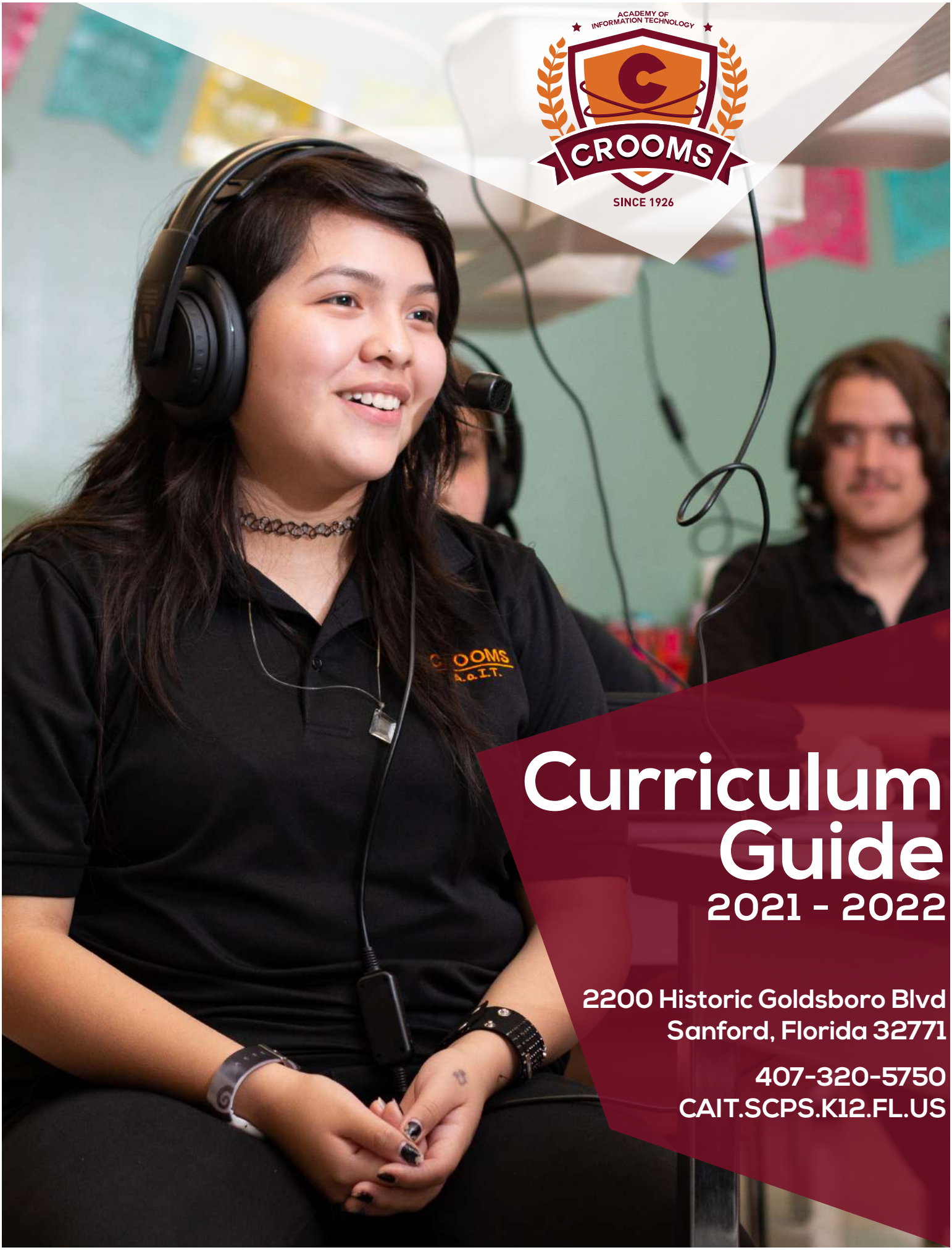

Curriculum Guide

2021 - 2022

2200 Historic Goldsboro Blvd
Sanford, Florida 32771

407-320-5750
CAIT.SCPS.K12.FL.US

Seminole County Public Schools
Educational Equity - Notice of Nondiscrimination

The Educational Equity Administrator for Seminole County Public Schools has the responsibility of assuring compliance with the educational equity requirements by providing technical expertise, monitoring activities or programs related to compliance, and responding to equity complaints. One of the responsibilities is to administer the Educational Equity Complaint/Grievance Procedures as adopted by the School Board.

It is the policy of the School Board of Seminole County, Florida, that no employee, student, or applicant shall - on the basis of race, color, national origin, sex, disability, marital status, age, religion, or any other basis prohibited by law - be excluded from participating in, be denied the benefits of, or be subjected to discrimination and harassment under any educational programs, activities, or in any employment conditions, policies, or practices conducted by the District. Additionally, the School board of Seminole County provides equal access to public school facilities for the Boy Scouts of America and other designated youth groups as required by 34 C.F.R. 108.9.

Every employee, student, or applicant for employment at Seminole County Public Schools has a solemn right to be treated fairly, equally, equitably, and with dignity. If for any reason you - the employee, student, or applicant for employment - find that you have been victimized by acts of discrimination and or harassment, whether intentional or unintentional, you are strongly encouraged to file an Educational Equity Complaint or Grievance with the Educational Equity Administrator, or any county or school-level administrator. All such complaints must be immediately forwarded to the Educational Equity Administrator for dissemination, action, and resolution. Forward to: SCPS Educational Equity Administrator, Seminole County Public Schools, Educational Support Center, 400 E. Lake Mary Blvd., Sanford, FL 32773-7127, (407) 320-0198.

Welcome to Crooms Academy of Information Technology

Where we are Rich in Tradition, Pride, and Vision

Vision Statement: To build a culture of excellence and success for every student.
Mission Statement: The mission of Crooms Academy of Information Technology is to provide innovative teaching and learning in a technology-enriched environment and to engage students in an academically challenging curriculum that prepares them for post-secondary education with industry-validated technology skills.

Administrative / Student Services Staff

Brandon Hanshaw, Ed. D, Principal
Mariette Herro, M. Ed. Assistant Principal
Brittany Campbell, M. Ed. Assistant Principal
Vincent Geigel, Ed. D, Certified School Counselor
Adriana Teague, M. S, Certified School Counselor
Jeanette Malone, M. A, Certified School Counselor

Table of Contents

Important Information for Students and Parents

Scheduling

Crooms AOIT operates on a modified, alternating block schedule with 7 periods. The block schedule is designed to allow for extended periods of time where teachers may direct students to work on labs, group projects or other extension activities.

Students cannot be on campus during class periods they are not scheduled for.

Florida Standards Assessment (FSA) Prep Coursework

Based on Crooms' school improvement plan, students whose FSA ELA and Math EOC scores indicate they may not meet the FSA graduation requirement will be automatically registered into an FSA preparation class for one or two class periods, depending on previous FSA and oral fluency scores. Passing the FSA is a graduation requirement set by the state legislature, and Crooms AOIT intends to provide all students the opportunity to prepare appropriately for that requirement.

Higher Level Course Enrollment Criteria

Seminole County recognizes the benefits students derive from higher level course participation and the importance of fair and equitable standardized criteria for enrollment in higher level courses. Students may elect to enroll in higher level courses based on any one of the multiple criteria. Where applicable, prerequisite course completion may be required.

Donation Notification

In an effort to provide educational enhancements to students beyond the curriculum routinely offered, donations in certain courses historically have been collected in Seminole County Public Schools on a voluntary contribution basis. Every encouragement is given to students and parents to assist Crooms Academy of Information Technology in continuing the practice of course embellishment that these donations make possible. While such assistance is a practical requirement to maintain current practices, no student shall be denied the opportunity either to take any course or to participate fully in all aspects of a course in which donations are sought. In such circumstances, please simply notify your child's teacher. Thank you for your understanding and commitment to excellence.

Technology Use In Education

Seminole County Public Schools believes technology is a valuable educational tool. All classroom teachers use technology as an instructional tool. Some examples of such activities are: use of the eCampus learning management system, Office 365, cloud storage and collaboration with OneDrive and Google Drive, the district's media/library catalog, web sites for education projects, on-line district and state classes and to conduct research in preparation for a project or presentation.

Students are photographed or videotaped for the purposes of daily school news broadcasts and yearbooks. Photographs or videos of students are also placed on school/district web pages as a form of recognition for special achievements, activities, projects and as a motivation to be creative.

Student works are published on the Web (Internet) to share stories, poems, and other creative works with other students and the school community and to provide motivations for writing.

If you wish to have your student excluded from any of the preceding activities, you may opt out in Skyward. Please be aware that opting out of local use, prohibits publishing your child's picture in the school yearbook.

How Do I Register?

Registration information will be distributed by grade level. Before selecting elective courses, all students should read this guide carefully to familiarize themselves with the information it contains.

Incoming students: Curriculum guides and registration forms will be distributed during the Panther Preview Preregistration night for incoming students on Thursday, February 25 at 6 p.m. Registration procedures and course selection information will be given at that time. ***All information regarding courses and graduation requirements is subject to change, pending legislation and state mandates. Courses in this guide may be dropped if there is not sufficient enrollment for the course.**

Guidelines For Current Students

1. Review the courses listed and consult with your classroom teachers over course selections.
2. Review the curriculum guide and discuss your course selections with your parents/guardians.
3. Write down any questions you may have for your counselor and discuss those questions with your counselor during the visit to Homeroom classes.

Schedule Changes

Students are expected to remain in a course for its duration. Schedule changes due to failure and/or teacher preference are not permitted. Courses may be dropped and/or added during the first five days of each semester if one of the following conditions is met:

1. The course to be added is needed for graduation this year.
2. Computer error.
3. The student already has a credit in this course.
4. The student has failed to meet a prerequisite.

Administrative Changes

Crooms reserves the right to change individual student schedules to comply with School Board and Department of Education policies. These changes may occur due to changes in the student population or faculty allocation. Changes will be made to balance classes and teacher loads and to maintain class size requirements. Every effort will be made not to disrupt the educational process when such changes become necessary.

Registration Calendar

January-March	Counselors meet individually with students through Homeroom classes to complete their registration process.
February 25	Panther Preview (6 p.m.) for incoming 9th/new students. More info to come!
March 9	Virtual Open Registration for incoming students at Crooms (9-11 a.m. and again at 5-7 p.m.)
March 24	Middle School registration forms submitted to middle school counselors if not submitted to Crooms

ePathways is customized learning that results in our students being prepared for 21st century globally competitive work.

Seminole County Public Schools offers a variety of choice options to empower students to ***customize their educational pathway in preparation for college, careers, and citizenship***. These options include Magnet Schools/Programs, Programs of Emphasis, Pre-Apprenticeship Training, Internships, Virtual School, After School Courses, and Computer Science Pathways. Each option has a unique application process and eligibility requirements. **Additionally, each high school's curriculum guide includes available Career & Technical Education programs—most of these options include opportunities for industry certification and/or college credit.**

The following information and program descriptions acquaint students and parents with the additional high school options they can consider.

MAGNET SCHOOLS/PROGRAMS

Magnet schools & magnet programs are high quality and innovative educational programs that specialize in a particular theme and are open to all Seminole County students who meet the eligibility requirements.

ELIGIBILITY: Acceptance into a magnet school/magnet program for students applying for ninth grade occurs via a random selection (lottery) process. Students must apply within the on-time application period to be included in the random selection process. Acceptance for students applying for grade ten and above is contingent upon a school based administrative review of their transcripts.

TRANSPORTATION: Transportation is provided to all students who live more than 2 miles from the school/program.

FOR MORE INFORMATION: Contact the Student Assignment & Program Access Department by email (SCPSChoices@scps.us), phone (407-320-0329), or view the department website (https://www.scps.k12.fl.us/district/departments/assignment-access/) for all the latest information.

CROOMS ACADEMY OF INFORMATION TECHNOLOGY

- Associate in Arts Degree Pathway allows students to earn a degree from Seminole State College, at no cost to the family.
- Information technology industry certification opportunities allow students to earn career credentials which make them job-ready upon graduation.
- Annual TechFest provides students opportunities to interact with business leaders and showcase their skills and credentials to an authentic audience.

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ACADEMY OF HEALTH CAREERS
Seminole High School

- Health career industry certification opportunities in either a patient care or a biomedical research pathway allow students to earn career credentials which make them job-ready upon graduation.
- Authentic lab spaces on campus allow students to develop and practice clinical skills.
- Career exploration opportunities are available through job shadowing and clinical experiences in local healthcare facilities.

ACADEMY OF ENGINEERING
Lyman High School

- Lyman Academy of Engineering offers industry certification testing for all students which can lead to additional opportunities for post-secondary employment.
- Renowned Project Lead the Way (PLTW) curriculum emphasizes critical thinking, creativity, innovation, and real-world problem solving.
- Students choose to explore an area of interest including aerospace engineering, digital electronics, civil engineering and architecture, and environmental sustainability.

INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAM
Seminole High School
Winter Springs High School

- Taught by IB trained faculty, the international college preparatory curriculum allows students to explore the world from a variety of perspectives.
- The IB Diploma Program has earned a reputation for rigorous assessment, helping IB diploma holders access the world's leading universities and programs.
- The IB Diploma Program is ideal for knowledgeable and caring young people who are motivated to grow as individuals through significant academic challenge.
- Students applying for the IB Program who are zoned to Lake Brantley, Lake Mary, Lyman, & Seminole may only apply to Seminole High. Students applying for the IB Program who are zoned to Hagerty, Lake Howell, Oviedo, & Winter Springs High may only apply to attend Winter Springs High.

PROGRAMS OF EMPHASIS

A Program of Emphasis provides a structured study strand centered on a career pathway. Students who reside in Seminole County and are zoned for the school may select the Program of Emphasis via the course scheduling process. A limited number of seats in some of the programs listed in this guide may be available for students who reside in Seminole County but are not zoned to the school.

Acceptance for out-of-zone students to a Program of Emphasis is by application only. By signing the application, parents and students agree to the commitment statements and understandings in the application.

ELIGIBILITY: Students must reside in Seminole County and submit a Program of Emphasis Transfer Application if they are applying as out-of-zone students. If more ninth grade applications are received than seats available, a random selection (lottery) will be conducted. Acceptance for students applying for grade ten and above is contingent upon a school based administrative review of their transcripts. Eligibility requirements, timelines, and the application process are described in detail on the Seminole County Public Schools Student Assignment & Program Access website https://www.scps.k12.fl.us/district/departments/assignment-access/. Programs designated with an * are not available as choice options and are currently only for students zoned to attend that school based upon their residence.

TRANSPORTATION: Transportation is NOT provided for Program of Emphasis transfers. Students may seek assistance for transportation if it is available through the Transportation Department's *Ticket to Ride* program. Details about this program may be found on the Student Assignment & Program Access website by clicking on the "Transportation" link.

