

Crooms Academy of Information Technology

2200 West 13th Street Sanford, FL 32771 (407) 320 - 5750



Curriculum Guide 2010-2011

SEMINOLE COUNTY PUBLIC SCHOOLS
STUDENT CALENDAR
2010-2011

Definition of Descriptions:

Schools Closed = Teachers and students not in attendance; Educational Support Center open for business

Schools Closed for Students – Students not in attendance; Teachers are working & Educational Support Center is open for business

School System Closed – Teachers, students, and employees at Educational Support Center not in attendance

August 10-13	Teacher Workdays
August 16	First Day of Student Attendance – Start of 1st Quarter/1st Semester
September 6	School System Closed
September 9	Schools Closed
October 15	End of 1st Quarter
October 18	Schools Closed for Students/Student Make-Up Day #4 If Needed/Teacher Workday
October 19	Start of 2nd Quarter
November 24	Schools Closed
November 25-26	School System Closed
December 20-22	Early Dismissal for Students (Last three days of first semester)
December 22	End of 2nd Quarter
December 23	Schools Closed for Students/Teacher Workday
Dec. 24- Jan. 3	School System Closed
January 4	Schools Closed
January 5	Schools Closed/Student Make-up Day #3, If Needed
January 6	Schools Closed/Student Make-up Day #2, If Needed
January 7	Schools Closed for Students/Student Make-up Day #1, If Needed/Teacher Workday
January 10	Classes Resume, Start of Third Quarter/2nd Semester
January 17	School System Closed
February 21	School System Closed
March 17	End of 3rd Quarter
March 18	Schools Closed for Students/Teacher Workday
March 21-25	Schools Closed
March 25	School System Closed
March 28	Classes Resume - Start of 4th Quarter
April 22	Schools Closed
May 27, 31 & June 1	Early Dismissal for Students (Last three days of second semester)
May 30	School System Closed
June 1	Last Day of Student Attendance – End of 4th Quarter
June 2-3	Teacher Workdays

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 / Guidance Staff

Dr. Connie Collins, Principal

Mrs. Cindy Dawson, Guidance Counselor

Ms. Demetria Hayes, Assistant Principal

Mrs. Daphne Velez-Cortes, Guidance Counselor

Mrs. Mickey Reynolds, Assistant Principal

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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. As part of their school day, students also participate in 20-minutes of silent sustained reading

FCAT Prep Coursework

Based on Crooms' school improvement plan, students whose FCAT scores indicate they may not meet the FCAT graduation requirement will be automatically registered into an FCAT preparation class for one or two class periods, depending on FCAT and oral fluency scores. Passing the FCAT 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 is required. Multiple enrollment criteria include, but are not limited to, self-selection, teacher consultation, previous academic success, and standardized or state test scores.

Fee/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 Internet to access encyclopedias, magazines, 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 year-books. 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, exclusion (opt-out) forms are available on the district website and at your child's school.

How Do I Register?

Curriculum guides and registration forms will be distributed by students' English teachers. Students will have five days to complete and submit their registration forms. Recommended core courses will be provided so students can focus on selecting electives. Students who wish to change their recommended core courses must obtain signatures from their current teacher in that subject. Before selecting elective courses, all students should read this guide carefully to familiarize themselves with the information it contains. Signatures for elective courses are only required for courses where a prerequisite is required.

Incoming 9th grade students: Curriculum guides and registration forms will be distributed during the Open House for incoming 9th graders on Tuesday, February 23rd at 6:30 p.m.. Registration procedures and course selection information will be given at that time. A counselor will begin visiting middle schools on March 22nd to review and collect the registration forms of incoming 9th graders.

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

1. Study the courses listed and consult with your classroom teachers over course selections.
2. Take the curriculum guide home 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 at lunch during the week of February 22nd through February 26th. Both counselors will be available in the cafeteria during both lunch periods on these dates to answer any registration or course selection questions.
4. Fill in personal information at the top of the registration form.
5. Review the recommended core courses already provided for you. If you wish to change any core course, you must obtain a signature from your current teacher in that subject area.
6. List the electives you have selected.

Schedule Changes

Students are expected to remain in a course for its duration. Schedule changes due to failure are not permitted. Courses may be dropped and/or added during the first 5 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. You already have credit in this course.
4. You have failed to meet a prerequisite.
5. Teacher or administrative recommendation.

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 when necessary. Every effort will be made not to disrupt the educational process when such changes become necessary.

