficiency on their principal instrument. One half hour lesson is required each week in addition to five hours of practice. Recital is required. Permission of music faculty required.

## **MVP - MUSIC - APPLIED**

### **MVP 2321 - Principal Applied Percussion**

Private instruction designed for music majors needing maximum proficiency on their principal instrument. One half hour lesson is required each week in addition to five hours of practice. Recital is required. Permission of music faculty required.

## **MVS - MUSIC**

### **MVS 2321 - Principal Applied Violin (1.5 credits)**

Applied Music lessons provided for IRSC instrumental music students in the fall and spring semesters. Each enrolled student is assigned an applied instructor and meets for 30 minutes per week. Music majors are expected to take four semesters of applied music.

**MVS 2322 - Principal Applied Viola (1.5 credits)**

Applied Music lessons provided for IRSC instrumental music students in the fall and spring semesters. Each enrolled student is assigned an applied instructor and meets for 30 minutes per week. Music majors are expected to take four semesters of applied music.

**MVS 2323 - Principal Applied Cello (1.5 credits)**

Applied Music lessons provided for IRSC instrumental music students in the fall and spring semesters. Each enrolled student is assigned an applied instructor and meets for 30 minutes per week. Music majors are expected to take four semesters of applied music.

**MVS 2324 - Principal Applied String Bass**

Private instruction designed for music majors needing maximum proficiency on their principal instrument. One half hour lesson is required each week in addition to five hours of practice. Recital is required. Permission of music faculty required.

**MVS 2326 - Principal Applied Guitar**

Applied Music lessons provided for IRSC instrumental music students in the fall and spring semesters. Each enrolled student is assigned an applied instructor and meet for 30 minutes per week. Music majors are expected to take four semesters of applied music.

**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 2321 - Principal Applied Voice**

Private instruction designed for music majors needing maximum proficiency on their principal instrument. One half hour lesson is required each week in addition to five hours of practice. Recital is required. Permission of music faculty required.

**MVW - MUSIC - APPLIED****MVW 2321 - Principal Applied Flute**

Private instruction designed for music majors needing maximum proficiency on their principal instrument. One half hour lesson is required each week in addition to five hours of practice. Recital is required. Permission of music faculty required.

**MVW 2322 - Principal Applied Oboe (1.5 credits)**

Applied Music lessons provided for IRSC instrumental music students in the fall and spring semesters. Each enrolled student is assigned an applied instructor and meets

for 30 minutes per week. Music majors are expected to take four semesters of applied music.

**MVW 2323 - Principal Applied Clarinet**

Private instruction designed for music majors needing maximum proficiency on their principal instrument. One half hour lesson is required each week in addition to five hours of practice. Recital is required. Permission of music faculty required.

**MVW 2324 - Principal Applied Bassoon**

Private instruction designed for music majors needing maximum proficiency on their principal instrument. One half hour lesson is required each week in addition to five hours of practice. Recital is required. Permission of music faculty required.

**MVW 2325 - Principal Applied Saxophone**

Private instruction designed for music majors needing maximum proficiency on their principal instrument. One half hour lesson is required each week in addition to five hours of practice. Recital is required. Permission of music faculty required.

**NSP - NURSING - SPECIAL TOPIC COURSES****P000****NSP P933 - Intravenous Therapy (N) (varying 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. This course offers 5 credits lecture and 5 credits of clinical.

Prerequisite: BSC 2085, BSC 2085L, with a grade of "C" or higher; pre/corequisite: BSC 2086, BSC 2086L, 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. This course offers 6 credits of lecture and 5 credits of clinical.

Prerequisite: NUR 1021C, BSC 2086, BSC 20864L, 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 psycho-social, cellular regulation and inflammation/immunity. Clinical experiences are provided with clients across the lifespan. This course offers 5 credits of lecture and 5 credits of clinical.

Prerequisite: NUR 1034C with a grade of "C" or higher.  
Corequisite: MCB 2010, MCB 2010L, with 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. This course offers 5 credits of lecture and 6 credits of clinical.

Prerequisite: NUR 2035C, MCB 2010, MCB 2010L. all with a grade of "C" or higher. Corequisite: Pre/corequisite: MAC 1105, or MGF 1106, or MGF 1107 with a grade of C or higher.

**NUR - Special Topics in Nursing (0.5 - 5 credits)**

This course reflects current topics of interest in nursing. Topics may vary from semester to semester.

**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 covers 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 presents 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 covers pharmacotherapeutics, pharmacodynamics, and pharmacokinetics as they relate to the nursing practice. The nursing processes are utilized in the study of the various drug classifications.

**NUR 3164 - Nursing Research and Informatics (3 credits)**

This course content covers 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: STA 2023 with 'C' or higher.

**NUR 3826 - Ethical and Legal Issues in Health Care (3 credits)**

The course provides instruction regarding 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 3931 - Special Topics in Nursing Practice (0.5-6 credits)**

This course examines current topics or special interests in nursing. Topics may vary from semester to semester.

**NUR 4636C - Community Health Nursing (4 credits)**

This course provides instruction regarding 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 learning experiences are provided in community-based sites in a variety of settings.

Prerequisite: Pre/Corequisites: NUR 3164, NUR 3846, NUR 4837.

**NUR 4655 - Nursing in a Diverse Culture (3 credits)**

This course content includes the knowledge, skills, and behaviors needed to give culturally competent nursing care to people from diverse cultural groups. This course analyzes the health-related practices, values, and beliefs among major cultural groups as they influence nursing practice.

**NUR 4827 - Leadership and Management in Professional Nursing (3 credits)**

This course content includes principles of nursing leadership and management with an emphasis on decision-making, priority setting, delegating, communicating, team 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 all with grade of C or higher; Pre/Corequisite: NUR 4636C . Corequisite: Pre/corequisite: NUR 3826, NUR 4655.

**NUR 4837 - Health Care Policy and Economics (3 credits)**

This course content presents the 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. 253) 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 explores the natural history of marine organisms, their taxonomic relationships and their interactions with each other, and their environment. The ecological and evolutionary processes of various marine organisms, and their place within 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 marine environments. This course is for non-science majors.

**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.

## 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 1231 - Lawn Care Maintenance (3 credits)**

In this course students explore 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)**

In this course students are introduced to basic principles of plant identification.

### **ORH 1842 - Landscape Installation and Maintenance (3 credits)**

In the course students examine 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)**

In this course students critique turfgrass varieties, their establishment, maintenance, and renovations used by successful turfgrass managers.

### **ORH 2601 - Retail Nursery Operations (3 credits)**

Students explore the principles of retail nursery operations.

### **ORH 2941 - Landscape Field Training (3 credits)**

In this course students will focus 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 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 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. 255). 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.

**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.

**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 3372 - Communication in Emergency Management (3 credits)**

This course introduces students to the fundamental concepts, theories, principles and practices of public information and communication in a risk environment as well as effective leadership principles in emergency management.

**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 3844 - Public Health and Emergency Management (3 credits)**

This course provides an overview of public health preparedness and emergency management. A broad perspective on preventing, preparing for and responding to public health emergencies and threats are discussed.

**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.

**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 evaluation, goal identification, performance measurement, methods of analysis, participants in the evaluation process, and the problems with partisanship.

**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.

**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 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 is the laboratory corequisite for PCB 3063. It 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, phylogeny, human evolution and evolutionary genetics are covered.

Prerequisite: BSC 2011, BSC 2011L with a grade of "C" or higher.

**PCB 4023 - Cell Biology and Physiology (3 credits)**

Students learn 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, all 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 PCB 4023 where students study 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, all 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 2011, BSC 2011L, 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, CHM 1046, CHM 1046L, 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, CHM 1046, CHM 1046L, 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, 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. Corequisite: PCB 4701L.