FOR MORE INFORMATION: In-zone students should contact their school counselor, out-of-zone students may contact the Student Assignment & Program Access Department by email (SCPSChoices@scps.us), phone (407-320-0329), or view the department website (https://www.scps.k12.fl.us/district/departments/assignment-access/) for all the latest information.

Hagerty High School

MODELING, SIMULATION AND ANALYSIS

In the Modeling, Simulation, & Analysis program students learn to navigate and create detailed models and simulations. This pathway has the potential to lead to high-paying careers in diverse fields related to modeling/simulation technologies and program management. This program includes industry certification.

Lake Brantley High School

ACADEMY OF FINANCE

The Finance Academy offers a curriculum comprised of finance and business technology including Accounting Applications and Personal Financial Planning. This program includes industry certification.

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CREATIVE DESIGN AND ENTERTAINMENT

Central Florida is a hub for art and design entertainment, providing many job opportunities for those with a creative passion. Students have the opportunity to develop their artistic and digital skill set while preparing for a future career. Students can choose from multiple program pathways and have the opportunity to earn industry certification.

Lake Howell High School

BUSINESS & ENTREPRENEURSHIP

The Business & Entrepreneurship program curriculum introduces the broad spectrum of business, industry, and small business initiatives. Students will develop the fundamental knowledge and skills necessary to start and operate a business. This program includes opportunities to earn dual enrollment credit or an Associate in Arts degree in Business from Seminole State College while simultaneously completing a high school diploma. This program also includes industry certification.

CULINARY ARTS *

The Culinary Arts program allows students to explore all facets of the culinary field, including entrepreneurship, in an industry-standard commercial kitchen. This program includes industry certification.

CYBERSECURITY

The Cybersecurity program curriculum introduces and prepares students for careers in computer science and cyber-defense in multiple industries. This program includes industry certification.

Lake Mary High School

ADVANCED MANUFACTURING & INNOVATION

The Advanced Manufacturing & Innovation program gives students the opportunity to design and prototype innovative products using high-tech, industry standard equipment. This program includes industry certification.

FORENSIC SCIENCE & LEGAL STUDIES

This Program of Emphasis includes two pathways: Forensic Science uses groundbreaking modern scientific technology in crime scene investigation, and Legal Studies teaches the foundations of our legal system. This program includes opportunities to earn dual enrollment credit.

Lyman High School

NEW FOR 2020-21! ACADEMY OF BUILDING & DESIGN

Construction workforce demands in Central Florida continue to rise and career opportunities abound! This academy gives students the opportunity to explore careers in General Building Trades, Electrical, HVAC, and Welding. Students will follow a progression of courses aligned with a chosen trade. In addition to industry specific course content, students will have the opportunity to take and earn industry certifications that will help them obtain post-secondary employment. This Program of Emphasis will be housed in a brand new state-of-the-art facility, the Career Innovation Center.

Oviedo High School

Bioscience Technology

The Bioscience Technology program prepares students to be successful in career fields of applied biology in various industries. The courses are designed to be predominately laboratory based with a focus on utilizing bioscience equipment and practicing lab technician skills. This program includes industry certification.

Seminole High School

Aviation Academy

The Aviation Academy is a state-of-the-art program designed to prepare students for employment or advanced training in the aviation industry. This program gives students relevant experience with tools, flight training materials, simulators, and actual aircraft: a Cessna 150 and Robinson R22HP helicopter. There are two programs in the academy: Aviation Maintenance and Avionics. This program includes industry certification.

Problem Solving Incubator (PSI High)

PSI High is a project-based, full-time Program of Emphasis in which students work in a high-tech learning environment designed to solve real community, business, and social problems. All students complete the Business Management and Analysis Career and Technical Education (CTE) program, multiple industry certifications in either digital design, product engineering, or computer application design, and gain direct management experience operating a School-Based Enterprise. PSI High learners are the innovators of tomorrow.

Winter Springs High School

Public Service Academy: Heroes of Tomorrow

The Public Service Academy includes three pathways for students to learn about a variety of career opportunities. The pathways include: Principles of Teaching, Criminal Justice, and Emergency Planning and Response. Students are provided preparation for various career fields in the public sector, while working collaboratively to solve problems in an environment of rapid change and uncertainty.

Renewable Energy

The Renewable Energy program allows students to study energy technologies and the advantages, disadvantages, and limitations of renewable energy resources for a sustainable future. This program includes opportunities to earn dual enrollment credit.

Pre-Apprenticeship Training

Don't leave high school with just a diploma—leave with a JOB! The Academy of Construction Technologies (ACT) develops a well-trained workforce in the construction industry by integrating academics and a paid work-site experience when available. ACT offers students age 16 and older the opportunity to begin a career in high school in building trades and construction design technology, which is offered at Lake Brantley HS, Lake Mary HS, and Lyman HS. Students must be on track for graduation and have a 2.0 GPA to participate.

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INTERNSHIPS

Students in grades eleven and twelfth may have the opportunity to participate in a paid or unpaid internship in some of our region's most in-demand fields. Academic credit will be earned upon successful completion of 133 hours of work along with other required assignments. Students can utilize flexible scheduling to work before, during, or after the school day to gain exposure to real-world working conditions. For more information about work-based learning opportunities, visit the ePathways website: https://www.scps.k12.fl.us/district/departments/epathways/workplace-learning/

VIRTUAL SCHOOL

Virtual schools provide a high-quality education along with flexible options to meet the demanding schedule of the 21st century student. SCPS operates two virtual schools: Seminole County Virtual School (SCVS) is a franchise of Florida Virtual School, and Seminole Academy of Digital Learning (SADL) uses curriculum created or purchased by SCVS. Seminole also contracts with two other Florida school districts for additional full-time instruction options.

High School and Middle School student choices include SCVS full-time, SCVS part-time, SADL part-time, or full-time contracted district franchise. Full-time options allow students to earn a regular Florida high school diploma. Full-time enrollment in SCVS for semester 1 will be open from Mon., April 5, 2021 through Tue., July 20, 2021. Part-time options are available throughout the school year; virtual classes can be taken outside of the school day or during the school day at home or at the student's school in a virtual lab pending space availability. Additionally, the district may offer virtual course enrollment over the summer (SCVS 365).

Why should students select a Seminole County Virtual School over other virtual providers?

*schedule flexibility
* full-time local teachers
*no waiting list to start classes
*optional face-to-face sessions
*tax dollars stay in Seminole County

For more information, please visit www.scvs.us or call 407-871-7287.

What high school courses are available through Seminole County Virtual School?

Courses with a * are available at both Standard and Honors level; H = honors class

Math:	Algebra I*, Geometry*, Algebra II*, Pre-Calculus (H), Calculus (H), Liberal Arts Math I, Liberal Arts Math II, Math for College Readiness, AP Calculus AB, AP Calculus BC, AP Statistics
Language Arts:	English I*, English II*, English III*, English IV*, English IV College Prep, AP English Language, AP English Literature
Social Studies:	World History*, U.S. History*, AP U.S. History, Economics*, AP Macroeconomics, AP Microeconomics, U.S. Government*, AP U.S. Government, AP Human Geography, AP Psychology

Sciences: Biology I*, AP Biology, Earth Space Science*, Chemistry*, Physics*, Marine Science*, Physical Science*, Anatomy & Physiology*, Forensic Science

World Languages: French I, II & III*, Spanish I, II & III* IV*, Spanish for Spanish Speakers I, American Sign Language I, II, III*, IV*

Electives: Many options, including Personal Fitness/Fitness Lifestyle Design, Art, Guitar, AP Art History, Drivers Ed, Hospitality & Tourism, and much more! See website for a complete list.

AFTER SCHOOL COURSES

SCPS offers several after school Career and Technical Education (CTE) courses for high school credit. Students can attend an after school course at any of the participating high schools regardless of the high school they currently attend. Transportation is not provided. Courses typically meet from 3:30-5:30 on Tuesdays and Thursdays unless otherwise noted. Please note that courses are subject to cancellation due to low enrollment or change in instructor availability.

Program Name	Hosting School	Course Codes	Course Description
Applied Robotics	**Lake Mary**	**Yr. 1- 9410110X** **Yr. 2- 9410120X** **Yr. 3- 9410130X** **Yr. 4- 9410140X**	This program provides students with the foundational knowledge and technically oriented experience in the study of the principles, applications and systems of robotics engineering and its effect upon our lives. The students in this program will build and participate in the FIRST Robotics Competition (FRC) at UCF. Students participating in the competition will be eligible to apply for participation in the $80 million FIRST Scholarship Program. This course requires some Saturday participation.
Automotive Maintenance and Light Repair	**Oviedo**	**Yr. 1- 9504110X** **Yr. 2- 9504120X** **Yr. 3- 9504130X**	This program provides students with the theory and practical knowledge of basic automotive systems and principles, including internal combustion engine theory, shop safety, tool usage, shop measurement, use of shop manuals, automotive industry history and development, and preventative maintenance.
Aviation	**Seminole**	**Yr. 1- 9540610X** **Yr. 2- 8715110X** **Yr. 3- 8715120X** **Yr. 4- 8715130X**	Fly into the future with a career in aviation! This state-of-the-art program is designed to prepare students for pursuit of employment or advanced training in the commercial and general aviation industry. Throughout these courses, students will learn the fundamentals of flight including meteorology, navigation systems and procedures, flight planning skills, ground operations and service duties. Students will participate in project-based learning experiences by using general shop tools and flight training materials while exploring career opportunities and the requirements of a professional aviation mechanic or pilot.

Program Name	Hosting School	Course Codes	Course Description
Cosmetology	**Lake Howell**	**8757210X (.5)** **8905120X (Spring .5)**	The ideal candidate for the Cosmetology program has a passion for making people feel and look good. Students will practice performing services of the hair, skin, and nails throughout this course. Upon completion of these courses, students will have up to 160 hours towards the state requirement for licensing.
Electrical ***This course meets Mondays and Wednesdays 3:30-5:30**	**Lyman**	**Yr. 1- 8727210X** **Yr. 2- 8727220X** **Yr. 3- 8727230X**	This program focuses on the fundamentals of electrical technology utilizing the same equipment, materials, tools, and techniques as industry professionals. Students will learn how to troubleshoot, repair, and replace various types of electrical systems from teachers who are trained experts in the field. For students who are age 16 and older, this course provides pre-apprenticeship training and may lead to summer employment through Academy of Construction Technologies.
Heating, Ventilation, and Air Conditioning (HVAC)	**Lyman**	**Yr. 1- 8713010X** **Yr. 2- 8713020X** **Yr. 3- 8713030X**	This program focuses on the fundamentals of HVAC technology utilizing the same equipment, materials, tools, and techniques as industry professionals. Students will learn how to troubleshoot, repair, and replace various types of HVAC systems from teachers who are trained experts in the field. For students who are age 16 and older, this course provides pre-apprenticeship training and may lead to summer employment through Academy of Construction Technologies.
Technical Design	**Lake Mary**	**Yr. 1- 8401010X** **Yr. 2- 8401020X** **Yr. 3- 8401030X** **Yr. 4- 8601900X**	This program focuses on Engineering, Architecture, 3D Modeling & 3D Printing. Students will learn the basics of Autodesk AutoCAD to complete their projects. Students who choose to dive deeper into 3D Modeling will have the opportunity to print their projects on a Mojo or Dimension 1200 3D printer. Those focused on architecture will work on an in-depth architecture project such as developing a set of plans of their dream house. All students will take the AutoCAD Certification Exam.

Crooms Requirements for Graduation

To graduate, Crooms students must have all of the following:

- 26 Credits
- Passing Score on the FSA ELA10 & EOC Algebra I
- 2.0 unweighted Grade Point Average
- Completion of Required IT Courses
- Complete 1 Online Course

Subject	Credits
English	4
Science	4
Mathematics	4
Social Studies (World History, American History, American Government (0.5) & Economics (0.5))	3
Personal Fitness	0.5
Physical Education	0.5
Electives to include below	9
Fine Arts or practical art (courses that qualify as a fine art include Digital Information Technology, Web 1—4, Digital Design 1—5, 2–D Graphics, Chorus, Digital Media Fundamentals, Steel Band, and Game & Simulation Foundations)	1
Digital Information Technology (9th grade)	1
Technology Support Systems–Client or A+ Network Concepts (10th grade)	1
World Language suggested for college bound students (optional)	2

Additional Graduation Requirements

Passing Scores on:

Grade 10 FSA English Language Arts Proficiency
Algebra I EOC

Additional Course Assessments

Geometry EOC: 30% of course grade
Biology EOC: 30% of course grade
US History EOC: 30% of course grade

Grade Level Classifications

9th Grade	A student who has been promoted from 8th grade.
10th Grade	A student who has earned six (6) credits beyond the 8th grade.
11th Grade	A student who has earned twelve (12) credits beyond the 8th grade.
12th Grade	A student who has earned nineteen (19) credits beyond the 8th grade.

Opportunities for Additional Credit

Students may earn additional credit toward graduation through any of the following programs for which they are eligible:

1. Students may be awarded high school credit in middle school for the following courses:

(a) Algebra I--the student must successfully complete and demonstrate mastery of the performance standards and pass EOC. Geometry--the student must successfully complete and demonstrate mastery of the performance standards. Any math credit earned in middle school will serve as a math elective in high school.

(b) Spanish taught at the middle school or to be taught on the high school campus--The students must successfully complete the course and demonstrate mastery of the performance standards.

(c) Biology/Environmental Science--The students must successfully complete the course and demonstrate mastery of the performance standards.

2. Early College / Dual Enrollment
3. Seminole County Virtual School
4. Florida Virtual School

Please consult the SCPS Student Progression Plan for information on waivers for the requirements for physical education, fine arts and specific science/math courses prior to registration.

SEMINOLE COUNTY PUBLIC SCHOOL'S DIPLOMA PATHWAYS

In the spring of 2013 the Florida Legislature created new diploma options for the students of Florida. In doing so, they have offered students more choice as well as an opportunity to align their education to their future college and career plans. In Seminole County we refer to these new choices as Diploma Pathways. We call them Pathways because we believe that students should use their time in high school to embark on their own personal Pathway to success. Students may now choose a Pathway that will result in a standard high school diploma, a high school diploma connected with industry certification, a diploma designed to rigorously prepare them for the university setting, a diploma option in world languages, or an Advanced Placement diploma option.

Seminole County offers the Florida Seal of Biliteracy, which recognizes a high school graduate who has attained a high level of competency in one or world languages in addition to English. Beginning with the 2016-2017 school year, the Gold Seal/Silver Seal of Biliteracy will be awarded to high school students who earn a standard diploma and who earn four world language course credits in the same world language with a cumulative grade point average of 3.0 or higher on a 4.0 scale and achieve a qualifying score on a world language assessment.

In the subsequent chart you will find the Diploma Pathways and the corresponding expectations associated with each one. In addition to those offered by the state of Florida, Seminole County also offers the AP Capstone Pathway and Scholars with Distinction Pathway. These very rigorous Pathways will challenge even the most talented and dedicated students to an even higher level of academic accomplishment.

Seminole County will start each and every student on the Scholars Pathway. We want to ensure that students are setting their academic goals high as they begin high school. Through performance and self-selection, students and their families may opt to change Pathways as they progress through high school. Our goal is to have all students qualify to earn a Scholars Pathway diploma. In the end, regardless of the Pathway Diploma, we want every student in Seminole County to exit our school system as a graduate.

Your administrators and school counselors are available to provide further guidance on what each of the Pathways requires.

DIPLOMA PATHWAY REQUIREMENTS
CLASS OF 2022-2025

STANDARD DIPLOMA PATHWAY	*CR*	***REQUIREMENTS** (must include (1) online course)*
		English Credits (English 1 – English 4) or equivalent accelerated course(s)-4 credits *Math Credits Grades (9-12) (must include Algebra 1 & Geometry)-4 credits* *Science Credits (must include Biology I, (3) courses must contain a lab component, and 2 Equally Rigorously Courses)-4 credits* *Social Studies (must include World History, US History, 0.5 US Government & 0.5 Economics with Financial Literacy)-3 credits* *Fine or Performing Arts, Speech & Debate or Practical Art-1 credit* *½ Personal Fitness and ½ PE Elective-1 credit* *Elective Credits-9 credits*
TESTING REQUIREMENTS		*Passing Score on: Grade 10 ELA FSA & Algebra 1 EOC or concordant/comparison score* *EOC's in Algebra 1*, Geometry, Biology I & US History will count as 30% of the students overall grade* ****A passing industry certification may take the place of a science or math credit.**** Industry certifications that lead to college credit may substitute for up to two mathematics credits (except for Algebra I and Geometry). An industry certification that leads to college credit substitutes for up to one science credit (except for Biology I). ****An approved Computer Science course may take the place of a math or science credit.****
SCHOLARS DIPLOMA PATHWAY		***REQUIREMENTS OF A STANDARD DIPLOMA PLUS:***
		**Earn (1) credit in Statistics or equally rigorous mathematics course* ** Earn (1) credit in Algebra II or equally rigorous mathematics course* **Earn (1) credit in Chemistry or Physics* **Earn (1) credit in science course equally rigorous to Chemistry or Physics* **Earn (2) credits in the same foreign language course* **Earn (1) credit in Advanced Placement, International Baccalaureate, an Advanced International Certificate of Education, Dual Enrollment Course*
TESING REQUIREMENTS		*Passing Score on Grade 10 ELA, Algebra 1 EOC, Geometry EOC, Biology I EOC, and US History EOC*
MERIT DIPLOMA PATHWAY		***REQUIREMENTS OF STANDARD DIPLOMA PLUS:***
		REQUIREMENTS OF STANDARD DIPLOMA PLUS: **Attain one or more Industry Certifications from the list established under S. 1003.492 F. S* *****Industry Certification Courses which lead to college credit may be substituted for up to two math credits and/or one science credit excluding Algebra 1, Geometry and Biology****
TEST REQUIREMENTS		*SAME AS THE STANDARD DIPLOMA*
SCHOLARS WITH DISTINCTION DIPLOMA PATHWAY		***REQUIREMENTS OF A SCHOLARS DESIGNATION PATHWAY PLUS:***
		** Cumulative Weighted Grade Point Average of 3.75 or higher* ** (3) Consecutive years in the same World Language* ** (6) credits in AP or IB classes earning a grade of A or B or (4)AP or IB and (2) Dual Enrollment Credits* ** (1) credit in Experimental Research or equivalent with a grade of A or B or (1) Extended Essay, Senior Portfolio or 4th year of World Language or (1) extra AP, IB or Dual Enrollment Credit.*
TEST REQUIREMENTS		*SAME AS THE SCHOLARS DESIGNATION PATHWAY*
BILITERACY DIPLOMA		***REQUIREMENTS OF STANDARD DIPLOMA PLUS:*** **Earn four world language course credits in the same world language* **Earn a cumulative grade point average of 3.0 or higher on a 4.0 scale* **Earn a qualifying score on a world language assessment*
TEST REQUIREMENTS		*SAME AS THE STANDARD DIPLOMA PLUS* *Qualifying score on a world language assessment*
ADVANCED PLACEMENT CAPSTONE DIPLOMA		***REQUIREMENTS OF STANDARD DIPLOMA PLUS:*** **Satisfactory completion of the AP Seminar course as determined by College Board* **Satisfactory completion of the AP Research course as determined by College Board* **Satisfactory completion of four AP courses as determined by College Board*
TEST REQUIREMENTS		*SAME AS THE STANDARD DIPLOMA PLUS* *Satisfactory completion of AP courses as determined by the College Board*

Earn Your Associate in Arts (A.A.) Degree at Crooms Academy

Students at Crooms who meet specific criteria will have the opportunity to earn the credits required to receive an A.A. degree from Seminole State College as part of their high school curriculum.

What is an Associates in Arts (A.A.) degree?

An Associates in arts (A.A.) degree is designed for students to transfer as a junior to a college or university to continue their four year degree at Seminole state..

What courses do I take?

Although each student's pathway to the A.A. degree will be slightly different, depending on elective choices and AP credits, highlights of the course sequence will include:

Preparation Years

• **Ninth & Tenth Grades:** Crooms students will take high school courses and dual enrollment technology electives at the high school. Preferably students should have 2 years of World Language and 4 dual enrollment technology electives complete by the end of 10th grade. Students should take honors and AP level course work when possible to best prepare for college level course rigor.

• **Summers:** Students will be encouraged to meet some high school graduation requirements if needed, such as World Language through virtual school over the summer.

• **Eleventh & Twelfth Grades:** Participating students will take a combination of face to face and virtual dual enrollment courses at Crooms. Schedule and transportation permitting, students will also have the option to take courses not offered at Crooms face to face on Seminole State campus. Whenever possible, dual enrollment General Education courses will be scheduled to keep students in the same cohort together with the same instructor.

What are the requirements?

• Every effort will be made to support students to earn college-ready scores on the Reading, Writing and Math sections of the PERT assessment, is a prerequisite to enrollment in General Education dual enrollment courses. The score requirement must be completed by the end of 10-th grade.

• Students will be required to Maintain a 3.0 un-weighted cumulative GPA, which is a prerequisite to enrollment in General Education dual enrollment courses.

• To be eligible students must have a passing score on the Algebra 1 EOC and the 10th grade FSA ELA.

What are the Benefits?

The program offers students the opportunity to complete their first two years of college (toward a bachelor's degree) at no cost to them. All fees (tuition, fees and books) are covered.

Remember, a student does not officially start the AA Pathways Program until the 11th grade year.

General Education College Courses and Descriptions

ENC1101 - English I

This is a course in the process of expository writing. Students will read essays and compose papers that are unified, organized, logically developed and supported, clearly stated and well-focused. Research techniques are introduced and incorporated into at least one composition. This course partially satisfies the writing requirement of S.B.E. 6A-10.030. Students must pass the core assignments with a grade of "C" or higher. Prerequisite: Test scores that indicate ENC 1101 eligibility.

ENC1102 - English II

In this course students develop the ability to read literary texts critically, to think logically and creatively and to write and research effectively. Students must pass the core assignments with a grade of "C" or higher. This course partially satisfies the writing requirement of S.B.E. 6A-10.030. Prerequisite: ENC 1101 with a grade of "C" or higher.

MAC1105 - College Algebra or Higher Math Course

This course is a study of the fundamental topics in advanced algebra with emphasis on applications, the understanding of the function concept and manipulative skills. Major topics include operations on algebraic expressions and complex numbers, solving polynomial equations and inequalities, absolute value equations and inequalities and rational equations and inequalities, applications, functions, exponents and logarithms, graphs of polynomial, exponential and logarithmic functions and systems of equations and inequalities. The use of graphing calculators will be incorporated throughout the course. Prerequisite: MAT 1033 with a grade of "C" or higher or sufficient score on placement test.

STA2023 - Statistical Methods I or Higher Math Course

This course introduces descriptive statistics, probability and probability distributions, estimation, confidence intervals, hyothesis testing, two-sample inferences, correlation and regression and nonparametric tests. This course is a first course in statistical methods for those students entering a science or business-related field. Prerequisite: MAC 1105 or MAT 1033 or MAT 1100 or equivalent with a grade of "C" or higher or sufficient score on placement test.

SPC1608 - Speech Communication

The purpose of this course is to improve the basic skills of speaking and listening. Class exercises emphasize preparing and delivering public speeches, speaking with clarity and variety and listening with literal and critical comprehension.

BSC2010C - General Biology I

This course is primarily for science majors or students with a strong biology background. It is a study of the molecular and cellular composition and function of living organisms. Emphasis will be given to structure, chemical metabolism and genetic mechanisms. Laboratory illustrates basic biological principles. Prerequisites or corequisites: ENC 1101 and MAT 1033 or MAT 1100 or higher level mathematics course.

2nd General Education Science with Lab.

Popular choices include but not limited to:
CHM2045C- General Chemistry I
PHY248C- Physics with Calculus I
(Refer to link at the bottom of the page for full list)

ECO2013 - Principles of Economics (MACRO)

This is an introductory course covering the nature, scope and methods of economics, economic concepts and economic institutions. Emphasis is placed upon production, consumption, determination of prices, distribution of income, fiscal policy, national income determinants, money and banking and comparative economic systems. This course partially satisfies the writing requirement of S.B.E. 6A-10.030. Prerequisite: ENC 1101 with a grade of "C" or higher or corequisite ENC 1101.

POS2041 - United States Federal Government

In this course basic aspects of the federal government are studied. Emphasis is placed upon content and interpretation of the Constitution, Federalism, the Congress, the Presidency, the federal court system and the citizen's connection to the federal government by means of elections, political parties, interest groups and public opinion. This course partially satisfies the writing requirement of S.B.E. 6A-10.030. Prerequisite: ENC 1101 with a grade of "C" or higher or corequisite ENC 1101.

AMH2020 - United States History 1865 to Present

This course begins with the "Reconstruction" period and examines the problems of reunifying America. The nation's industrial period gets close attention, as does the rise of American cities and their accompanying social and political problems. U.S. Imperialism and the Spanish-American War are examined. The "Progressive" period, which includes emphasis on the American Labor Movement and the demand for women's rights, are included. World War I and its aftermath in the "Roaring Twenties" are analyzed. The Great Depression and World War II are detailed. The conflicts of the late twentieth century, including the Cold War, Korea, Vietnam and the American Civil Rights Movement are examined. This course partially satisfies the writing requirement of S.B.E. 6A-10.030. Prerequisite or corequisite: ENC 1101.

Two Humanities courses required.

One course must be a core course, the 2nd course must be chosen out of the opposite area (refer to link below).

Core choices Include:
HUM2020- Experiencing Humanities
PHI2010- Intro to Philosophy
ARH1000- Art Appreciation
LIT2000- Intro to Literature
MUL2120 Music Appreciation
THE2000- Theatre Appreciation

Full list of courses & descriptions can be located on the link below:
https://www.seminolestate.edu/become-a-student/what/aa-gened

Earn Your Associate in Arts (A.A.) Degree At Crooms

Preparation Year Courses

***specific courses are not required but highly recommended. Honos courses are recommended**

9th Grade		10th Grade	
English I	1.0	English II	1.0
Math (Algebra, Geometry, Algebra II)	1.0	Math (Geometry, Algebra II, Precalc)	
Science (Biology, Chemistry, *AP Biology)	1.0	Science (Chemistry, *AP Biology)	
World History (*AP option)	1.0	US History (*AP option)	
Digital Information Technology	1.0	PE/Personal Fitness	
GRA2201 Digital Imaging	3 credits	**CET1179 Network Concepts**	3 credits
DIG2000 Digital Media	3 credits	**CET1178C Network Maintenance & Repair**	3 credits
CIS2028 Intro to the IT Industry	3 credits	**DE Technology Elective - Semester 1**	3 credits
COP1000 Principles of Computer Prog.	3 credits	**DE Technology Elective - Semester 2**	3 credits
Subtotal: 12 college credits		Subtotal: 12 college credits	
SCVS Summer School			
World Language I	1.0	World Language II	1.0

Official AA Pathways Courses

11th Grade - Semester 1		11th Grade - Semster 2	
ENC1101 - English 1	3 credits	**ENC1102 - English 2**	3 credits
MAC1105 College Algebra (or higher math course)	3 credits	**STA2023 Statistical Methods I (or higher math course)**	3 credits
BSC2010C General Biology I	3 credits	**POS2041 U.S.: Federal Government**	3 credits
DE Technology Elective	3 credits	**DE Technology Elective**	3 credits
Subtotal: 12 college credit		Subtotal: 12 college credit	
12th Grade - Semester 1		**12th Grade - Semester 2**	
2nd General Science w/Lab	3 credits	**SPC1608 Speech Communications**	3 credits
ECO2013 Principles pf Economics MACRO	3 credits	**Any G.E. Humanities - Area A or B**	3 credits
HUM2020 Experiencing Humanities	3 credits	**AMH2020 US History 1865 to Present**	3 credits
DE Technology Elective	3 credits	**DE Technology Elective**	3 credits
Subtotal: 12 college credits		Subtotal: 12 college credit	

college level courses in bold

For more information, contact:
Crooms AOIT
Adriana Teague
407-320-5718
Adriana_teague@scps.k12.fl.us

AA Pathway FAQ:

When am I officially part of the AA Pathway Program?

Not until your 11th grade year pending you have college ready PERT, SAT or ACT scores, passing Algebra I EOC and FSA ELA 10th grade exam and a 3.0 GPA unweighted.

When should I take the PERT?

You will need college ready PERT scores by the end of your 10th grade year to enroll in academic dual enrollment courses. Remember, you will only have the opportunity to take the PERT twice in the Spring of 10th grade. It is beneficial to wait to the end of your tenth grade year to acquire as much knowledge as possible.

What is an unweighted GPA?

An unweighted GPA does not include any bonus quality points for taking Honors, AP or Dual Enrollment courses. It averages your grades based on 4.0 quality points for an A, 3.0 quality points for a B, 2.0 quality points for a C, 1.0 quality points for a C and 0.0 quality points for an F.

Do I have to take the recommended 9th grade and 10th grade courses to be accepted into the official AA Pathway program as an 11th grader?

Not necessarily. The only requirements to be part of the official AA Pathway program as an 11th grader are college ready PERT, SAT or ACT scores, Passing Algebra I EOC and FLA ELA exam scores and a 3.0 GPA unweighted. HOWEVER, to minimize your work load as an upperclassmen and maximize your chance of successfully completing the program, we highly recommend the classes listed for the 9th and 10th grade.