**PCB 4701L - Human Physiology Laboratory (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. Corequisite: PCB 4701.

**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 includes specialized instruction with emphasis on advanced skills, techniques, and strategies of softball.

**PEL 2214 - Softball III (1 credit)**

This course includes team skills and rules; strategy and teamwork in softball are the main emphasis.

**PEL 2215 - Softball IV (1 credit)**

This course includes rules, safety, strategy and skills of varsity softball.

**PEL 2216 - Baseball I (1 credit)**

This course includes rules, safety, strategy and basic skills of baseball

**PEL 2217 - Baseball II (1 credit)**

This course covers 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 includes basic skills, rules, and strategies of volleyball.

**PEL 2322 - Volleyball II (1 credit)**

This course covers rules, strategy, advanced skills and tournament play. This course also includes different leadership qualities and styles as well as the responsibility of a team captain.

**PEL 2324 - Volleyball III (1 credit)**

This course 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)**

In this course students explore rules, strategy, safety and basic skills of basketball.

**PEL 2622 - Basketball II (1 credit)**

In this course students explore rules, strategy, advanced skills and tournament play.

**PEL 2624 - Basketball IV (1 credit)**

In this course students explore 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)**

In this course students use basketball skills and athletic ability to meet a highly competitive level of play on the collegiate level. The focus is on learning basketball skills and molding these into a team structure.

## PEN - PHYSICAL EDUCATION/RECREATION/WELLNES S

**PEN 2121 - Swimming I (1 credit)**

In this course students explore the basic techniques of personal water safety, survival, and propulsion.

**PEN 2122 - Swimming II (1 credit)**

In this course students use techniques for execution of the standard recreational swimming strokes and dives. Emphasis is on technique and endurance.

**PEN 2123 - Swimming III (1 credit)**

In this course students explore 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)**

In this course students explore fundamental and advanced skills, techniques of participation, strategy, teamwork, cardiovascular endurance training, and rules of competitive swimming.

## PEO - PHYSICAL EDUCATION/RECREATION/WELLNES S

**PEO 2013 - Sports Officiating (3 credits)**

This course includes the theory and practice of officiating football, basketball, and baseball.

## PET - PHYSICAL EDUCATION/RECREATION/WELLNES S

### **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)**

Students explore digital photography techniques and theory, including imaging software, camera types, and their application to contemporary photography work. Students analyze 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)**

Students explore how to create and edit digital images. Techniques that enhance or alter existing images are covered. The use and maintenance of new equipment and technologies are also studied, along with special effects. Additionally, students cover 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.

### **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 1071 - Eastern Philosophies (3 credits)**

This course examines the history, practices, and basic tenets of the three major Eastern philosophies: Hinduism, Buddhism, and Taoism. It seeks to provide students with a broad multicultural appreciation of these traditions and their significance for promoting personal and interpersonal happiness.

### **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 different philosophical views of the nature of reason and its relationship to human emotion and action and provides a philosophical overview of different types of emotion. Topics discussed include theories of emotions and views of what a human emotion is based on current studies in neuropsychology.

**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 clinical health care. Topics addressed include principles of biomedical ethics, decision-making models, roles of clinicians, moral and legal aspects of confidentiality and informed consent, codes of ethics, end of life decisions, death, advance directives, euthanasia, and assisted suicide.

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 addresses theories on the nature of the arts: music, painting, photography, street art, architecture, and magic. The course also uses a case-based approach in which students consider practical cases that challenge our views on art.

Prerequisite: student must score into college-level English and reading on placement test.

**PHI 2100 - Introduction to Logic (3 credits)**

This course covers logic with an emphasis on deductive logic, explores the basic principles of categorical logic, truth functional logic (propositional logic), and limited topics in predicate logic. The first part of the course focuses on the basic principles of the subject, such as validity, soundness, strength, cogency, definition, and paraphrase, and explores the traditional (i.e., Aristotelian) treatment of deductive arguments. The second part of the course explores the concepts of modern, symbolic logic.

Prerequisite: student must score into college-level English and reading on placement test.

**PHI 2620 - Environmental Ethics (3 credits)**

This course covers theoretical and practical issues in environmental ethics. Theories include anthropocentrism, animal rights, biocentrism, ecocentrism, and deep ecology. Students study practical topics such as climate change, population, and capitalism.

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 1000 - Introduction to Physical Therapy (2 credits)**

This course introduces students to the physical therapy profession with emphasis on the role and responsibilities of the physical therapist assistant in patient/client

management. Principles of professionalism, ethical conduct, medical terminology, cultural diversity and communication skills are introduced specific to the physical therapy profession.

Corequisite: PHT 1020, PHT 1020L, PHT 1121, PHT 1121L.

### **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.

Corequisite: PHT 1000, PHT 1020L, PHT 1121, PHT 1121L.

### **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.

Corequisite: PHT 1000, PHT 1020, PHT 1121, PHT 1121L.

### **PHT 1080 - Principle of Practice II (2 credits)**

This course examines the role of the physical therapist assistant in the health care delivery system. Specifically, this course introduces the acute care setting, integumentary assessment, and wound care management. Additionally, the concepts of pathology, PT interventions, and data collection for application to pediatric populations are addressed.

Prerequisite: PHT 1000, PHT 1020, PHT 1020L, PHT 1121, PHT 1121L all with grade of C or higher.

Corequisite: PHT 1080L, PHT 1132, PHT 1132L, PHT 1213, PHT 1213L.

### **PHT 1080L - Principles of Practice II Lab (1 credit)**

In this course students practice the acute care setting interventions, integumentary assessment, wound care management, and pediatric population as presented in PHT 1080.

Prerequisite: PHT 1000, PHT 1020, PHT 1020L, PHT 1121, PHT 1121L all with grade of C or higher.

Corequisite: PHT 1080, PHT 1132, PHT 1132L, PHT 1213, PHT 1213L.

### **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 discussed.

Corequisite: PHT 1000, PHT 1121L, PHT 1020, PHT 1020L.

### **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.

Corequisite: PHT 1000, PHT 1020, PHT 1020L, PHT 1121.

### **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 1000, PHT 1020, PHT 1020L, PHT 1121, PHT 1121L. Corequisite: PHT 1080, PHT 1080L, PHT 1132, PHT 1132L, PHT 1213L.

### **PHT 1132L - Musculoskeletal PT Lab (2 credits)**

In this course students practice assessment skills and interventions including joint mobilizations specific to the orthopedic patient as presented in PHT 1132.

Prerequisite: PHT 1000, PHT 1020, PHT 1020L, PHT 1121, PHT 1121L. Corequisite: PHT 1080, PHT 1080L, PHT 1132, PHT 1213, PHT 1213L.

### **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. This course provides the student with a foundation in therapeutic exercises.

Prerequisite: PHT 1000, PHT 1020, PHT 1020L, PHT 1121, PHT 1121L all with grade of C or higher.  
Corequisite: PHT 1080, PHT 1080L, PHT 1132, PHT 1132L, 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. 261).

Prerequisite: PHT 1000, PHT 1020, PHT 1020L, PHT 1121, PHT 1121L all with grade of C or higher.  
Corequisite: PHT 1080, PHT 1080L, PHT 1132, PHT 1132L, PHT 1213.

**PHT 2210 - Principles of Practice III (2 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 with "C" or higher. Corequisite: PHT 2210L.

**PHT 2210L - Principles of Practice III Lab (2 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 with "C" or higher. 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 discussed.

Prerequisite: PHT 2210, PHT 2210L all with grade of C or higher. 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 all with grade of C or higher. Corequisite: PHT 2255, PHT 2810.