Do I have to take honors level English, math, science and social studies classes my 9th and 10th grade years in order to be accepted into the official AA Pathway program as an 11th grader?

No but it is highly recommended. It is important to remember that if you are accepted into the AA Pathway Program, you will be taking COLLEGE LEVEL English, math, science and social studies classes. Honors classes will better prepare you for the rigor of these postsecondary courses.

If I earn my AA degree at Crooms, can I still earn Bright Futures scholarships?

Yes, students can still earn and use Bright Future Scholarships for their remaining post secondary education.

Will private schools and out of state universities recognize my AA degree?

Most schools will recognize the degree, however application of credits towards a specific bachelor's degree will vary by university. We suggest you contact university admissions for more specific answers.

If I earn an AA degree at Crooms, will I have to declare my major when I start at a University?

Yes. In most cases, students who have already earned an AA degree start at a University as a junior credit wise.

If I earn the AA degree can I be considered a transfer student thru Direct Connect?

Students graduating from high school are required by the Universities to apply as a First Time Freshman. Reason being to be eligible for freshman scholarships and housing. A university may decide after review of application to accept a student as a transfer but that is up to the university.

Four Year Plan

Subjects	Graduation Requirement	Recommended for College	Grade 9	Grade 10	Grade 11	Grade 12
English	4	4	English I	English II	English III AP Lang. & Comp.	English IV AP Lit. & Comp
Math	4	4	Algebra I, Geometry, Algebra II	Geometry, Algebra II, Trig/Analysis of Functions, Pre Calc	Algebra II, Trig/ Analysis of Functions, Pre Calc, AP Calc AB, or AP Stats	Trig/Analysis of Functions, Pre Calc, AP Calc AB, AP Stats, or MCR
Science	4	4	Biology, Chemistry	Biology, Chemistry, Physical Science, AP Biology, Physics	Chemistry, AP Biology, AP Enviro, Physics, or Marine Science	Chemistry, AP Biology, AP Enviro, Physics, or Marine Science
Social Studies	3	3		World History AP World History: Modern	United States History AP American History	US Govt/Economics AP US Govt/Honors Economics
Physical Education	.5 .5	.5 .5	Physical Education Personal Fitness			
Virtual Course	1					
Fine Arts	1	1	Digital IT			
World Language		2	Spanish I or II	Spanish I or II	Spanish I or II	Spanish II
IT Elective (Required)	2	2	Digital IT	Tech. Support Systems-Client Systems Network Concepts / Network Computer Maint. & Repair		
IT Elective See Course descriptions for options	7	5				
Elective						
Total	26	26	/	/	/	/

Standard Diploma High School Graduation Options
(Students Entering 9th Grade in 2014-2015 and After)

26 credit standard diploma option available to all students, including students with disabilities	26 credit standard diploma option available only to students with disabilities**: No access courses permitted**	26 credit standard diploma available only to students with disabilities, who take **access courses** and the alternate **assessment.** *
4 Credits English Language Arts (ELA)		
• ELA I, II, III, IV • ELA honors, Advanced Placement (AP), Advanced International Certificate of Education (AICE), International Baccalaureate (IB) and dual enrollment courses may satisfy this requirement.	• Must earn credits for all of the courses listed in the first column • May substitute a **CTE** course with content related to English for **English IV** after a student study team review	• Must earn credits for all of the courses listed in the first column • May substitute access courses for general education courses • May substitute a CTE course with content related to English for English IV after a student study team review
4 Credits Mathematics		
• One of which must be Algebra I and one of which must be Geometry • Industry certifications that lead to college credit may substitute for up to two mathematics credits (except for Algebra I and Geometry) • Approved Computer Science courses can substitute for a math credit (except for Algebra I and Geometry)	• Must earn credits for all of the courses listed in the first column • May substitute a **CTE** course with content related to mathematics for one mathematics credit after a student study team review (except for EOC courses: Algebra I and Geometry) • Approved Computer Science courses can substitute for a math credit (except for Algebra I and Geometry)	• Must earn credits for all of the courses listed in the first column • May substitute access courses for general education courses • May substitute a CTE course with content related to mathematics for one mathematics credit after a student study team review (except for EOC courses: Algebra I and Geometry) • Approved Computer Science courses can substitute for a math credit (except for Algebra I and Geometry) after a student study team review.
4 Credits Science		
• One of which must be Biology I, two of which must be equally rigorous science courses • Two of the three required credits must have a laboratory component • An Industry certification that leads to college credit substitutes for up to one science credit (except for Biology I) • Approved Computer Science courses can substitute for a science credit (except for Biology I)	• Must earn credits for all of the courses listed in the first column • May substitute a CTE course with content related to science for one science credit after a student study team review (except for EOC course: Biology I) • Approved Computer Science courses can substitute for a science credit (except for Biology I) after a student study team review.	• Must earn credits for all of the courses listed in the first column • May substitute access courses for general education courses • May substitute a CTE course with content related to science for one science credit after a student study team review (except for EOC course: Biology I) • Approved Computer Science courses can substitute for a science credit (except for Biology I) after a student study team review.
3 Credits Social Studies		
• 1 credit World History • 1 credit in U.S. History • .5 credit in U.S. Government • .5 credit in Economics	• Must earn credits for all of the courses listed in the first column • May substitute a CTE course with content related to social studies for one social studies course after a student study team review (except for EOC course: U.S. History)	• Must earn credits for all of the courses listed in the first column • May substitute access courses for general education courses • May substitute a CTE course with content related to social studies for one social studies course after a student study team review (except for EOC Course: U.S. History)
1 Credit Fine and Performing Arts, Speech and Debate, or Practical Arts**		
9 Elective Credits		
• **1 Online Course (IEP Team may waive if appropriate)** • Student may also earn a nationally-recognized industry certification in information technology.	• **Must include .5 credit in an employment based course (OJT is a possibility)** • May include ESE courses • **Online Course (IEP Team may waive if appropriate)**	• May include employment based course/s • **1 Online Course (IEP Team may waive if appropriate)**
1 Credit Physical Education to include Personal Fitness		
Students must earn a 2.0 grade point average on a 4.0 scale and pass statewide assessments (FSA ELA 10th grade and Algebra 1 EOC) unless a waiver of assessment results is granted by the IEP team.		

*Parental consent is required before a student may take access courses.

**Eligible courses and eligible course substitutions are specified in the Florida Course Code Directory.

Grading Policy Information

Grade Scale

The following is the grading system for Crooms Academy of Information Technology:

Letter	Percentage
A	90–100
B	80–89
C	70–79
D	60–69
F	0—59

Grade Point Average Calculation

Cumulative Grade Point Average (GPA) is based on final grades and determined by dividing the total number of courses attempted into the total number of quality points earned. Any other course for which no letter grade is given, is not included.

Students have a Florida GPA which is unweighted and a weighted District GPA which is calculated using different weights for various grades.

Honors, Dual Enrollment and Advanced Placement courses weight grades of C or better. The chart below indicates the quality points each grade carriers for both types of GPA.

Letter Grade	Quality Points	Quality Points	Quality Points
	Unweighted	Honors	Dual & AP
A	4	4.5	5
B	3	3.5	4
C	2	2.5	3
D	1	1	1
F	0	0	0

Recognition of Academic Excellence

Honor Roll, Dean's List, and Principal's List are open to all students. These lists are prepared as follows:

1. Grade point averages are weighted and include all courses for which a letter grade is given.
2. Students carrying at least three on campus courses are eligible.
3. Any grade lower than a "C" automatically disqualifies a student.
4. The minimum GPA for Honor Roll is 3.0, for the Dean's List is 3.5, and for the Principal's List is 3.8. These averages are not rounded off; therefore a GPA of 2.99, 3.49, and 3.79 respectively are not sufficient.

EOC/Competency Testing Requirement

According to Florida law, students must meet all academic requirements in order to receive a standard high school diploma from a public school. This means that students must take required courses, earn the correct number of credits, and maintain a passing grade point average. Students who meet these requirements, but do not pass the required assessments for a high school diploma, will receive a Certificate of Completion. Students are to have taken and passed the Algebra I and 10th grade Reading FSA. Concordant scores are as follows:

*Algebra I - PSAT/NMSQT 430, SAT 420, ACT 16

*FSA ELA 10 - ACT Reading 19 or SAT EBRW 480 or ACT an average score of 18 on English & Reading Subtests

How Do I Earn College Credit at Crooms?

	Advanced Placement	Dual Enrollment
Entrance Requirements	Success in honors-level courses and pre-requisite coursework if applicable.	2.5 unweighted GPA; 3.0 unweighted GPA for AA Pathway PERT Scores required for AA by end of sophomore year: Reading 106; Writing 103; Math 123 Pre-requisites if applicable
How is College Credit Earned?	By scoring a 3 or better on the AP Exam administered in May	Successful completion of the course
How does Credit Appear on Transcript?	As a 1 credit AP course weighted with the highest quality points.	As a .5 or a 1.0 credit course depending on the articulation agreement on the high school transcript weighted with the highest quality points. As 3 or 4 hours of credit on the college transcript.
Who Accepts College Credit?	All 2-year colleges and most 4-year colleges/universities.	All 2-year colleges and most 4-year colleges/universities
Other Course Requirements	Students must maintain a passing grade in coursework in order to sit for the exam.	
Courses Offered	AP Psychology AP World History AP United States History AP U.S. Government & Politics AP Biology AP Physics 1 AP Environmental Science AP English Language AP English Literature AP Calculus AB AP Computer Science A AP Statistics	Including but not limited to: CISCO Network Fund. CISCO Router Technology. CISCO Scaling Networks CISCO Connecting Networks SQL Data Driven Websites Database Management Network Concepts Net Comp Main/Repair Web Programming I Web Programming II Digital Imaging I Intro to Digital Media Computer Applications Adv. Computer Applications Principles Comp. Program Intro to UNIX Java Programming Advanced Java Programming Intro to Internet Security Intro to IP Telephony Intro to Wireless Tech. C++ Programming Simulation & Gaming Fund 1 Python Programming Intro to Data Analysis Advanced JavaScript Design Fundamentals 3D Modeling & Animation Intro to the IT Industry

*In all of the above courses, students who enroll must remain until the completion of the course.
** Course availability based on SSC offerings and classes may be taught at Crooms or online through Seminole State

As per the Seminole County Public Schools Student Progression Plan, "Students enrolled in an approved dual enrollment course are exempt from the payment of registration, tuition, and laboratory fees for no more than nine credit hours per semester". AA Pathways students will take four Dual Enrollment courses per semester.

Florida's Bright Futures Scholarship Program

*Subject to change with legislation

	Florida Academic Scholars Award	Florida Medallion Scholars Award	Florida Gold Seal Vocational Scholars*
2017-18 Award Amounts	4 Year/Semester Hour Award—**100%*** *To a public institution	4 Year/Semester Hour Award—**$77.00**	Career Certificate—**$39.00**
	2 Year/Semester Hour Award—**$63.00**	2 Year/Semester Hour Award—**$63.00**	Applied Technology Diploma—**$39.00**
			Technical Degree Education—**$48.00**
Weighted GPA	**3.5**	**3.0**	**3.0 cumulative with a 3.5 in 3 program courses**
Opportunities for Additional Credit Required Credits	4 English	4 English	4 English
	4 Mathematics	4 Mathematics	4 Mathematics
	3 Science	3 Science	3 Science
	3 Social Science	3 Social Science	3 Social Science
	2 World Language	2 World Language	1 Practical Art/Fine Art
			1 Physical Education
			3 sequential technology classes with 3.5 GPA in these courses
Community Service	**100** Hours	**75** Hours	**30** Hours
Test Scores	**Class of 2021** SAT = **1330** or ACT = **29**	**Class of 2021** SAT = **1210** or ACT = **25**	**Class of 2021** **ACT** Scores Reading **19** English **17** Math **19** or **SAT** Scores Verbal **440** Math **440 or** **PERT Scores** **Reading 106** **Writing 103** **Math 114**

* Beginning with the 2016-17 high school graduates, students who earn a Gold Seal CAPE (GSC) award and attain an AS or AAS degree may receive an additional 60 hours of funding toward a qualifying BS or BAS degree program.

In order to be eligible for an initial award from any of the three types of scholarships under the Florida Bright Futures Scholarship Program, a student must:

- Be a Florida resident. Earn a standard Florida high school diploma
- Be accepted by and enrolled in an eligible Florida public or independent postsecondary education institution.
- Be enrolled for at least 6 non-remedial semester credit hours or the equivalent in quarter hours or clock hours.
- Not have been found guilty of, or entered a plea of no contest to, a felony charge.
- Application opens October 1st of student's senior year

The School Counselors will be available to any senior requesting additional assistance with their application.

NAF Track Certification

NAFTrack Certification is achieved through an online system created by education and business leaders to assess college and career readiness. NAF uses a multi-method approach to assess students on a broad range of skills. Student performance is measured through career-related coursework, a qualifying internship, and high school graduation. Upon successful completion of NAFTrack Certification, students are eligible for NAFTrack Certified Hiring!

NAFTrack Certification helps students...

- Make the connection between their high school coursework and their futures
- Reflect on their own learning in order to set goals for personal and professional development
- Gain proficiency in taking online assessments, which are becoming more prevalent in higher education
- Demonstrate the hard and soft skills they develop throughout their academy experience
- Get on track to NAFTrack Certified Hiring, a commitment made by top companies to give special consideration to NAFTrack certified job applicants

Career Coursework

Each NAF course has a culminating project and end-of-course exam, but academies may choose other approved certification pathways that do not include a culminating project. NAF culminating projects and end-of-course exams are designed to assess mastery of content and a variety of skills including: critical thinking, problem solving, teamwork/ collaboration, innovation, written communitcation, and quantitative reasoning.

Qualifying Internship

Students are assessed by their internship provider. Internship requirements include:

- 120 hours or two 60+ hour internships
- Direct supervision by an accountable adult who is not the student's teacher
- Produces work of value to an employer
- Written individualized learning plan connected to student learning outcomes
- Completion of the NAFTrack Internship Assessment by the student intern's supervisor at the end of the internship
- Interns are paid at no less than the applicable state or local minimum wage, which may be a youth minimum wage if permitted by state or local law

High School Graduation

As the final component of NAFTrack Certification, students must complete all school and district requirements for high school graduation.

Principals or their designee at the academy confirm that students are truly college ready and poised to enter the next phase of career preparation.

Career Success Program

As a member of the National Academy Foundation-NAF, Crooms AOIT embraces the NAF Design, which includes : Academy Development & Structure, Curriculum & Instruction, Advisory Board, Work-Based Learning

The Crooms Business Advisory Council support the pillars of the NAF Design. Work-based learning programs are infused in the academic and applied technology courses to ensure that students are future ready for college and the work place. All students are required to participate in the career programs with the support of the Junior Achievement partnership. Specific programs will be offered to students through the English, World History, and DIT courses. Students will earn a certificate of completion to include in their culminating activity of the Senior Portfolio Project. All programs require student participation to meet the NAF guidelines. Students who additionally participate in the Internship Program have the opportunity to earn the NAFTrack Certification.