**PHT 2289 - Cardiopulmonary & Systemic Physical Therapy (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 all with grade of C or higher. 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 all with grade of C or higher. 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 all with grade of C or higher. 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 group research project presented to peers are also required.

Prerequisite: PHT 2255, PHT 2255L, PHT 2810 all with a grade of C or higher. 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, and matter.

Prerequisite: MAT 1033, with grade of C or higher, or placement scores.

**PHY 1053 - 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, will a grade of C or higher; student must score into college-level reading on placement test. Corequisite: PHY 1053L.

#### **PHY 1053L - College Physics I Lab (1 credit)**

This is the lab component for PHY 1053 (p. 262). 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 a grade of C or higher; student must test into college-level reading on placement test. . Corequisite: PHY 1053 .

#### **PHY 1054 - College Physics II (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: PHY 1053, PHY 1053L, and MAC 1114 or MAC 1147 or MAC 2311, all with a grade of C or higher. Corequisite: PHY 1054L.

#### **PHY 1054L - College Physics II Lab (1 credit)**

This is the lab component for PHY 1054 (p. 263). Topics include electric charge, fields and circuits; electromagnetism, applied electricity; geometrical, wave, and applied optics; electrons and photons; atoms, and nuclei.

Prerequisite: PHY 1053, PHY 1053L, and MAC 1114 or MAC 1147 or MAC 2311, all with a grade of C or higher. Corequisite: PHY 1054.

#### **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. 263). 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. 263) 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, MAC 2312 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. 263). 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 a grade of C or higher. Corequisite: PHY 2049.

### **PLA - PARALEGAL STUDIES/LEGAL ASSISTING**

#### **PLA 1104 - Legal Research and Writing I (3 credits)**

This course explores the process of legal research, with an emphasis on the use of online legal research services. Students conduct research, update legal research materials, apply legal research materials to factual scenarios, and write case briefs.

#### **PLA 1610 - Real Estate and Property Law (3 credits)**

This course explores the law of real property, including ownership of real property, real estate contracts, real estate transactions, title examinations, and real estate closings. Students review real estate contracts and deeds.

#### **PLA 1763 - Law Office Management (3 credits)**

This course examines the fundamentals of law office management, including the application of legal ethics to the functions of managing trust accounts, billing, and attorneys' fees. Other topics include the maintenance of law libraries, technology, and human resources.

**PLA 1931 - Special Topics in Law (1 credit)**

In this course students examine contemporary issues in the legal field; discuss the ongoing changes to family law, real estate, estate planning, and litigation; and prepare for certification examinations.

**PLA 2003 - Introduction to Paralegal Studies (3 credits)**

This course provides an overview of the training and purpose of paralegals and examines the roles of lawyers and paralegals. The course explores the ethical and professional practice standards applicable to attorneys, paralegals, and other legal professionals.

**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 reinforces legal research and writing skills obtained in PLA1104, Legal Research and Writing I. Students write advanced case briefs, conduct research, apply legal materials to factual scenarios, and draft legal memoranda.

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 authorities, trial briefs, and appellate briefs.

Prerequisite: PLA 2114.

**PLA 2203 - Civil Litigation I (3 credits)**

This course explores the jurisdiction of courts, the process of civil litigation, and alternatives to litigation. Students identify the proper court in which to file pleadings, draft pleadings and motions, and examine the Florida and federal rules of civil procedure. Students are also introduced to the law of evidence.

**PLA 2223 - Civil Litigation II (3 credits)**

This course continues to examine the process of civil litigation, as presented in Civil Litigation I. The methods and scope of discovery are outlined, the pretrial process is explained, trials are discussed, and post-trial options are highlighted.

Prerequisite: PLA 2203.

**PLA 2273 - Torts (3 credits)**

This course examines the principles of tort law, including intentional torts, negligence, and products liability. Defenses to intentional torts, assumption of risk, and comparative negligence are also explored.

**PLA 2423 - Contracts (3 credits)**

In this course students examine the elements of contracts, discuss third party contracts, identify contracts governed by the Uniform Commercial Code, and apply legal and equitable remedies for breach of contracts.

**PLA 2433 - Corporate and Business Law (3 credits)**

This course examines the formation, management, duration, taxation, and liability of corporations, general partnerships, limited partnerships, sole proprietorships, and limited liability companies. Students are exposed to the complexities of public corporations.

**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, the Freedom of Information Act, and the Privacy Act.

**PLA 2600 - Estate Planning and Probate Administration (3 credits)**

In this course students examine comprehensive estate planning, apply intestate succession statutes, draft wills, evaluate trusts, and outline various probate proceedings.

**PLA 2800 - Family Law (3 credits)**

In this course students are introduced to various aspects of family law: marriage, dissolution of marriage, child custody or timesharing, spousal support, property disposition, adoption, and post-dissolution modifications.

**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)

In this course students explore 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 0101C - Advanced Welding Principles (N) (150 hours)

In this course students delve into welding symbol interpretation in accordance with American Welding Society (AWS) standards. Students use fundamental drawing elements, scales, layouts, and title blocks to design and build a product. Metallurgical principles such as heat treating are discussed and applied through practical lab activities. Students explore how welding affects the metallic properties of strength, hardness, and ductility in order to provide insight for managing desirable material properties.

Prerequisite: PMT 0108.

### 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)

Students build foundational skills required of professionals in the welding industry. Safe practices in the preparation of the work area, proper use of tools and equipment, along with handling of materials are emphasized. Student use math to solve practical problems utilized in the fabrication of weldments. Thermal cutting processes such as Oxy/Fuel and Plasma, and weld inspections and testing to industry codes and standards are also covered.

### 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)

Students learn the 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 on carbon steel groove welds. Emphasis is placed on proper weld joint preparation, and recognizing weld bead discontinuities and defects.

Prerequisite: PMT 0131 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 gun 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)

Students' skill set is expanded to incorporate Gas Tungsten Arc Welding (TIG) with advanced machine controls. Students weld on ferrous and nonferrous base materials

such as aluminum and stainless steel on multiple joint designs, out of position. Emphasis is placed on developing consistency in weld bead geometry and weld bead placement, along with proper setup and surface finishing of GTAW welds. 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) (100 hours)**

Students learn the use of fixtures, fit-up techniques, metal shaping, forming, weld sequencing, project planning, and quality control. Basic CNC programming is introduced along with new fabrication techniques.

Prerequisite: PMT 0131 with a grade of "C" or higher.  
Corequisite: Pre/corequisite: PMT 0134.

#### **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)**

Students work toward certifications 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. Students create a resume and prepare for job interviews.

Prerequisite: PMT 0164 with a grade of C or higher.  
Corequisite: pre/corequisite: PMT 0161, PMT 0164, PMT 0165.

#### **PMT 0870 - Apprenticeship - Welding OJT (N) (667 hours)**

In this course students participate in on-the-job training to develop their skills and apply 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 in the welding industry.

#### **PMT 0930 - Special Topics in Welding (N) (30-150 hours)**

In this course students study current or special interest topics in welding. The course may be repeated up to a maximum of three times. Topics that may be covered are: Specialty Welding operations, Robotic Welding programming and operation, cad-cam plasma arc operations for the welding industry, and review for the welding certification exam.

## **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 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 life in the United States or be a fully functioning citizen without having a basic understanding of politics and government in the United States. This course fulfills the State of Florida Civics Literacy.

Prerequisite: Student must score into college-level English and reading on placement test.