Very Important: All seniors at Crooms AOIT must participate in the Seniors Portfolio Project as is encompasses all parts of our career education components. Crooms AOIT is a member of NAF. Every NAF Academy has a senior project outlined as a culminating activity. This project comes through the senior English class. However, if you do NOT have an English class or in the AA Pathway Program, you will still be required to participate in this project. ***Failure to participate in the Senior Portfolio will exclude you from participating in senior privileges such as Senior Lunch, Grad Bash, and the Senior Picnic as well as the inability to apply for our Business Advisory Council (BAC) scholarships.***

Fine Arts

Chorus I, II, III, IV
1303300 (Year 1),1303310 (Year 2), 1303320 (Year 3) 1303330 (Year 4)
Prerequisite: None for Chorus I

1 Credit **Grades 9-12**

Chorus I is to enable students to develop basic to advanced individual and ensemble skills in choral performance through preparation of musical theory, music history, and varied high school choral literature. Emphasis will be placed on healthy and expressive singing, accurate interpretation of notation, and development of critical and aesthetic response to music.
On and off campus performances are required during and after school.

Music Technology & Sound Engineering
1304300

1 Credit **Grades 10-12**

Students will learn fundamental music terminology, literacy, performance, composition, distribution, and sound reinforcement through the use of digital sequencing tools such as FL Studio.

Instrumental Techniques I, II, III, & IV (Steel Band)
1302420 (Year 1), 1302430 (Year 2), 1302440 (Year 3), 1302450 (Year 4)

1 Credit **Grade 9-12**

Students will develop basic performance skills on selected percussion instruments in small ensemble and solo settings using a varied repertoire of musical literature. Performance techniques, music knowledge, critical analysis, and aesthetic response will be emphasized.
On and off campus performances are required during and after school.

Personal Skills & Leadership Development

Student Assistant Program
Office: 2104350/2104360
Teacher: 1700380/14003300T
Prerequisite: Must be a Senior, 3.0 unweighted GPA, maintain good attendance

1 Credit **Grade 12**

Courses are only open for Seniors with a 3.0 unweighted GPA or better, students must also maintain excellent attendance.The purpose of the course is to enable students to develop intermediate level knowledge and skills in communication and participate in operations and office duties as assigned. Students will be assigned to strategic areas of the campus such as Student Services, Media Center or Specific Teacher etc. These courses will be offered only as pass/ fail to students.

Leadership Skills Development
2400300 (Year 1), 2400310 (Year 2), 0500520 (Year 3)
Prerequisite: 3.0 GPA and by application only

1 Credit **Grades 9-12**

Leadership is comprised of students who hold leadership positions on campus. Priority is given to student government and senior class officers, then other club or organization officers, publications, editors, etc.. The class is project-focused and offers students the opportunity to learn about leadership styles and techniques, group dynamics, and team building. Students participate in and lead a variety of school and community activities.
Applications are available on the school website and due by March 24.

http://www.cait.scps.k12.fl.us/resources/forms-and-documents.stml

World Languages

Spanish I
0708340
Prerequisite: None
1 Credit **Grades 9-11**

This introductory course is for students with little or no prior knowledge of Spanish. Students are exposed to authentic materials and text rich in culture and literature. They will develop listening and speaking skills through conversation. The present tense of reading and writing skills will be emphasized.

Spanish II
0708350
Prerequisite: Spanish I
1 Credit **Grades 9-12**

This course emphasizes reading and writing at the intermediate level, with a focus on the past tenses. Students will continue to develop their speaking and listening skills as well. Structures taught in Spanish I will be reviewed prior to the presentation of new material. Students will gain a better understanding of various aspects of the Hispanic culture.

Spanish III Honors
0708360
Prerequisite: Spanish II
1 Credit **Grades 10-12**

This course focuses on everyday communication and prepares the students to speak and write appropriately in the language, in a variety of situations. Listening, speaking, reading, and writing skills at the advanced level are learned and applied through the use of authentic materials from Spain and Latin America. The course offers further insights into the Hispanic culture.

Virtual options for world languages include: American Sign Language, Latin, French, Spanish, and Chinese. See FLVS.net for other options but choose Seminole County's virtual school option if available.

graphic from inlingua.edu

Physical Education

Wellness & Technology

These courses integrate technology into the curriculum. Wellness education revolves around the total person's intellectual, physical, emotional, spiritual, and social fitness. Each person must develop his or her unique pathway to wellness. A key factor in achieving wellness is developing an integrated and balanced lifestyle. The curriculum for personal fitness and health life management skills provide students with multiple opportunities to understand the importance of health concepts and significance of lifestyle on one's health and fitness. Physical Education and Health are the only subjects which, by the very nature of their content have the potential to affect how a person will feel every moment of every day for the rest of his or her life.

Personal Fitness
Graduation Requirement
1501300
Prerequisite: None

.5 Credit **Grades 9-12**

The Personal Fitness curriculum focuses on students learning the benefits of an active lifestyle and how to become their own personal trainer. Students will learn how to train. All areas of health-related fitness based on the FITT Formula and target zone for fitness. Interval training, circuit training, and weight training. All are used to help increase fitness performance. Student's current health will be measured using Fitness Gains. This course is required for graduation.

Team Sports I
1503350
Prerequisite: None

.5 Credit **Grades 9-12**

This course focuses on development of fundamental skills, techniques, rules and terminology of selected team sports. Safety practices such as injury prevention through proper warm-up and cool-down procedures will be emphasized. Students will describe and demonstrate strategies utilized in selected team sports. Students will be able to self officiate games based on rules learned.

Team Sports II
1503360
Prerequisite: Team Sports I

.5 Credit **Grades 9-12**

This course focuses on the development of fundamental and advanced skills, techniques, rules and terminology, and offensive and defensive strategies of selected team sports. It continues to cover topics taught in Team Sports I. Students will be able to officiate their own games.

Individual/Dual Sports
1502410
Prerequisite: Team Sports I

.5 Credit **Grades 9-12**

This course is designed to provide learning experiences that will lead to the development of basic skills, knowledge, and techniques for a variety of recreational activities. Students will be expected to participate in moderate to vigorous activities, including kickball, pickle ball, badminton, as well as group games and exercises.

Language Arts

English I
Graduation Requirement
1001310

1 Credit **Grade 9**

This course provides instruction in the fundamentals of grammar, writing and vocabulary, and literature (including nonfiction), poetry, and drama. Reading and writing strategies are based on FSA power benchmarks as assessed on the 9th grade FSA reading test. These strategies will be used to enhance higher level thinking skills. ** All students testing below grade level (levels 1&2) on the 8th and 9th grade FSA Reading test will also be placed in an Intensive Reading class.

English I Honors
Graduation Requirement
1001320

1 Credit **Grade 9**

This course provides advanced instruction in the fundamentals of grammar, writing and vocabulary, and literature (including nonfiction), poetry, and drama. Reading and writing strategies are based on FSA power benchmarks as assessed on the 9th grade FSA reading test. These strategies will be used to enhance higher level thinking skills. Students in this course should expect outside reading and writing assignments.

English II
Graduation Requirement
1001340

1 Credit **Grade 10**

This course continues to incorporate reading and writing skills developed in English I. Students will be exposed to world literature through various projects, papers, presentations, and readings. Emphasis will be placed on literatures of various cultures (fiction and nonfiction) as well as a variety of genres. Additionally, students will complete intensive practice activities reinforcing power benchmarks needed to succeed on the FSA Writing exam and FSA Reading.
** All students testing below grade level (levels 1&2) on the 9th and 10th grade FSA Reading test will also be placed in an Intensive Reading class.

English II Honors
Graduation Requirement
1001350

1 Credit **Grade 10**

This course continues to incorporate higher level reading and writing skills developed in English I. Students will be exposed to world literature through various projects, papers, presentations, and readings. Emphasis will be placed on literatures of various cultures (fiction and nonfiction) as well as a variety of genres. Additionally, students will complete intensive practice activities reinforcing power benchmarks needed to succeed on the FSA Writing exam and FSA Reading exam. Students in this course can expect outside reading and writing assignments.

English III
Graduation Requirement
1001370

1 Credit **Grade 11**

This course continues to incorporate higher level reading skills through a survey of American Literature. Writing exercises become more extensive with emphasis on multi-paragraph essays as well as documented papers, position papers, and research papers. Additionally, students will complete intensive practice activities reinforcing power benchmarks needed to succeed on the FSA Writing exam and FSA Reading. SAT and college preparation become more focused. ** All students testing below grade level (levels 1&2) on the 9th, 10th and 11th grade FSA Reading test will also be placed in an Intensive Reading class.

English III Honors
Graduation Requirement
1001380

1 Credit **Grade 11**

This course continues to incorporate higher level reading skills through a survey of American Literature. Writing exercises become more extensive with emphasis on multi-paragraph essays as well as documented papers, position papers, and research papers. SAT and college preparation become more focused. Additionally, students will complete intensive practice activities reinforcing power benchmarks needed to succeed on the FSA Writing exam and FSA Reading exam. Students in this course can expect outside reading and writing.

Language Arts

English IV FL College Prep
Graduation Requirement
1001405

1 Credit **Grade 12**

Placement in this course is required for students requesting a 12th grade level language arts course who have not demonstrated college readiness as determined by test scores on the ACT or SAT. This course incorporates reading and writing study through writing a variety of informative text using grade-level writing craft and through the in-depth reading and analysis of informational selections in order to develop critical reading and writing skills necessary for success in college courses. This course prepares students for successful completion of Florida college English courses. The benchmarks reflect the Florida College Competencies necessary for entry-level college courses and are also related to the College and Career Readiness (CCR) anchor standards, the exit standards of Florida's K-12 Common Core Standards.

English IV Honors
Graduation Requirement
1001410

1 Credit **Grade 12**

In this course the primary emphasis on writing is critical analysis of literature and refining composition skills. Writing assignments include an extensive research paper that pairs with the student's professional portfolio. Additional writing projects include the college essay as well as extensive SAT practice. The literature is a survey in British literature and the course prepares students for college programs. Students in this course can expect outside reading and writing.

AP English Language & Composition
Fullfills Graduation Requirement
1001420

1 Credit **Grade 11**

The purpose of this course is to provide students with an understanding of the semantic, structural, and rhetorical aspects of the English language. The course is designed to develop flexible writers who are able to write in various modes for a variety of purposes. Based on the results of the Advanced Placement exam, college credit may be awarded by participating colleges and universities.

AP English Literature & Composition
Fullfills Graduation Requirement
1001430

1 Credit **Grade 12**

Students study and discuss great works of literature from various genres and periods. Designed to develop the students' understanding of style, subject, and audience, frequent reading and writing assignments focus on the critical analysis of literature. Based on the results of the Advanced Placement exam, college credit may be awarded by participating colleges and universities.

Reading

High School Reading Placement

Students in grades 9 and 10 who do not meet the requirements for satisfactory performance in English on FSA, may be enrolled the following year in and accelerated reading support program.

Schools will continue to make decisions that are in the best interest of each student regarding course enrollment and instructional support for students entering their junior and senior year who have not demonstrated college readiness on the SAT, ACT, or through mastery of standards in mathematics or English language arts courses. Acceleration support courses taken in grades 9-12 may be taken only as elective credits for high school graduation. Acceleration support instruction may not be in lieu of English credits required for graduation.

Reading

These courses are assigned based on assessment results

9th Grade Intensive Reading

1 credit **Grade 9**

This course is created for fluent readers who need a less intense level of support of literacy skills necessary to pass FSA reading. The course uses a variety of texts to teach students strategies to develop and build literacy strategies and comprehension and writing skills. Students work on vocabulary and critical thinking skills while reading both fiction and non-fiction material. The ReadingPlus software program provides a computerized supplement for independent practice for 30 minutes three times per week. Placement is based on previous FSA level and other individual assessments.

10th Grade Intensive Reading

1 credit **Grade 10**

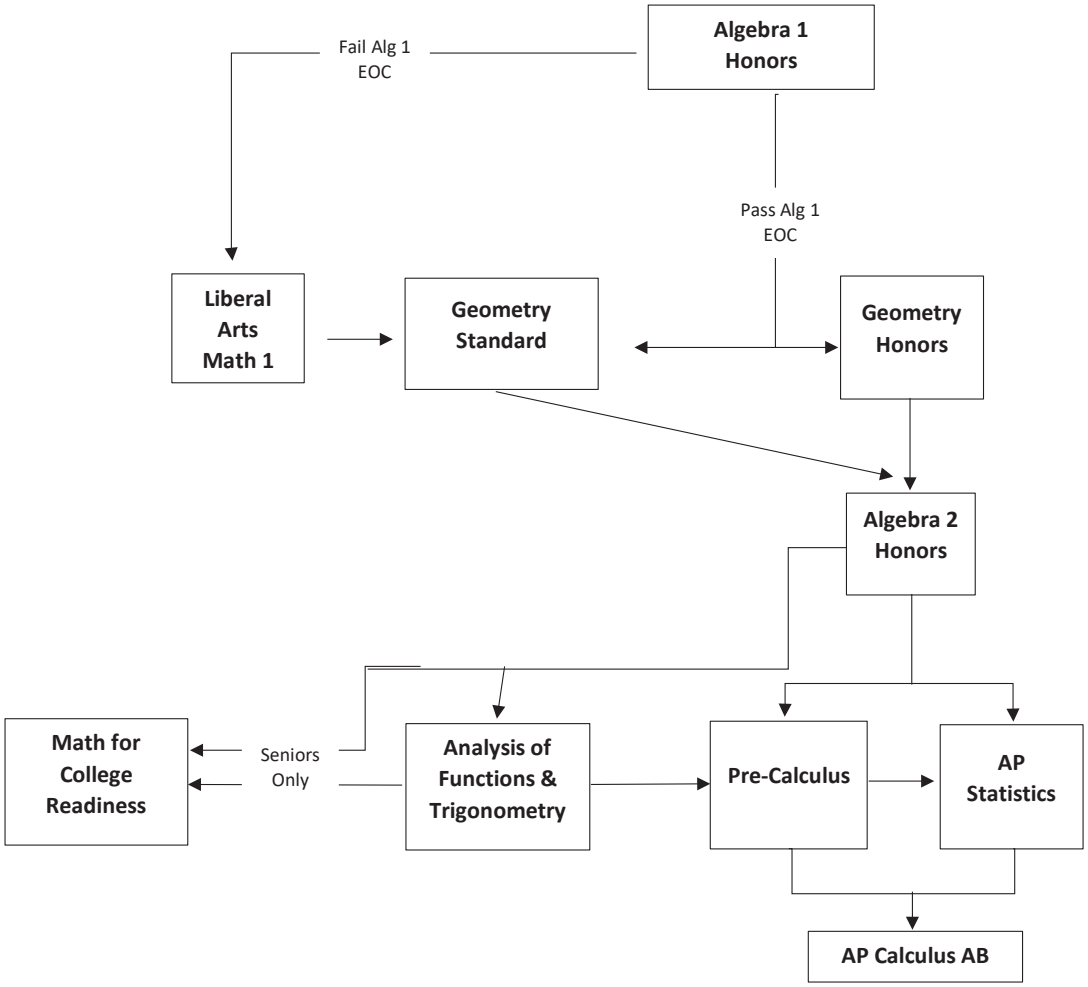
This course is created for students who are not yet fluent readers and need additional support on reading skills necessary to pass the FSA. The course utilizes whole group and small group individualized instruction, as well as independent learning opportunities through computer assisted instruction, audio books and independent reading. This program is wide-ranging; building fluency, vocabulary and comprehension. Placement is based on previous FSA level and other individual assessments. By working in the web-based program ReadingPlus, students are assessed and then receive individualized reading intervention to build reading efficiency and comprehension.