## PPE - HUMAN SERVICES

### **PPE 2001 - Person and Personality Development (3 credits)**

In this course, students examine the major theories of personality, personality development, and personality assessment. The major theorists include Freud, Erikson, Jung, Adler, Laing, Fromm, Maslow, Skinner, Rogers, and Ellis. Objectives include exploration of the ways phenomena such as anxiety, creativity, happiness, and love relate to personality.

## **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. 267) 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 w/C or higher.

### **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 with grade of C or higher.

### **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 with C or higher.

## 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.

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 scientific study of human thought, feelings, and behavior. It is valuable for all majors providing practical insights for understanding, negotiating with, and influencing others in real-world job settings. Scientific research methods are taught to help students critically evaluate information in the media and to provide the scientific principles for students who major in psychology. Diverse theories of human behavior are introduced to examine how biological systems, physical and social environments, and experiences interact to form the bases of personality, beliefs, emotions, and behaviors.

Prerequisite: Student must score into college-level English and reading on placement test.

## PTN - PHARMACY TECHNOLOGY

### **PTN 0000 - Pharmacy Technician Orientation (N) (75 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 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, milliequivalent 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) (200 hours)**

In this course students are assigned to a community pharmacy facility to demonstrate skills learned in the classroom/lab courses. Students complete 200 hours of supervised professional duties of a pharmacy technician.

Prerequisite: PTN 0032L, PTN 0033L, PTN 0023, PTN 0015 with grade of C or higher.

**PTN 0031 - Introduction to Institutional Pharmacy (N) (205 hours)**

In this course students are assigned to an institutional pharmacy facility to demonstrate skills learned in the classroom/lab courses. Students complete 205 hours of supervised professional duties of a pharmacy technician.

Prerequisite: PTN 0032L, PTN 0033L, PTN 0023, PTN 0015 all with grade of C or higher.

**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 required in an institutional pharmacy to include filling patient orders, aseptic techniques used for preparation of sterile products (intravenous, irrigation, ophthalmic, total parenteral nutrition, and chemotherapy drugs), proper usage of automated dispensing cabinets, medication reconciliation, and safe handling of antineoplastic drugs. Students get hands on experience through lab simulation.

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.

**PTN 0092 - Clinical Experience for the Pharmacy Technician Apprentice (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) (75 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 all with grade of C or higher.

## **QMB - BUSINESS ADMINISTRATION AND MANAGEMENT**

### **QMB 1001 - Mathematics of Business (3 credits)**

In this course, the student explores mathematical concepts required for success in a variety of business careers, including payroll calculations, markups and markdowns, discounts, commissions, and profit calculations.

## **RED - READING**

### **RED 2010 - Introduction to Reading Language Arts (3 credits)**

In this course students explore how to teach conceptually and developmentally appropriate literacy content for all students at the PK-6 grade level. Major topics include components of reading, writing, grammar, and mechanics.

Prerequisite: Pre/corequisites: EDF 2005, ENC 1101, ENC 1102, with grade of C or higher.

### **RED 3009 - Early and Emergent Literacy (3 credits)**

This course lays the foundation to allow teachers from all levels and subject areas to build a balanced and scientifically based/evidence-based classroom environment in order to develop effective and proficient readers. The course will focus on research-based material covering the developmental continuum for children from birth through lower elementary grades. All aspects of literacy are explored: reading, writing, listening, and speaking. This course covers Competency One of the Florida Reading Endorsement: Foundations in Language and Cognition and some Competency Two: Application of Research-Based Practice.

### **RED 3342 - Foundations of Research Based Practices in Reading Education and Application of Instruction (3 credits)**

In this course students examine the principles of scientifically based reading research as the foundation of comprehensive instruction that synchronizes and scaffolds each of the major components of the reading process to assist students in mastering this process. The course will address effective research-based instruction methodology to prevent reading difficulties and promote the acceleration

of reading progress for struggling students, including students with disabilities, and students from diverse populations. Guided Early Field Experience (15 hours) provides pre-professional educators with the experience of observation and interaction with PK12 students. This course is aligned with Competency 1 (Foundations of Reading Instruction) and Competency 2 (Application of Research-Based Instructional Practices) of the Florida Reading Endorsement.

Corequisite: pre/corequisite: EDF 2005, EDF 3214, SLS 3318L.

### **RED 3360 - Teaching Reading in Middle/Secondary Schools (3 credits)**

This course promotes the effective teaching of literacy skills across the curriculum and includes Reading Competencies 1 and 2 with a focus on secondary classrooms. The major emphasis of this course is placed on current theories, research-based strategies and materials used in content area literacy instruction.

### **RED 4348 - Literacy Development K-12 (3 credits)**

In this course students explore reading instruction through the elementary, middle, and secondary school levels. It presents learning to read as a continuous process that impacts all academic success; this course focuses on "reading to learn." Students acquire a specific understanding of reading as student engagement in both the fluent decoding of words as well as the construction of meaning. This course focuses on 4th to 12<sup>th</sup>-grade students. This course is aligned with Competency 2 of the Florida Reading Endorsement: Application of Research-Based Instructional Practices.

### **RED 4519 - Diagnostic and Instructional Interventions in Reading (3 credits)**

In this course students explore formal and informal methods and materials used to identify the 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 the diagnosis of reading problems, administration of assessments, evaluation of results, and planning of instructional interventions to remediate reading difficulties. This course is aligned with Competency 3 of the Florida Reading Endorsement: Foundations of Assessment.

Prerequisite: Pre/corequisite: RED 3342.

### **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. This course is aligned with

Competency 4 of the Florida Reading Endorsement: Differentiation.

Prerequisite: RED 3342, RED 4519, Passing score on GK Reading. All courses require a grade of C or higher.  
Corequisite: RED 4854.

### **RED 4854 - Reading Practicum (2 credits)**

This course is a structured field experience course (40 hours) 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. This course aligns with application of Reading Endorsement Competency 5.

Prerequisite: RED 3342, RED 4519, Passing score on GK Reading. All courses require a grade of C or higher. .  
Corequisite: RED 4654.

## **REE - REAL ESTATE**

### **REE 1040 - Real Estate Principles and Practices I (4 credits)**

In this course, the student explores the theoretical, practical, and legal aspects of the field of real estate. Material is presented in a manner to assist the student in preparation for the course and state licensing examinations.

### **REE 1180 - Real Estate Residential Appraisal ABI (6.5 credits)**

Students holding a Registered Trainee Appraiser License with the state of Florida will receive 6.5 credits.

## **REL - HUMANITIES**

### **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 Care 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.

Corequisite: RET 1007, RET 1485, RET 1274.

### **RET 1274 - Respiratory Care 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) and Pediatric Advanced Life Support based on the American Heart Association standards. It prepares students for the ACLS and PALS certification examination.

Prerequisite: RET 2280 with a grade of C or higher.  
Corequisite: RET 2835.

### **RET 2264 - Mechanical Ventilation with Lab (3 credits)**

This course is an in-depth 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.

Prerequisite: RET 2442 with a grade of C or higher.  
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 with a grade of C or higher.  
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 with C or higher.

### **RET 2414C - Pulmonary Function Studies with Lab (3 credits)**

This course is an in-depth 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.

Prerequisite: RET 2442 with grade of C or higher.  
Corequisite: RET 2833.

### **RET 2442 - Respiratory Care 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, RET 2503, RET 2832 al with a grade of C or higher. 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 with grade of C or higher.  
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 with grade of C or higher.  
Corequisite: RET 2835.

### **RET 2832 - Respiratory Care 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. 270) and RET-1274 (p. 270). Clinic meets two days per week (16 hours).

Prerequisite: RET 1024, RET 1274 with grade of C or higher. Corequisite: RET 2275, RET 2503.