11th/12th Grade Intensive Reading

1 credit **Grade 11/12**

This course is created for fluent readers who need a less intense level of support of literacy skills necessary to pass FSA reading. The course uses a variety of texts to teach students strategies to develop and build literacy strategies and comprehension and writing skills. Students work on vocabulary and critical thinking skills while reading both fiction and non-fiction material. In addition, students are focused on the FSA retake in the fall and ACT and SAT prep in the spring. The Reading Plus software program provides a computerized supplement for independent practice. Placement is based on previous FSA level and other individual assessments.

2021-2022
Math Course Sequence



Mathematics

Algebra I Honors
Graduation Requirement
1200320
Prerequisite: 8th Grade Math

1 Credit **Grade 9**

Algebra I Honors includes a rigorous, in-depth study of all of the topics included in Algebra I as well as Binomial theorem, solving radical and rational equations, systems of nonlinear functions, inverse functions, deeper exploration of arithmetic and geometric sequences and series. A graphing calculator is required for Algebra I Honors. It is strongly recommended that students taking this course have successfully completed their previous math course. Additionally, students will work on test taking skills and problem solving techniques to prepare for the End of Course Exam (EOC). Algebra I or its equivalent course is required for high school graduation.

Geometry
Graduation Requirement
1206310
Prerequisite: Algebra I

1 Credit **Grades 9-10**

This course is designed to develop critical thinking skills in mathematical situations using deduction and discovery. Practical applications of geometric skills and concepts in the real world are included. Topics include, but not limited to: logic and reasoning, proofs, the study of Euclidean geometry of lines, planes, angles, triangles, similarity, rigid transformations, congruence, geometric inequalities, explorations with polygons and circles, area and volume, and constructions. Additionally, students will work on test taking skills and problem solving techniques to prepare for the End of Course Exam (EOC).

Geometry Honors
Graduation Requirement
1206320
Prerequisite: Algebra I

1 Credit **Grades 9-10**

This course includes a rigorous, in-depth study of all of the Geometry topics as well as, but not limited to: in depth constructions, Cavalieri's principle, proving and applying laws of sines and cosines in non-right triangles, and conic sections. A graphing calculator is required. It is strongly recommended that students taking this course have successfully completed their previous math course. Additionally, students will work on test taking skills and problem solving techniques to prepare for the End of Course Exam (EOC).

Algebra II Honors
1200340
Prerequisite: Geometry

1 Credit **Grades 9-12**

This course includes a rigorous, in-depth study of all the Algebra II topics except rational expressions and equations, absolute value equations and inequalities, recursive formulas for arithmetic and geometric sequences, and normal distributions, which students are expected to have a solid understanding in from Algebra I Honors. Additional topics studied in this course include, but are not limited to: piecewise functions, binomial expansion theorem, discontinuities, asymptotic behavior in rational graphs, non-linear systems of equations, conic sections and partial sums of arithmetic and geometric series. A graphing calculator is required. It is strongly recommended that students taking this course have successfully completed their previous math course.

Mathematics

Pre-Calculus Honors
1202340
Prerequisite: Algebra II Honors or Analysis of Functions and Trigonometry
1 Credit **Grades 10-12**

Pre-Calculus is designed to provide a foundation for the study of Calculus. Topics include analysis of algebraic, exponential, polynomial, rational, logarithmic, and trigonometric functions, intermediate and extreme value theorems, analytic geometry, vectors, polar and parametric equations, complex number system, and infinite series, with an introduction to limits and continuity. A graphing calculator is required.

Mathematics for College Readiness
1200700
1 Credit **Grade 12**

This course is designed to meet the needs of seniors who plan to attend college. Projects designed to help students research and apply to colleges, make a preliminary two-year course plan, and schedule first semester college classes will be incorporated throughout the year. Topics include but are not limited to simplify polynomial expressions with math properties and exponents, prove polynomial identities, simplify and solve rational and radical equations, solve systems of equations graphically and algebraically, transform polynomial functions, statistical linear regression analysis, and analyze domain and range. This course is supplemented with a graphing calculator. The standards align with the Mathematics Postsecondary Readiness Competencies deemed necessary for entry-level college courses.

AP Statistics
1210320
Prerequisite: Algebra II
1 Credit Each **Grade 10-12**

The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP Statistics course: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding.

Analysis of Functions Honors
1201315
Prerequisite: Algebra II
.5 Credit **Grades 10-12**

This course is designed to give students the knowledge and understanding that will enable them to make appropriate decisions in financial management. Topics include but are not limited to linear equations and inequalities, systems of linear equations, exponential growth and decay, simple & compound interest, future value, present value, finance charges, deferred payments, fees associated with a mortgage, balloon mortgage, points, personal budget, federal income tax, insurance options and fees, retirement plans, diversification in investments, stocks and bonds.

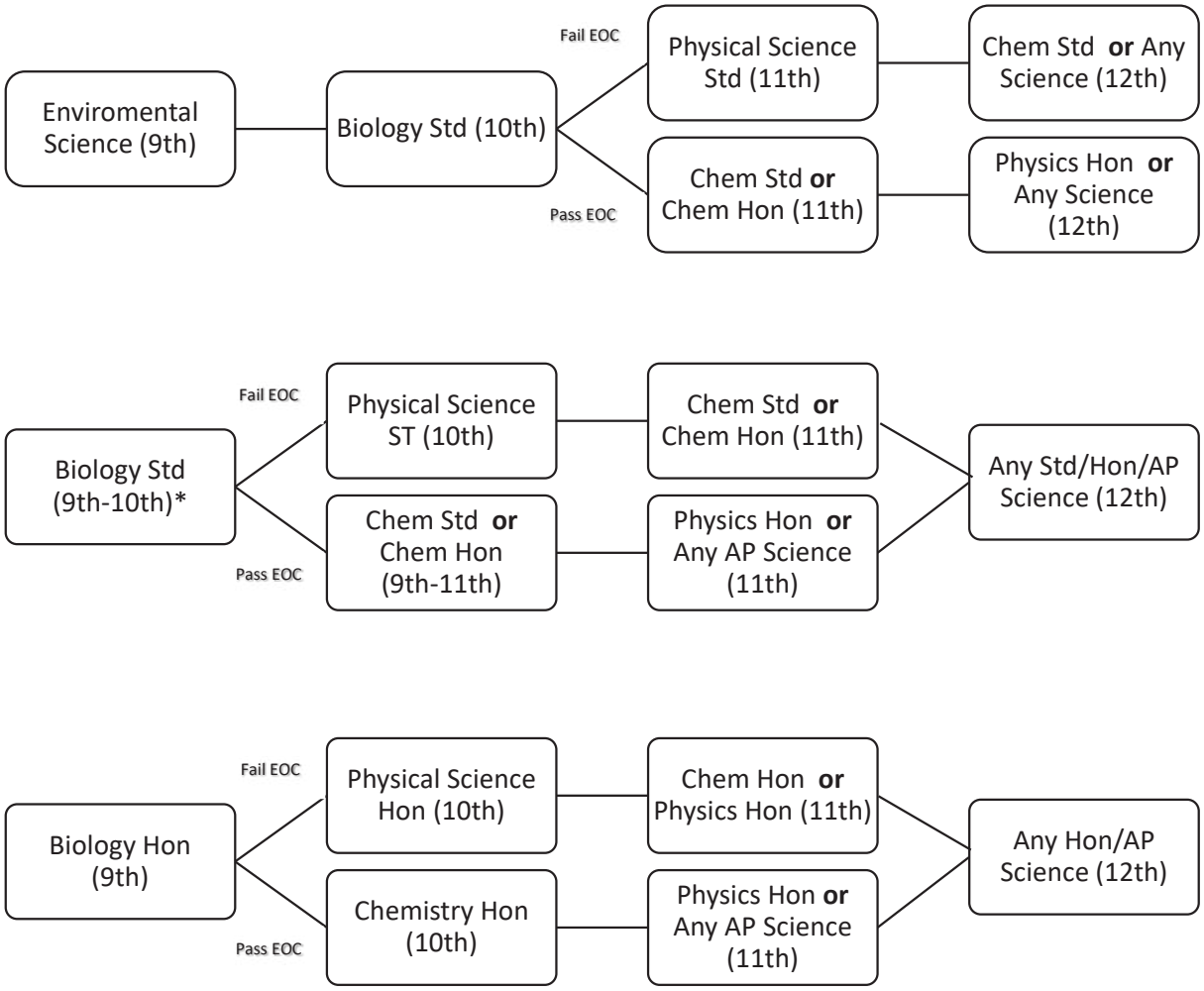
Trigonometry Honors
1211300
Prerequisite: Analysis of Functions
.5 Credit **Grades 10-12**

This course is a semester-long follow up to Analysis of Functions prepares students to be successful in Precalculus. Topics include but are not limited to circular functions; trigonometric identities; graphs of trigonometric functions; particular and general solutions of trigonometric equations; and solutions of right and oblique triangles; prove Pythagorean identities; using trigonometry in a complex plane; using trigonometry with vectors. A graphing calculator is required.

AP Calculus AB
1202310
Prerequisite: Pre-calculus
1 Credit **Grade 11-12**

AP Calculus is designed for the highly motivated college-bound student who wishes to pursue college level work while still in high school. This course is intended for students who have a thorough knowledge of college preparatory mathematics and elementary (algebraic, trigonometric, exponential, and logarithmic) functions. AB (Calculus I) topics include limits and continuity, derivatives and integrals, and their applications. Based on the results of the AP exam, college credit may be awarded by participating colleges and universities. A graphing calculator is required.

2021-2022 Science Progression



*AP Sciences: as early as 10th grade

Science

Biology I
Graduation Requirement
20003100

1 Credit — Grade 9-10

This course is designed to help students develop skills in the areas of cooperative learning, critical thinking, the scientific method, and the utilization of technology in the research of contemporary problems and issues. The study of life processes will include measurement, cellular biology, genetics, ecology, animal and plant anatomy and physiology, as well as an introduction to the structure and function of the human body. Laboratory activities and safe laboratory techniques are an essential component of the course.

Biology I Honors
Graduation Requirement
2000320

1 Credit — Grade 9

In this course students will explore the relationship between organisms and their environments, and between individual cells and biological systems. The processes of life will be approached from the viewpoints of cellular structure and function, genetics and molecular biology, classification of organisms, physiology, biochemistry, and biological changes through time. Students will be presented scientific concepts at an advanced level. Laboratory activities are a significant component in the course and offer students an opportunity to become familiar with scientific instruments and experimental methods.

Physical Science
2003310
Prerequisite: Biology

1 Credit — Grades 10-11

This course will prepare students understand the role of chemical and physical technology in everyday life and society. Laboratory activities and safe laboratory techniques are an essential component and allow students to become familiar with scientific instruments and methods as well as provide opportunities to study the concepts of matter, energy, and forces, and their applications through exploratory investigations and activities. This course fulfills the graduation requirement for an "Equally Rigorous Course" as defined by the Florida Department of Education.

Chemistry I
2003340
Prerequisite: Biology I

1 Credit — Grade 9-12

The purpose of this course is to introduce students to the study of the composition, properties and changes associated with matter. Some topics include atomic structure of matter, periodic table as an informational tool, types of chemical bonding, kinetic molecular theory, and water solutions. Laboratory activities and safe laboratory techniques are essential components of the course.

Chemistry I Honors
2003350
Prerequisite: Biology I Honors

1 Credit — Grade 9-12

In this course, students will study composition, properties and changes associated with matter. The content includes: measurement, classification and structure of matter, atomic theory, moles, periodicity, chemical bonding, formula writing, nomenclature, chemical equations, stoichiometry, kinetic theory, gas laws, acids and bases, energy relationships, solids, liquids and solutions. Laboratory activities and safe laboratory techniques are taught.

Physics I Honors
2003390
Prerequisite: Geometry

1 Credit — Grades 10-12

This course will provide students with an introductory study of the theories and laws governing the interaction of matter, energy, and the forces of nature. The content shall include, but is not limited to, mechanics, wave phenomena, electricity, magnetism, optics and sound. Laboratory activities and safe laboratory techniques are essential components of the course.

Marine Science I
2002500
Prerequisite: Biology I

1 Credit — Grade 12

The purpose of this course is to provide students with an understanding of the coastlines and tidal zones, tropical ocean and reef inhabitants, and deep marine organisms. Economic implications of marine resources and the impact of pollution of marine environment will be included. Laboratory activities and safe laboratory techniques are an essential component of this course and offer students an opportunity to become familiar with scientific instruments and methods.

Science

AP Biology
2000340
Prerequisite: Biology & Chemistry
1 Credit Grade 10-12

This course is designed to be the equivalent of a two-semester college introductory biology course. Students will engage in an in-depth study of the following three areas: molecules and cells, heredity and evolution, and organisms and populations. The two main goals of AP Biology are to help students develop a conceptual framework for modern biology and an appreciation of science as a process.

AP Physics I
2003421
Prerequisite: Biology & Algebra II
1 Credit Grades 11-12

Algebra-based is the equivalent to a first-semester college course in algebra-based physics. It has been written to serve as a first physics course for high school students. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It will also introduce electric circuits. During the course, students will prepare for the AP Physics I exam.

AP Environmental Science
2001380
Prerequisite: Biology & Chemistry
1 Credit Grades 10-12

The AP Environmental Science is a rigorous course designed to be the equivalent of a one semester, introductory college course in environmental science. The goal of this interdisciplinary course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world in order to identify and analyze environmental problems that are natural and human-made. Students will evaluate the relative risks associated with these problems and examine alternative solutions for resolving or preventing these issues. Laboratories will support student content mastery in the course.