### **RET 2833 - Respiratory Care Clinic II (2 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 2275 with grade of C or higher.  
Corequisite: RET 2442.

### **RET 2834 - Respiratory Care Clinic III (5 credits)**

This course provides supervised observation and clinical practice of adult critical care skills including airway management and mechanical ventilation.

Prerequisite: RET 2414C with grade of C or higher.  
Corequisite: RET 2264.

### **RET 2835 - Respiratory Care Clinic IV (7 credits)**

This course provides supervised observation and clinical practice of mechanical ventilation on adult and pediatric/neonatal patients along rotations in specialized care settings.

Prerequisite: RET 2264, RET 2280, RET 2834 all with grade of C or higher. 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 with grade of C or higher. Corequisite: RET 2714, RET 2835.

## **RMI - INSURANCE**

### **RMI 1090 - Customer Service Representative (3 credits)**

Students holding Florida's 4-40 Resident Customer Representative License will receive 3 credits.

### **RMI 2500 - Individual Life and Health Insurance (3 credits)**

In this course, the student explores 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.

### **RMI 2600 - Property and Casualty Insurance (12 credits)**

Students holding a Florida 2-20 Resident General Lines (Property, Casualty, Surety, Marine, Health, and Miscellaneous Lines) License will receive 12 credits.

## **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.

Corequisite: RTE 1503.

### **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 with a focus on x-ray equipment and its relationship to the formation of the x-ray beam.

Prerequisite: MAT 1033, RTE 1000. Corequisite: RTE 1513, RTE 1513L, RTE 1523L, RTE 1824.

### **RTE 1457 - Radiographic Imaging II (3 credits)**

This course provides in-depth analysis of the principles of radiographic imaging as they apply to receptor exposure, spatial resolution, contrast, magnification, and distortion. The emphasis is on digital image receptors used for radiography and fluoroscopy.

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 radiographic image. Specific units covered include 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.

Corequisite: RTE 1000, RTE 1804.



**RTE 1513 - Radiographic Procedures II (3 credits)**

This course provides the radiography student with instruction in radiographic examinations of the shoulder girdle, pelvis, and upper and lower extremities. There is special emphasis placed on radiographic anatomy, surface landmarks, positioning, exposure factors, pathology, and image evaluation.

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 shoulder, pelvis, and the upper and lower extremities.

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 bony thorax, spine, skull and facial bones.

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. The student rotates through selected areas of the radiology department in order to gain experience in image processing and transportation of patients. The student observes, assists, and performs basic radiographic procedures (chest and abdomen) under the supervision of a clinical preceptor.

Corequisite: RTE 1503.

**RTE 1814 - Radiographic Clinical Education II (1 credit)**

This course is a continuation of RTE 1804 with students performing radiographic examinations under direct supervision in the clinical education sites. Emphasis is placed on achieving competence in chest imaging and using appropriate methods of patient care and safety.

Prerequisite: RTE 1804.

**RTE 1824 - Radiographic Clinical Education III (3 credits)**

This course is a continuation of RTE 1814 with students performing radiographic procedures under direct supervision in the clinical education centers. Emphasis is placed on achieving competence in 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 with students performing procedures taught in previous clinical courses. Emphasis is placed on achieving competence in radiographic examinations of the bony thorax, spine, skull, facial bones and paranasal sinuses.

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 (3 credits)**

This course includes a presentation of the concepts of radiobiology and factors that modify the response of cells to radiation. The effects of radiation on humans are discussed, such as genetic effects, somatic effects, early, and late effects. Emphasis is placed on minimizing radiation dose to the lowest practical level to produce a quality diagnostic image. Dose reduction strategies and dose limits are presented to prepare students for professional practice.

Prerequisite: RTE 1457, RTE 1457L.

**RTE 2533 - Radiographic Procedures IV (2 credits)**

This course provides continued study in radiographic anatomy, positioning, pathology, and image evaluation with emphasis on radiological examinations of the urinary and gastrointestinal systems.

Prerequisite: RTE 1523, RTE 1523L. Corequisite: RTE 2533L.

**RTE 2533L - Radiographic Procedures IV Lab (1 credit)**

This course provides lab instruction and evaluation in radiographic examinations of the urinary and gastrointestinal systems. Students simulate radiographic procedures of the GI and urinary systems by role play and by practicing interviewing and positioning skills on each other. Simulated performances are evaluated as part of the competency-based curriculum.

Prerequisite: RTE 1523, RTE 1523L. Corequisite: RTE 2533.

**RTE 2553 - Radiographic Procedures V (3 credits)**

This course provides continued study in radiographic procedures. Topics include interventional, trauma and surgical imaging, mammography, bone densitometry, pharmacology and CT scanning.

Prerequisite: RTE 2533, RTE 2533L. Corequisite: RTE 2553L.

**RTE 2553L - Radiographic Procedures V Lab (1 credit)**

This course provides lab practice in performing vital signs, venipuncture, and various types of imaging procedures in trauma situations.

Prerequisite: RTE 2533, RTE 2533L. Corequisite: RTE 2553.

**RTE 2844 - Radiographic Clinical Education V (1 credit)**

This course is a continuation of RTE 1834 with students perfecting positioning skills with indirect supervision. Emphasis is placed on achieving competence in 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 with students perfecting positioning skills with indirect supervision.

Emphasis is placed on achieving competence in radiographic procedures involving the digestive, urinary and biliary systems.

Prerequisite: RTE 2844. Corequisite: RTE 2533, RTE 2533L.

**RTE 2864 - Radiographic Clinical Education VII (3 credits)**

This course is a continuation of RTE 2854 with students perfecting positioning skills with indirect supervision. Emphasis is placed on achieving competence in mobile and operating room radiographic procedures.

Prerequisite: RTE 2854. Corequisite: RTE 2553, RTE 2553L.

**RTE 2874 - Radiographic Clinical Education VIII (3 credits)**

This course is a continuation of RTE 2864 with students performing a wide range of radiologic imaging studies 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)**

In this course, the student explores and 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)**

In this course students explore 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 Florida 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, all with a grade of C or higher. Corequisite: Middle Grades SCE 3940 or Secondary Biology SCE 4942.

**SCE 3905 - Science through Tutoring (3 credits)**

In this course students explore 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, all with grade of C or higher.

**SCE 3940 - Teaching Middle School Science Practicum (1 credit)**

In this course students 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 Florida State Standards, subject matter competencies, and pedagogy pertinent to the discipline and required for certification.

Prerequisite: EDF 2005, EDF 3214, EDG 3343, Middle Grades SCE 4942 or SCE 3940, 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)**

In this course teacher candidates demonstrate pre-professional competencies during a 12 week, full-time internship in a public school approved by the department.

Senior level status, all program requirements complete, and permission of department.

Prerequisite: Senior level status, all program requirements complete, and permission of department. Corequisite: SCE 4943.

**SCE 4942 - Teaching Secondary Science Practicum (1 credit)**

In this course students 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 Florida State Standards, subject matter competencies, and pedagogy pertinent to the discipline and required for certification.

Prerequisite: EDF 2005, EDF 3214; Secondary Biology EDG 3343, nine (9) hours of science content courses, all with grade of C or higher. Corequisite: Middle Grades EDG 3343 or Secondary Biology SCE 3360.

**SCE 4943 - Seminar in Science Teaching (3 credits)**

In this course students develop instructional strategies, planning techniques, evaluation procedures and class management skills for science courses in the secondary school environment.

Senior level status, all program requirements complete, and permission by department

Prerequisite: Senior level status, all program requirements complete, and permission by department. Corequisite: SCE 4941.

**SLS - BUSINESS ADMINISTRATION AND MANAGEMENT****SLS 1261 - Essentials of Contemporary Leadership (3 credits)**

In this course, the student explores and 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 1421 - Personal and Career Development (3 credits)**

In this course, students develop the skills required for successful, lifelong career planning. Students explore all aspects of the career development process including self-assessment, decision-making related to choosing a major and identifying related career options, goal setting, career and employer research, workplace skills, and job search tools and strategies

**SLS - COLLEGE ORIENTATION****SLS 1101 - Student Success (3 credits)**

In this course students explore the metacognitive process to become self-directed. Students learn to recognize thinking patterns, personality and learning preferences, and use this self-knowledge to be self-directed in making good decisions. As a required course for many students, this course provides students with a common learning experience as they transition to college, fosters a meaningful foundation for the general college curriculum, and promotes purposeful involvement in college and career decision-making.

**SLS 1501 - Navigating the River (0 credits)**

In this course students participate in an orientation to the college experience and explore career readiness, technology expectations and resiliency resources for student success.

**SLS 3318L - Orientation to Education Programs (0 credits)**

In this course students explore the school of education department processes and overall expectations for disposition for teaching. Pre-service teachers learn how coursework relates to meeting the Florida Department of Education requirements for teacher certification and how to ensure they remain a satisfactory candidate for graduation.

Prerequisite: pre/corequisite: EDF 3214, or EDG 3620, or RED 3342.

**SLS - PSYCHOLOGY****SLS 0341 - 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, **In** this course, students explore skills necessary to find, maintain and change employment throughout their career. Activities include resume writing, creating cover letters, participation in mock interviews, handling job changes, and payroll deductions. Students tour CTE (Career and Technical Education) programs, and engage in labs and activities. Students research desired career choices and present their findings.

**SLS 0460 - Specialized Career Education, Basic 1 (N) (150 hours)**

Students learn about personal and career exploration. Students identify and describe personal skills, interests, values, experiences, personality traits, and academic abilities. Students review and discuss career and employment opportunities, determine realistic employment goals, explain individual rights and responsibilities in the workplace, as well as describe the rights, responsibilities, and benefits of employment.

**SLS 0461 - Specialized Career Education, Basic 2 (N) (150 hours)**

In this course, students learn the importance and management of interpersonal relationships, job seeking, and employability skills. Students learn to participate as a member of a team, 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

dress and groom for employment. There is an introduction to work tools, equipment, systems, and materials.

Prerequisite: SLS 0460 with a grade of "S".

**SLS 0462 - Specialized Career Education, Basic 3 (N) (150 hours)**

In this course, students learn how to be a successful employee and to request work-related reasonable accommodations. The course includes an introduction to appropriate oral and written communication and industry-related math skills.

Prerequisite: SLS 0461 with a grade of "S".

**SLS 0463 - Specialized Career Education, Advanced 1 (N) (150 hours)**

Students practice employability skills and use of information technology. Students practice the ability to explain and request reasonable job-related accommodations, listen to, follow, and provide directions in a workplace setting.

Prerequisite: SLS 0462 with grade of "S".

**SLS 0464 - Specialized Career Education, Advanced 2 (N) (150 hours)**

In this course, students learn about workplace organization; 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.

Prerequisite: SLS 0463 with a grade of "S".

**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 0944 - Specialized Career Education, Internship (N) (150 hours)**

This course consists of an on-the-job training component. Students are either placed in a job shadowing opportunity

or work one-on-one with an instructor to prepare for employment.

Prerequisite: SLS 0464 with a grade of "S".

### **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.

## **SPC - SPEECH**

### **SPC 1017 - Fundamentals of Speech Communication (3 credits)**

SPC 1017 is a survey course that examines the process of communication in a variety of contexts like interpersonal, small group, organizational, intercultural, and technological. Students study and understand fundamental concepts, principles and theoretical concerns at the foundation of effective communication.

### **SPC 1608 - Public Speaking (3 credits)**

In this course, students examine 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. 277), 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. 277) and SPN-1121 (p. 277), 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)**

Students are presented information which includes: summarizing data using descriptive statistics and computational techniques, finding probability of discrete and continuous variables, using the Central Limit Theorem to relate statistics to parameters of a population, using correlation to analyze relationships between variables, creating confidence intervals and performing hypothesis tests to apply inferential statistics. Students also use computer software to practice, analyze, and verify skills learned throughout the course.

Prerequisite: MAT 1033 (or higher), or MGF 1106, or MGF 1107 with a grade of "C" or higher, or placement scores.

## **STS - SURGICAL TECHNOLOGY**

### **STS 0013L - Central 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, all with grade of "C" or higher.

**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.

Prerequisite: Pre/corequisite: HSC 0003, with "C" or higher.

**STS 0850 - Surgical Technology Apprenticeship: Fundamentals (N) (180 hours)**

This course provides instruction on 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.

**STS 0851 - Surgical Technology Apprenticeship: Healthcare Sciences (N) (180 hours)**

This course provides instruction on the structure and function of the human body, related medical language, pathophysiology, and general pharmacological concepts. Emphasis is on the structure and function of body organs and systems including cellular biology, related terminology, and pathophysiology, including effects of medication on body systems.

**STS 0852 - Surgical Technology Apprenticeship: Perioperative Concepts & Techniques (N) (180 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.

**STS 0853 - Surgical Technology Apprenticeship: Seminar (N) (100 hours)**

The course prepares surgical technology apprenticeship students to sit for the national examination. Course participants receive a comprehensive review based on the certification exam content identified by The National Board of Surgical Technology and Surgical Assisting. The student utilizes resources offered through a variety of practice activities as well as their apprenticeship resources.

**STS 0854 - Surgical Technology Apprenticeship: On-the Job Clinical Experience (N) (180 - 600 hours)**

This course implements the theoretical concepts introduced in the classroom components of the surgical technology apprenticeship program through on-the-job learning.

**STS 1177C - Surgical Technique & Procedures (3 credits)**

Students learn operating room theory and the role of the surgical technologists in the operating room and surgical services department. The principles of asepsis and practice of sterile technique 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, transfer, preparations of the surgical patient, care of specimens, and surgical count sequence and management.

Prerequisite: BSC 2085, BSC 2085L, HSC 2531, all with grade of "C" or higher. Corequisite: STS 1302, STS 1340C, STS 1380C, and STS 1947L.

**STS 1302 - Introduction to Surgical Technology (3 credits)**

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, asepsis/infection control, and the surgical patient.

Prerequisite: BSC 2085, BSC 2085L, HSC 2531, all with grade of "C" or higher. Corequisite: STS 1177C, STS 1340C, STS 1380C, AND STS 1947L.

**STS 1340C - Pharmacology & Anesthesia (3 credits)**

This course introduces general pharmacological concepts and principles utilized in the management of the surgical patient. 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. Techniques include medication identification, administration, and management within the sterile field.

Prerequisite: BSC 2085, BSC 2085L, HSC 2531, all with grade of "C" or higher. Corequisite: STS 1302, STS 1177C, STS 1380C, AND STS 1947L.

**STS 1380C - Central Service Fundamentals (3 credits)**

This course is an introduction to the concepts, principles, and procedures of the central service department. The topics include professional behavior and communication, basic science and technology, infection control, wrapping techniques, methods of disinfection, decontamination, and sterilization, and fundamentals of procurement and inventory control.

Prerequisite: BSC 2085, BSC 2085L, HSC 2531, all with grade of "C" or higher. Corequisite: STS 1302, STS 1340C, STS 1177C, AND STS 1947L.

### **STS 1947L - Surgical Services Clinical I (2 credits)**

This course introduces 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. The student also participates in rotations through the preoperative area, post anesthesia care unit, and environmental services to assimilate to the surgical services department.