Drivers Education

Driver Education
(After School Program)
1900310
Prerequisite: Students must be 15 years old and hold a valid Learner's permit.
.5 Credit Grades 9-12

An after school driver education program is offered each semester at Lyman, Seminole and Winter Springs High Schools. The program includes classroom instruction, range driving and on the road driving. Students must hold a valid Florida Learner's License to be eligible for the program. Students that successfully complete the program earn .5 credit. The program is open to all students in Seminole County regardless of the high school that they attend.

Students attend classes two days a week, either Monday and Wednesday or Tuesday and Thursday from 3:15-5:15 PM. Transportation is not provided. There is no cost for the program. Applications are available at the high schools.

* This program is a collaborative effort between Seminole County Government, the municipalities; METROPLAN Orlando and Seminole County Public Schools in an effort to better prepare our teen drivers and enhance the safety on our roadways.

Please consult the SCPS Student Progression Plan for information on waivers for the requirements for physical education, fine arts and specific science courses prior to registration.

Applications are available in the Student Services Offices at each high school prior to each semester or at the link below.

https://www.scps.k12.fl.us/district/departments/teaching-learning/special-programs/drivers-ed.stml

Social Studies

World History Honors
Graduation Requirement
2109320

1 Credit **Grades 9-10**

This course will provide an understanding of the contemporary world through an overview of the growth of world religions, the development of political traditions, contemporary world cultures, and current international events. While reading and writing strategies are incorporated in both courses, World History will put a stronger emphasis on using content to reinforce reading skills. Whereas, World History Honors will focus on research and writing methods to further deepen historical analytical skills.

****AA Pathways students may start their social studies progression with World History Honors or AP World History in the 9th grade.**

AP World History: Modern
Fullfills Graduation Requirement
2109420

1 Credit **Grade 9-12**

This course will develop a greater understanding of the evolution of global processes and contacts, in interaction with different types of human societies. This understanding is advanced by a combination of selective factual knowledge and appropriate analytical skills. The course highlights the nature of changes in international frameworks and their causes and consequences, as well as comparisons among major societies. The course is focused on the past thousand years of the global experience building on the understanding of cultural, institutional, and technological precedents that along with geography, set the stage prior to 1000 C.E.

****AA Pathways students may start their social studies progression with World History Honors or AP World History in the 9th grade.**

United States History Honors
Graduation Requirement
2100320

1 Credit **Grade 10-11**

This course is designed to help students develop an understanding of American history. The course begins with a two week review of colonization to reconstruction The course continues with an in-depth study of America's rise to power, the Populist and Progressive movements, World War I, and the Crash. This in-depth study continues with an examination of the Depression, World War II, the 50's, 60's, the Vietnam War, Watergate, and the new millennium. While reading and writing strategies are incorporated in both courses. American History will put a stronger emphasis on using content to reinforce reading skills. Whereas, American History Honors will focus on research and writing methods to further deepen historical analytical skills.

AP United States History
Fullfills Graduation Requirement
2100330
Prerequisite: World History

1 Credit **Grade 10-12**

This course includes advanced content in American history, emphasizing critical essay writing, primary and secondary source research techniques, and in-depth interpretations, and analysis of the traditional historical periods of a chronological survey in American history. The content covered begins with pre-Columbian North American society to present day.

AP Psychology
2107350

1 Credit **Grades 11-12**

This course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and animals. Students will study the psychological facts, principles and phenomena associated with each of the major subfields within psychology. Students will also learn about the methods psychologists use in their science and practice. Students will also learn stress management skills.

Social Studies

U.S. Government and Politics Honors Graduation Requirement 2106320

.5 Credit **Grade 12**

This course provides students the opportunity to acquire an understanding of American government and political behavior. Content will include an analysis of documents which shape our political traditions, a comparison of the roles of the three branches of government at the local, state and national levels, a study of state and local government, an understanding of the evolving role of political parties, interest groups, and the media in determining government policy, how the rights and responsibilities of citizens in a democratic state have evolved and been interpreted, and the importance of civic participation in the democratic political process.

Economics Honors Graduation Requirement 2102320

.5 credit **Grade 12**

This Economics course consists of the following content area strands: Economics and Geography. The primary content emphasis for this course pertains to the study of the concepts and processes of the national and international economic systems. Content should include, but is not limited to, currency, banking, and monetary policy, the fundamental concepts relevant to the major economic systems, the global market and economy, major economic theories and economists, the role and influence of the government and fiscal policies, economic measurements, tools, and methodology, financial and investment markets, and the business cycle.

****Must register for both classes**

AP U.S. Government and Politics 2106420

.5 Credit **Grade 12**

This course provides students with a challenging opportunity to develop the analytical skills and factual knowledge necessary to deal critically and objectively with the challenges, content, and materials of American government. Emphasis is placed on content and interpretation of the Constitution, federalism, the congress, the presidency, the federal court system, citizen involvement, American political traditions, and responsibilities of citizens.

Economics Honors Graduation Requirement 2102320

.5 credit **Grade 12**

This Economics course consists of the following content area strands: Economics and Geography. The primary content emphasis for this course pertains to the study of the concepts and processes of the national and international economic systems. Content should include, but is not limited to, currency, banking, and monetary policy, the fundamental concepts relevant to the major economic systems, the global market and economy, major economic theories and economists, the role and influence of the government and fiscal policies, economic measurements, tools, and methodology, financial and investment markets, and the business cycle.

****Must register for both courses.**

How Do I Earn IT Certification at Crooms?

Students earn technology certifications by taking and passing industry certification exams. Certain courses are geared towards industry certification and help prepare students for specific tests. Below is a list of certification exams and the courses that prepare students to successfully pass those exams.

Industry Certifications

Certification Exam	Corresponding Course
CompTIA A+*	Network Concepts/Computer Maintenance and Repair Technology Support Services - Network Systems
CompTIA Network+*	CET1179
CompTIA Security+*	CET1179, Computer and Network Security Fundamnetals
Adobe Dreamweaver Associate	Foundations of Web Programming
Adobe Photoshop Associate	GRA2201; Digital Design I, II, III, IV; 2-D Graphic Development
Adobe Premiere Pro Associate	Digital Media Fundamentals, Digital Media Production Systems
Adobe InDesign Associate	Digital Design 1, DIG2000
Adobe Illustrator Associate	DIG2000, Game & Simulation 2D Graphic Development
Autodesk 3ds Max	Game & Simulation 3D Graphic Animation
CCNA*	Cisco Networking courses (4)
MOS–Word, Excel, PowerPoint, Access	Digital Information Technology
MTA Introduction to Programming using HTML	Web Programming, COP2830
MTA Introduction to Programming using Java	COP1000, Foundations of Programming
MTA Windows Operating System Fundamentals	Network Concepts/Computer Maintenance & Repair, Technology Support Services - Client Systems
NAF Track Certification	Any 4 Tech Courses and Full Credit Paid Internship
NCS Modeling & Simulation	Game & Simulation Design, Game & Simulation Programming, Game & Simulation Foundations
Oracle	CTS2445

**These certifications are not on the CAPE Secondary funding list, as such student families will be expected to fund the cost per attempt prior to testing. (cost is subject to change)*

College Technical Certifications

Classes toward a Web Development Technical Certificate at Seminole State College	Required: COP1000 Principles of Programming, COP2830 Web Programming I, COP2831 Advanced Javasripts, and COP2833 Data Driven Websites Choose 2: COP2836, COP2047, or CEN2724
Classes toward a Computer Programming Specialist Technical Certificate at Seminole State College	Required: CET1179 Network Concepts and Operating Systems, CGS2545C Database Management, COP1000 Principles of Computer Programming, , COP2800 Programming in Java Choose 1: CGS2100C or CIS2028 Choose 1: COP2224, COP2360, COP2830, COP2047

Career & Technical: Tracks & Course Order

Required course for all 9th graders:

Digital Information Technology
8207310

1 Credit **Grade 9**

The intention of this course is to prepare students to be successful both personally and professionally in an information-based society. Digital Information Technology includes the exploration and use of: databases, the internet, spreadsheets, presentation applications, management of personal information and email, word processing and document manipulation; utilizing software that meets industry standards.

10th Grade IT Magnet Academy Foundations:

Tech Support Services - Network Systems **or**
Network Concepts/Network Computer Maintenance & Repair

Technology Support Services - Client Systems Honors
9001420
Prerequisite: Digital IT

1 Credit **Grade 10**

This course provides technical knowledge and skills needed to prepare students for future careers in Information Technology specifically for introductory Client Support Services.

OR

DUAL ENROLLMENT

Network Concepts and Operating Systems/ Network Computer Maintenance and Repair (A+)
CET 1179 & CET 1178C (6 hrs. credit SSC)
Prerequisite: Digital IT

1 Credit **Grades 10-12**

This course is an introduction to network maintenance and repair. Preventative maintenance and diagnosis of the microcomputer will be emphasized along with basic-to-advanced troubleshooting skills. This course will prepare the student for the Microsoft Technical Associate certification in Windows and optional CompTIA A+ certification exams*.

**The A+ Essentials certification is not on the CAPE Secondary funding list, as such student families will be expected to fund the cost of $174 per attempt prior to testing. (cost is subject to change)*

Internships Available for students that meet these requirements:

Age 15 years or older
min 2.5 GPA

Information Technology Cooperative Education OJT
9000420
By Application Only

1 Credit **Grade 11-12**

This internship course provides students with the opportunity to stimulate their career interest and to demonstrate human relations, communications, and employability skills necessary for entry-level employment in the information technology industry. Students will enhance and apply instructional competencies learned in the classroom through the internship experience. This internship must be a paid internship.

Business Cooperative Education–OJT
8200410
Prerequisite: AOIT Internship/IT OJT

1 Credit **Grade 12**

This course is designed to provide the on-the-job training component when the cooperative method of instruction is used to prepare students for employment in business occupations. Students should only enroll in this course after they have fulfilled the AOIT Internship requirement.

Applied Cybersecurity
9001300

Florida Bright Futures Scholarship Program
Gold Seal Eligible

Digital Information Technology
8207310

1 Credit **Grade 9**

The intention of this course is to prepare students to be successful both personally and professionally in an information-based society. Digital Information Technology includes the exploration and use of: databases, the internet, spreadsheets, presentation applications, management of personal information and email, word processing and document manipulation; utilizing software that meets industry standards.

Computer Network & Security Fundamentals Honors
9001320
Prerequisite: Digital IT

1 Credit **Grades 10-12**

This course introduces students to cybersecurity and provides them with essential computer and networking knowledge and skills, particularly those related to cybersecurity.

Cybersecurity Essential Honors
9001330
Prerequisite: Computer Network & Security Fund. Hon.

1 Credit **Grades 11-12**

This course provides students with insight into the many variations of vulnerabilities, attack mechanisms, intrusion detection systems, and some methods to mitigate cybersecurity risks, including certificate services and cryptographic systems.

Operational Cybersecurity Honors
9001340
Prerequisite: Cybersecurity Essentials

1 Credit **Grades 12**

This course provides students with insight into the many ways in which computer systems can be secured, countermeasures implemented, and risk assessment performed.

Extensions

Introduction to Internetworking Security CTS 1120
Prerequisite: CET1179

.5 Credit **Grade 11-12**

This course examines the principles, mechanisms and implementation of network security and data protection. The topics presented will help students gain the fundamentals of network security and explain what happens behind the scenes and from the point of view of a computer. Topics include definition and use of password crackers, operating system exploits, what is a Hacker, IP Spoofing, Session Hijacking, Denial of Service attacks (DOS), Buffer Overloads, general concepts of password security, how to create a company-wide security policy, how to perform security audits and how to recover from such attacks.

Introduction to UNIX (Linux+) – CET 1526C
Prerequisite:CET 1179

.5 Credit **Grades 11–12**

This course introduces students to the UNIX Operating System. The course includes an overview of UNIX, simple commands, the VI Editor, file system, shell, communication, program development, shell programming and shell scripts.

Advanced Security Certified Ethical Hacker CTS 2317
Prerequisite: CTS 1120

.5 Credit **Grade 11-12**

This course examines in great depth the principles, mechanisms and implementation of network security and data protection. Students learn to understand the topics Cipher Block Mode, Key Distribution methodology, Public Key Infrastructure, Kerberos, X.509 Directory Security, IP/Web/Email Security, SLS (Secured Sockets Layer), PGP (Pretty Good Privacy) and Network Security Management from both an internal and external security reference. Basic networking concepts and security principles required.

Crooms DE Networking Pathway

Digital Information Technology
8207310

1 Credit **Grade 9**

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Network Concepts and Operating Systems/ Network Computer Maintenance and Repair (A+)
CET 1179 & CET 1178C (6 hrs. credit SSC)
Prerequisite: Digital IT

1 Credit **Grades 10-12**

This course is an introduction to network maintenance and repair. Preventative maintenance and diagnosis of the microcomputer will be emphasized along with basic-to-advanced troubleshooting skills. This course will prepare the student for the Microsoft Technical Associate certification in Windows and optional CompTIA A+ certification exams*.

**The A+ Essentials certification is not on the CAPE Secondary funding list, as such student families will be expected to fund the cost of $174 per attempt prior to testing. (cost is subject to change)*

Cisco Networking Fundamentals (Net+)/ Cisco Router Technology
CET1600C/ CET1610C

.5 Credit Each **Grades 10–12**

This course is designed to prepare the student to apply and understand the basics of routing and switching. The course describes the architecture, components and operations of routers and switches in a small network.

Cisco Scaling Networks/ Cisco Connecting Networks
CET 2615C/CET2620C
Prerequisite: CET1600C and CET1610C

.5 Credit Each **Grades 11–12**

This course is designed to prepare the student to apply and understand the advanced principles and applications of networking. The course discusses the WAN technologies and network services required by converged applications in a complex network.

Extensions

Introduction to IP Telephony – CET 1675C
Prerequisites: CET 1600C

.5 Credit SCPS/4 Credits SSC **Grade 11-12**

This course explains how companies are using IP Telephony equipment and software to efficiently upgrade existing telephone systems. In addition, the course will give the student a fundamental understanding of the architecture of voice communication and how signaling, call quality and public switched telephone networks operate in a LAN/ WAN networking environment. The use of IP Telephony products will be discussed and how software allows companies to cost-effectively upgrade and eventually replace existing (legacy) telephone systems with more cost-effective and easy-to-use telephone equipment.

Digital Design
8209600

Digital Information Technology
8207310

1 Credit **Grade 9**

Florida Bright Futures Scholarship Program
Gold Seal Eligible

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Digital Design I
8209510
Prerequisite: Digital IT or concurrent

1 Credit **Grades 9–12**

Students will learn the basics of editing, manipulating, and creating a variety of raster-based images and vector graphics, along with the fundamentals of graphic design, page layout, and photojournalism. Students will use a variety of Adobe software including Photoshop, Illustrator, and InDesign to create flyers, posters, and news articles for electronic publishing.