Prerequisite: BSC 2085, BSC 2085L, HSC 2531, all with grade of "C" or higher. Corequisite: STS 1177C, STS 1302, STS 1340C, and STS 1380C.

### **STS 2323C - Surgical Specialties & Procedures I (3 credits)**

Students learn to identify 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 1302, STS 1177C, STS 1340C, STS 1380C, STS 1947L, all with grade of "C" or higher. Corequisite: STS 2944L and STS 2365C.

### **STS 2324C - Surgical Specialties & Procedures II (3 credits)**

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 2323C, STS 2365C, and STS 2944L, all with grade of "C" or higher. Corequisite: STS 2945L.

### **STS 2365C - Professionalism in Surgical Services (4 credits)**

This course explores, simulates, and applies the principles of professionalism as necessary for the surgical technologist to perform effectively in their role within healthcare organizations. The course expands the foundational knowledge of ethics and legal issues and then progress through theory on moral reasoning, human value development and the bio-psychosocial needs of the patient.

Controversial topics are introduced for analysis and discussion.

Prerequisite: STS 1302, STS 1177C, STS 1340C, STS 1380C, and STS 1947L, all with grade of "C" or higher. Corequisite: STS 2323C and STS 2944L.

### **STS 2944L - Surgical Specialties Clinical I (5 credits)**

This course provides clinical training in perioperative case management of the surgical patient through observation and participation in surgical procedures under professional supervision in the hospital, ambulatory surgery center, and freestanding specialty surgery center settings.

Prerequisite: STS 1302, STS 1177C, STS 1340C, STS 1380C, STS 1947L, all with grade of "C" or higher. Corequisite: STS 2323C and STS 2365C.

### **STS 2945L - Surgical Specialties Clinical II (5 credits)**

Students explore 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 2323C, STS 2365C, STS 2944L, all with grade of "C" or higher. Corequisite: STS 2324C .

## **SWS - AGRICULTURE PRODUCTION TECHNOLOGY**

### **SWS 1102 - Irrigation Systems I (3 credits)**

In this course students explore the general aspects of field crop, turf, and landscape irrigation.

### **SWS 2104 - Soils and Fertilizers (3 credits)**

In this course students study 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).

**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.

**TAX 4940 - IRS VITA Tax Practicum (3 credits)**

This course provides an opportunity for students to gain valuable experience in preparing tax returns and tax counseling and to apply their knowledge of classroom learning. The course consists of two parts: training tutorials and exams, and supervised tax preparation at IRS VITA sites.

Prerequisite: Pre/corequisite: TAX 4001 with grade of C or higher.

**TDR - TECHNICAL DRAFTING****TDR 0321 - CAD & Modeling I (N) (450 hours)**

In this course students explore CAD (Computer Aided Design) Modeling also known as 3D modeling. Students

learn technical skill proficiency using competency-based applied learning that contributes to academic knowledge, and other work skills.

Corequisite: TDR 0940.

**TDR 0940 - Mechanical Drafter On-the-Job-Training (N) (667 hours)**

In this course, students use the state required documentation of on-site training of skills and theoretical concepts introduced in the classroom components of the Mechanical Drafter 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 architecture and construction industry.

**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 1252 - Great Performances on Film (3 credits)**

This class traces the evolution of acting styles, from Marlon Brando to Viola Davis and beyond, focusing on the analysis of performance technique, the history of cinema, and the social and political enrollment they parallel.

**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 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 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.

## TRA - Transportation and Logistics

### TRA 2010 - Transportation and Logistics (3 credits)

This course explores the full scope of the transportation plant and transportation services as necessary preparation for efficient use of the transportation system. The course also discusses the role of logistics in the supply chain, in the economy, and in the organization. Topics include customer service, logistics information systems, inventory management, materials management, and supply chain management.

### TRA 2131 - Purchasing Management (3 credits)

This course provides a comprehensive introduction to purchasing and supply chain management. The curriculum emphasizes the purchasing process as it relates to inventory control procedures, price versus cost analyses, the importance of documentation, laws and ethics, vendor selection, and the development of vendor relationships. The purchasing function is also examined within the context of public, non-profit, and private sector organizations.

### TRA 2230 - Warehouse Management (3 credits)

This course is an introduction to the basic principles and processes of warehouse management. The course discusses the practical concepts of warehousing, including types of equipment, storage processes and systems, the technologies used to identify and track units in a warehouse, and the regulations designed to ensure safety in warehouse operations.

## TSL - EDUCATION

### TSL 3080 - ESOL Issues: Principles and Practices (3 credits)

In this course students explore 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 4081 - Second Language Acquisition and Cross-Cultural Communication (3 credits)

In this course students are introduced 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 includes 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.

### TSL 4100 - ESOL Methods, Curriculum and Assessment (3 credits)

In this course students explore the 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.

### **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.

## **WOH - HISTORY**

### **WOH 2012 - World History to 1500 (3 credits)**

In this course students explore cultural, economic, political, and social developments in world history to 1500 through the analysis of texts, sources, and other historical evidence.

### **WOH 2022 - World History Since 1500 (3 credits)**

In this course students explore cultural, economic, political, and social developments in world history since 1500 through the analysis of texts, sources, and other historical evidence.

### **WOH 2040 - World in the 20th Century (3 credits)**

In this course students explore cultural, economic, political, and social developments in 20th century world history through the analysis of texts, sources, and other historical evidence.

## **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. Corequisite: ZOO 3733L.

### **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. Corequisite: ZOO 3733.

## COLLEGE ORGANIZATION - ADMINISTRATION

Timothy E. Moore, President

B.S., Wofford College

M.S., North Carolina State University

Ph.D., Auburn University

Michael Hageloh, Executive Vice President of Strategic Initiatives and Chief Marketing Officer

M.B.A., Nova Southeastern University

Heather J. Belmont, Provost/Vice President of Academic Affairs, CAO

B.A., Ithaca College

Ph.D., University of Miami

Angela Browning, Vice President of Research and Institutional Effectiveness

B.A., Presbyterian College

M.A., University of South Carolina-Columbia

Ph.D., University of Florida

Elizabeth A. Gaskin, Vice President for Student Success

B.A., University of Kentucky

M.A., Eastern Kentucky University

Marvin L. Pyles, Vice President of Administration and Financial Services, CFO

B.A., University of Maryland

M.A., University of Maryland

Ph.D., University of Maryland

Melany K. Crawford, General Counsel

J.D., Stetson University

Jennifer Brown, Associate Vice President of Human Resources, CHRO

B.A., Kean University

M.B.A., Fairleigh Dickson University-College at Florham

Emily Mass, Associate Vice President of Recruitment and Admissions

B.S., Slippery Rock University of Pennsylvania

M.S., Nova Southeastern University

Edith R. Pacacha, Associate Vice President of Finance

M.B.A., Fordham University

Christopher Puorro, Associate Vice President – IRSC Public Media

B.A., The College of New Jersey

Annabel V. Robertson, Associate Vice President of Institutional Advancement and IRSC Foundation

B.A., Denison University

J.D., University of Miami

Suzanne Yanuck Seldes, Associate Vice President of Communications, PIO

B.A., State University of New York at Stony Brook

William R. Ward, Associate Vice President of Capital Planning, Projects, and Facilities

Leonard Calvin Williams, Associate Vice President of Advising and Career Services