Digital Design II, III, IV Honors (Yearbook)
8209520 (Year 1), 8209530 (Year 2), 8209540 (Year 4)
Prerequisite: Digital I and Application

1 Credit **Grade 10 - 12**

This course continues the development of skills required digital publishing careers. Content includes digital publishing operations; layout, design and measurement activities; and digital imaging as well as communication, collaboration and decision-making; critical thinking; and problem solving. Students will work on all aspects of the yearbook including writing, photography and marketing/sales. **After school participation and ad sales are required of all students.**
Application Required

Digital Imaging I/Introduction to Digital Media
GRA2201/DIG2000

1 Credit **Grades 9–12**

First Semester is designed for the graphics individual who wishes to integrate photography with page layouts. Students will learn the basics of scanning, retouching, color correcting, proofing and output to printer devices. Students pursue Adobe Associate certification in Photoshop. Second Semester explores contemporary digital design, highlighting the importance of process, innovation and communication. Students learn to use Photoshop, Illustrator and InDesign to for graphic design projects. Developing and refining the design concept and execution is emphasized.

Extensions

Design Fundamental
DIG2109C
Prerequisite: DIG 2000 or GRA 2201.

.5 Credit **Grades 10–12**

This course is an introduction to the concepts and principles of digital imaging and the tools and techniques of image capture, creation, manipulation and integration of still images. Students will understand composition, layout, color theory, image capture and output using industry-standard software.

3D Modeling and Animation I
DIG2302C
Prerequisite: DIG 2000 or GRA 2151C or GRA 2201

.5 Credit **Grades 10–12**

This course is designed to teach beginning level 3D animation for digital media. Emphasis will be placed on viewing the world in three dimensions as opposed to a single flat plane and training the eye to see shape instead of line. It will allow students to comprehend fully visual concepts such as light and shadow, foreshortening, color recognition and modeling techniques. Other topics include NURBS vs. polygons, texturing, lighting, rendering and keyframe animation. Lab fee required.

Digital Media Technology
9005100

Florida Bright Futures Scholarship Program
Gold Seal Eligible

Digital Information Technology
8207310

1 Credit **Grade 9**

The intention of this course is to prepare students to be successful both personally and professionally in an information-based society. Digital Information Technology includes the exploration and use of: databases, the internet, spreadsheets, presentation applications, management of personal information and email, word processing and document manipulation; utilizing software that meets industry standards.

Digital Media Fundamentals Honors
9005110
Prerequisite: Digital IT or concurrent

1 Credit **Grades 9–12**

Students will learn the basics of editing, manipulating, and creating a variety of raster-based images for photography and video, along with the fundamentals of motion graphics, audio/visual editing, and broadcast journalism. Students will use a variety of Adobe software including Photoshop, Premiere Pro, and After Effects to create short videos for the morning announcements.

Digital Media Production Systems Honors
9005120
Prerequisite: Digital Media Fundamentals

1 Credit **Grade 10-12**

This is the second-year course for students interested in video production. Students will learn the basics of editing, manipulating, and creating a variety of raster-based images for photography and video, along with the fundamentals of motion graphics, audio/visual editing, and broadcast journalism. Students will use a variety of Adobe software including Photoshop, Premiere Pro, and After Effects to create short videos for the morning announcements.

Digital Media Delivery Systems
9005130
Prerequisite: Digital Media Production Systems Hon.

1 Credit **Grade 11-12**

This course introduces students to the digital video and audio delivery media and associated protocols. Content includes technical aspects of evolving and emerging technologies used in the delivery of digital content.

Java Development & Programming
900720

Florida Bright Futures Scholarship Program
Gold Seal Eligible

Digital Information Technology
8207310

1 Credit **Grade 9**

The intention of this course is to prepare students to be successful both personally and professionally in an information-based society. Digital Information Technology includes the exploration and use of: databases, the internet, spreadsheets, presentation applications, management of personal information and email, word processing and document manipulation; utilizing software that meets industry standards.

Foundations of Programming Honors
9007210
Prerequisite: Digital IT or concurrent

1 Credit **Grades 9-12**

This course introduces concepts, techniques, and processes associated with computer programming and software development.

Procedural Programming Honors
9007220
Prerequisite: Found. of Programming Hon.

1 Credit **Grades 10-12**

This course continues the study of computer programming concepts with a focus on the creation of software applications employing procedural programming techniques. After successful completion of Programming Foundations and Procedural Programming, students will have met Occupational Completion Point B, Computer Programmer Assistant, SOC Code 15-1131.

Intro to the IT Industry/ Principles of Computer Programming
CIS2028/COP1000 (3 hrs. credit SSC)
Corequisite: Algebra I or Digital IT

1 Credit **Grades 9–12**

Students will learn basic programming principles and concepts using the Java programming language. **Students must maintain an unweighted 2.5 GPA to continue with Dual Enrollment 2nd semester.**

Programming in Java/ Advanced Java Programming
COP 2800/COP 2805
Prerequisite: COP1000 with a C or higher

1 Credit **Grades 10-12**

This course is designed to provide students the opportunity to design, code, develop, and implement advance programs using java, eclipse and NetBeans.

Extensions

Dtatabase Management
CGS 2545C
Prerequisite: COP 1000 or CGS 2100C
.5 Credit **Grade 10-12**

TThis course is a study of database design and management. Topics include the relational model, Entity Relationship Diagrams (ERDs), database design and normalization, query languages, multi-user and distributed databases and data warehouses.

Oracle Structured Query Language (SQL)
CTS 2445
Prerequisite: CGS 2545C
.5 Credit **Grade 11-12**

This class covers the industry standard Structured Query Language (SQL) and additional SQL features specific to Oracle relational databases. Students learn to create and maintain database objects and to store, retrieve and manipulate data. Classroom lecture and hands-on lab assignments reinforce the fundamental concepts. This course prepares students for the Oracle Application Developer and Database Administrator exams.

AP Computer Science A
0200320
1 Credit **Grades 10–12**

Students will learn basic programming principles and some intermediate concepts using the Java programming language in preparation for the AP exam.

Intro to Data Analytic
CAP 1760
Prerequisite: CGS 2545C
1 Credit **Grade 10-12**

This course is designed for students who require or are interested in basic aspects of data mining and analytics using domain-specific data. Students learn the computerized techniques by which to organize, manipulate, report, present, depict and analyze domain-specific data in order to find or otherwise derive information.

Information Technology Project Management
CTS 2142
.5 Credit SCPS/3 Credits SSC **Grade 10-12**

This course will provide a comprehensive overview of the skills, knowledge and tools needed to effectively manage projects with special emphasis on the unique challenges of the computing and information technology industries. The course will cover all nine areas of A Guide to the Project Management Body of Knowledge (PMBOK Guide) established by the Project Management Institute as the industry standard for project management instruction.

C++ Programming
COP 2224
Prerequisite: COP 2800 with a C or higher
.5 Credit **Grade 11-12**

This course provides an introduction to object-oriented programming and the C++ programming language. Students will create, document, run and debug programs using computer facilities on campus. Key topics include variables, classes, objects, selection, iteration, strings, arrays, pointers and functions.

Python Programming
COP 2047
Prerequisite: COP 1000
.5 Credit **Grade 10-12**

An introduction to the Python programming language to include control data structures, functions and web implementation.

Simulation and Gaming Fundamentals
CAP 2801
Prerequisite: COP 2800
.5 Credit **Grades 11-12**

This course covers fundamental design and programming principals for computer games and simulations. Topics include discrete event simulation, gaming and simulation design, and general gaming/simulation programming concepts.

Comp. Applications/Advanced Comp. Applications
CGS 2100C/CGS 2108C
Prerequisite: Digital IT
1 Credit **Grades 10-12**

Semester 1 – course in computer applications that focuses on the effective use of word processing, spreadsheet, database and presentation software programs. Students will gain a fundamental knowledge of Microsoft Office 365 and learn skills that have practical applications in real world business situations. This course utilizes lectures and hands-on computer exercises. Semester 2 – course in computer applications that focuses on the advanced use of word processing, spreadsheet, database and presentation software programs. Students will gain advanced knowledge of Microsoft Office 365 and have the necessary skills to solve real world business problems. This course utilizes lectures and hands-on computer exercises.

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Game & Simulation: Animation Programming
8208300

Florida Bright Futures Scholarship Program
Gold Seal Eligible

Digital Information Technology
8207310

1 Credit **Grade 9**

The intention of this course is to prepare students to be successful both personally and professionally in an information-based society. Digital Information Technology includes the exploration and use of: databases, the internet, spreadsheets, presentation applications, management of personal information and email, word processing and document manipulation; utilizing software that meets industry standards.

Game & Simulation Design
8208120

1 Credit **Grade 9-12**

This course is designed to provide students an introduction to game and simulation design with an emphasis on play mechanics, rules/logic, industry tools, careers, interpersonal skills, plus societal and gaming industry impacts. Students will learn to program and design basic 2D games with no prior experience needed.

Game & Simulation Programming
8208330
Prerequisite: Foundations of Programming

1 Credit **Grades 10–12**

Students will learn basic programming principles and concepts using the C++ programming language alongside the Unreal game engine to program their own games and or simulations.

Game & Simulation Advanced Applications
8208400
Prerequisite: G&S Design AND ONE of the following: G&S Programming, G&S Graphic Artist, or 3–D Graphic Animation

1 Credit **Grade 11-12**

Students will use their varying prerequisite skills to develop single and multiplayer game projects using the Unreal Engine, source control, and agile development techniques.

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Game & Simulation: Visual Design
8208100

Florida Bright Futures Scholarship Program
Gold Seal Eligible

Digital Information Technology
8207310

1 Credit **Grade 9**

The intention of this course is to prepare students to be successful both personally and professionally in an information-based society. Digital Information Technology includes the exploration and use of: databases, the internet, spreadsheets, presentation applications, management of personal information and email, word processing and document manipulation; utilizing software that meets industry standards.

Game & Simulation Design
8208120

1 Credit **Grade 9-12**

This course is designed to provide students an introduction to game and simulation design with an emphasis on play mechanics, rules/logic, industry tools, careers, interpersonal skills, plus societal and gaming industry impacts. Students will learn to program and design basic 2D games with no prior experience needed.

Game & Simulation Graphic Artist
8208130
Prerequisite: Digital IT or concurrent

1 credit **Grades 9 - 12**

Students will learn the basics of editing, manipulating, and creating a variety of raster-based images and vector graphics, along with the fundamentals of art and animation. Students will use a variety of Adobe software including Photoshop, Illustrator, and Animate to create artwork in various styles for video games and simulations.

AND/OR

Game & Simulation 3D Graphic Animation
8208140
Prerequisite: Digital IT

1 Credit **Grades 10-12**

Students will learn the basics of extrusion modeling, UV unwrapping, material creation, key frame animation, and lighting in preparation for the Autodesk 3D Studio Max certification.

Game & Simulation Advanced Applications
8208400
Prerequisite: G&S Design AND ONE of the following: G&S Programming, G&S Graphic Artist, or 3–D Graphic Animation

1 Credit **Grade 11-12**

Students will use their varying prerequisite skills to develop single and multiplayer game projects using the Unreal Engine, source control, and agile development techniques.

Technology Support Services
9001400

Florida Bright Futures Scholarship Program
Gold Seal Eligible

Digital Information Technology
8207310

1 Credit **Grade 9**

The intention of this course is to prepare students to be successful both personally and professionally in an information-based society. Digital Information Technology includes the exploration and use of: databases, the internet, spreadsheets, presentation applications, management of personal information and email, word processing and document manipulation; utilizing software that meets industry standards.

Technology Support Services - Client Systems Honors
9001420
Prerequisite: Digital IT

1 Credit **Grade 10**

This course provides technical knowledge and skills needed to prepare students for future careers in Information Technology specifically for introductory Client Support Services.

Technology Support Services - Network Systems Honors
9001430
Prerequisite: Technology Support Services - Client Systems

1 Credit **Grades 11-12**

This course covers networking topics such as layers of the OSI model, features and functions of network components and the skills needed to install, configure, and troubleshoot basic networking hardware peripherals and protocols.

Web Programming
9001100

Florida Bright Futures Scholarship Program
Gold Seal Eligible

Digital Information Technology
8207310

1 Credit **Grade 9**

The intention of this course is to prepare students to be successful both personally and professionally in an information-based society. Digital Information Technology includes the exploration and use of: databases, the internet, spreadsheets, presentation applications, management of personal information and email, word processing and document manipulation; utilizing software that meets industry standards.

Foundation of Web Design Honors
9001110
Prerequisite: Digital IT or concurrent

1 Credit **Grades 9–12**

This course is designed to provide students with opportunities to acquire and apply foundational skills using HTML5 and CSS so that they may learn to design for the web and build websites.

User Interface Design Honors
9001120
Prerequisite: Found. of Web Design Hon.

1 Credit **Grades 10–12**

This course provides advanced concepts used in interface design. The content includes principles of Human Computer Interface (HCI), advanced page design using Cascading Style Sheets (CSS), advanced HTML commands, multimedia applications, Internet/Intranet tools, and website promotion.

Extensions

Data Driven Web Sites – COP 2833
Prerequisite: COP 2836

.5 Credit **Grade 11-12**

Databases drive today's e-commerce websites. This course demonstrates how to leverage the power of a relational database through the use of SQL and server-side scripting. The student will explore server-side scripts in a variety of languages to provide dynamic website content. The course will demonstrate how to connect to data from standard ODBC-compliant databases and create database-driven websites. Upon successful completion of this course, students will be able to design, develop and publish a dynamic database-driven application suitable for use in business or e-commerce.

Advanced Java Script – COP 2831
Prerequisite: COP 2833 and COP1000

.5 Credit SCPS/3 Credits SSC **Grade 10-12**

This course will teach the student how to build applications based on JavaScript technologies. Topics covered include working with Node.js, JSON, REST, NoSQL databases and popular JavaScript application frameworks. Upon completion of this course, the student should be able to build a rich internet application based on front-end technologies.

Web Programming I
COP 2830
Prerequisite: Digital IT or concurrent

1 Credit **Grades 10–12**

Web Programming I will focus on the skills required for web application development using XHTML, client-side scripting and basic server-side scripts. This course will explore the syntax, semantics and limitations of page layout, Cascading Style Sheets and basic scripting. Implementation of server-side scripting will be covered as it pertains to form processing. Examples of tools, W3 standards and cross-browser compatibility will also be examined. Upon completion of the course, the student will be able to design, program and publish a commercial-grade website.

Web Programming II
COP 2836
Prerequisite: : COP 2830, COP 2831, and COP 1000

1 Credit **Grades 10–12**

This course introduces the student to modern web development with a client-side JavaScript framework, a service tier and a back-end database. The student constructs a sample web application and studies topics such as constructing forms, using CSS frameworks, source control and deployment.

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