B.S., Liberty University

M.A., Liberty University

Ph.D., Capella University

Prashanth Pilly, Associate Vice Provost of Academic Affairs

M.M., University of Phoenix

Ph.D. Northcentral University

Floralba Arbelo Marrero, Associate Vice President of Student Life

Russell P. Brown, Regional Development Executive

B.A., University of Central Florida

M.Ed., University of North Florida

Terri Graham, Regional Development Executive

B.S., Florida Agricultural & Mechanical University

M.S., Florida Agricultural & Mechanical University

M.B.A., Rollins College

Ed.D., University of Florida

Andrew K. Treadwell, Regional Development Executive

B.A., University of Florida

M.Ed., Florida Atlantic University

Anthony B. Dribben, Dean of Science

B.S., Mississippi College  
 Ph.D., University of Florida  
 Patricia A. Gagliano, R.N., Dean of Nursing  
 A.A., Sante Fe Community College  
 B.S.N., Barry University  
 M.S.N., Barry University  
 Ph.D., Barry University  
 James Howse, Dean of Business  
 B.B.A., University of Florida  
 M.Tax., Florida Atlantic University  
 Anna B. Hubbard, A.R.N.P., C.N.E., Dean of Health Science  
 B.S.N., Pennsylvania State University-Main Campus  
 M.S.N., Florida Atlantic University  
 Ed.D., Florida Atlantic University  
 D.N.P., University of South Alabama  
 Adriene B. Jefferson, Dean of Northwest Center, Equity Officer/Title IX Coordinator  
 B.S., Florida Agricultural & Mechanical University  
 M.Ed., Florida Agricultural & Mechanical University  
 Debra L. Kohuth, Dean of School of Education  
 M.S., University of Scranton  
 Raimundo J. Socorro, Dean of Public Service Education  
 M.S., University of Louisville  
 Ph.D., Barry University  
 William L. Solomon, Dean of Workforce Education  
 A.S., Macomb Community College  
 B.B.A., Florida Atlantic University  
 M.A., University of South Florida  
 Scott Stein, Dean of Liberal Arts  
 B.A., University of Miami  
 M.S., Rosalinda Franklin University  
 Psy.D., Union Institute and University  
 Mia S. Tignor, Dean of Learning Resources  
 B.A., University of South Florida  
 M.A., University of South Florida  
 Ph.D., University of Central Florida  
 Tiffany E. Lewis, Dean of Mathematics

A.A., Indian River State College  
 B.S., Florida Agricultural and Mechanical University  
 M.S., Nova Southeastern University  
 Jennifer A. Doak, Assistant Instructional Dean  
  
 A.A., University of Florida  
 B.S., Florida State University  
 M.S.N, Florida Atlantic University  
 D.N.P University of Florida  
 Troy A. Shearer, Assistant Instructional Dean  
  
 A.A., Indian River State College  
 B.S., Indian River State College  
 M.Ed., The University of Texas at Arlington  
 James M. Reynolds, Assistant Instructional Dean  
  
 B.S., University of Central Florida  
 Ph.D., University of Central Florida  
 Helen Wiersma-Koch, Assistant Instructional Dean  
  
 B.S., Sewanee: The University of the South  
 Ph.D., Stanford University  
 Scott H. Kimmelman, Athletic Director  
 B.S., The University of Tennessee  
 M.Ed., Florida Atlantic University  
 Natalia V. Chekhovskaya, Advanced Manufacturing Executive Director  
 M.S., Kyrgyz-Russian Slavic University  
 Kevin E. Cooper, Executive Director of Innovation and Business Development  
 B.S., Georgia Institute of Technology  
 B.S.C.E, Georgia Institute of Technology  
  
 M.S.E., Arizona State University  
 Ph.D., Arizona State University  
 Lisa Davenport, Executive Director/Principal - Indiantown High School  
 A.S., Ashworth University  
 B.S., California Coast University  
 M.S.Ed., American College of Education

Heather M. Gutman, Executive Director of Enterprise Systems

B.S., The State University of New York at Binghamton

M.A., The State University of New York at Binghamton

Leslie E. Judd, Executive Director/Principal - Clark Advanced Learning Center

B. Ed., University of Toledo

M.Ed., Florida Atlantic University

Ph.D., Florida Atlantic University

Hans A. Sorensen, Executive Director of Cloud and Infrastructure

A.A., Saddleback College

B.A., University of California- Los Angeles

Victoria Ortiz-Lucas, Chief Budget Officer

A.A., Indian River State College

B.B.A., Florida Atlantic University

M.B.A., Amberton University

Bruce W. Fraser, Director of the Institute for Academic Excellence

B.A., University of California-Santa Cruz

M.A., Boston University

Ph.D., Boston University

## 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

Sandra Krischke, St. Lucie County

\*Ira M. McAlpin, Jr., St. Lucie County

Linda T. Syfrett, Okeechobee County

\*Thomas H. Thurlow, Jr., Martin 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

\*Alma Lee Loy, 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*

## Foundation Executive Director Emeritus

Ann L. Decker, St. Lucie County

## President Emeriti

\*Herman A. Heise

B.A., Thiel College

M.A., Georgetown University

Ph.D., Georgetown University

L.H.D., Florida Atlantic University

Edwin R. Massey

B.S., Millsaps College

M.S., University of Southern Mississippi

Ph.D., University of Southern Mississippi

*\*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

Christina T. Hart

A.A., Indian River Community College

B.S., Florida State University

M.Ed., Florida Atlantic University

Ph.D., Florida Atlantic University

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

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

Paul R. O' Brien,

B.Ed., Queens University, Belfast

M.S., Barry University

\*Frank L. Watkins, Jr.,

A.S., Gulf Coast Community College

A.A., Gulf Coast Community College

B.S., Florida State University

M.Ed., Florida Atlantic University

*\*Deceased*

## 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

## Campus President Emeriti

Harvey E. Arnold

A.A., Indian River State College

B.A., University of West Florida

M.A., University of West Florida

Ph.D., Florida State University

Charles R. Lunceford II

B.M.E., University of Florida

M.M.E., Louisiana State University and A&M College

## 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

Donna D. Rivett, Dean of Workforce Education and Development

B.A., Florida Atlantic University

M.Ed., Florida Atlantic University

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

A.A., Indian River Community College

B.A., University of West Florida

M.A., University of West Florida

Ph.D., Florida State 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*

## Chief Emeritus

James A. Montgomery

Chief of Security and National Training Initiatives

## 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 2022-2023

ACCOUNTING

ADULT EDUCATION IET

ADVANCED TECHNOLOGY

AGRICULTURE PRODUCTION TECHNOLOGY

AIR CONDITIONING

APPRENTICESHIP

AUTOMOTIVE TECHNOLOGY

BUSINESS ADMINISTRATION & MANAGEMENT

CHILD DEVELOPMENT & EDUCATION

COSMETOLOGY

CRIMINAL JUSTICE

CULINARY INSTITUTE

DENTAL ASSISTING

DENTAL HYGIENE

EDUCATION COLLABORATION TEAM

EMERGENCY MEDICAL SERVICES

FARMWORKER JOBS & EDUCATION

FIRE SCIENCE

GRAPHIC DESIGN TECHNOLOGY

HEALTH INFORMATION MANAGEMENT

HUMAN DEVELOPMENT & RESOURCES

HUMAN SERVICES

INTERIOR DESIGN TECHNOLOGY

LANDSCAPE TECHNOLOGY

PARALEGAL STUDIES/LEGAL ASSISTING

MEDICAL ASSISTING PROGRAM

MEDICAL LABORATORY TECHNOLOGY

OFFICE SYSTEMS TECHNOLOGY

PHYSICAL THERAPIST ASSISTANT

RADIOGRAPHY

RESPIRATORY CARE

RESTAURANT MANAGEMENT

SCHOOL OF NURSING

SURGICAL TECHNOLOGY







## Index