Registration Calendar

Wednesday, Feb. 17	Curriculum Fair during both lunches for students to get info about tech electives
Monday, February 22	Registration forms and curriculum guides are handed out to students grades 9-11.
Monday-Friday, Feb. 22-26	Guidance counselors will be available during both lunches to answer any registration/course selection questions.
Friday, February 26	Students submit registration forms to their 7th period teachers
Tuesday, February 23	New students Open House (6:30 p.m. in Cafetorium)
Monday, March 22	Middle School visits begin.

Seminole County Public Schools

Districtwide High School *Choices*

Seminole County Public Schools provides students with educational opportunities that take them beyond traditional instructional experiences with high school choice options. Designed around specialized themes, these programs address the individual interests and abilities of students.

Acceptance into a magnet school/program is by application only. By signing the required program application, parents and students agree to commitment statements that include academic standards, attendance, conduct, and honor code. Eligibility requirements and the application process are described in detail on the Seminole County Public Schools Choices Web site at www.seminoleschoolchoices.com.

Student transfer options for the 2010-2011 school year are available on the Seminole County Public Schools Choices Web site at www.seminoleschoolchoices.com.

Magnet applications and transfer forms are available at all middle and high school guidance departments; the Choices Department at the Educational Support Center, 400 East Lake Mary Blvd., Sanford; and from www.seminoleschoolchoices.com.

Magnet Schools and Programs

Crooms Academy of Information Technology



Experience IT! Crooms Academy of Information Technology (AOIT) is Seminole County's only district-wide magnet high school. Crooms AOIT provides cutting edge innovation in teaching and learning through a technology-enriched environment. Students engage in a rigorous and relevant curriculum that prepares them for post-secondary education with industry-validated technology skills.

TRANSPORTATION: Transportation is provided to students living more than two miles from the school.

For further information, contact Demetria Hayes, Assistant Principal, 407-320-5702 or Cindy Dawson, Guidance Counselor, 407-320-5722.

Academy of Health Careers at Seminole High School



The Academy of Health Careers at Seminole High School provides a demanding interdisciplinary academic program. Students prepare for further study at the college level or to begin a career in health care upon high school graduation. Hands-on learning opportunities enable students to preview various health care careers through job shadowing and clinical experiences in area hospitals, clinics, medical, and veterinary offices. The Emergency Medical Technician (EMT) Program in conjunction with Seminole Community College is available to students in the Health Careers program.

TRANSPORTATION: Transportation is provided to students living more than two miles from the school.

For further information, contact Nancy Julian, Program Director, 407-320-5063 or Eugene Williams, Academy Guidance Counselor, 407-320-5064.

EXITING A CHOICE PROGRAM: Any student who exits a high school choice program will return to his/her zoned school at the end of the school year, unless there is a Seminole County Public Schools approved transfer that allows the student to remain at the school where the choice program is located.

Institute for Engineering at Lyman High School



The Institute for Engineering provides a highly creative, technology rich, college preparatory program. Students are exposed to a rigorous integrated curriculum infused with relevant industry innovations and technology. The world class program is designed for the student who would like to pursue a professional career in any area of engineering. Students may choose to focus on any of the following five areas of concentration:

- Architectural Engineering and Design
- Aerospace Engineering
- Bioengineering
- Computer Modeling and Simulation
- Electrical Engineering

TRANSPORTATION: Transportation is provided to students living more than two miles from the school.

For further information, contact the Institute for Engineering Office, 407-746-2312 or Joannie Shalls, Guidance Counselor, 407-746-2142.

International Baccalaureate Diploma Program at Seminole High School



The International Baccalaureate (IB) Diploma Program is an internationally recognized, rigorous pre-university course of study that incorporates an extensive liberal arts curriculum containing humanities, social studies, foreign language, math, and science. The IB program, affiliated with the International Baccalaureate Organization (IBO), is designed for highly motivated college-bound students seeking educational challenges. The curriculum is based on international standards and examinations that are evaluated by international educators.

TRANSPORTATION: Transportation is provided to students living more than two miles from the school.

For further information, contact Mary Cragar, Program Coordinator, 407-320-5223 or Mindi Craft, IB Guidance Counselor, 407-320-5224.

Other Choice Options

Academy of Construction Technologies for all Seminole County 11th & 12th Graders

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 the opportunity to begin a career in high school in one of three areas—carpentry and cabinetmaking, electrical, and fire sprinkler system technology. Individual course numbers are listed under Career and Technical Education in this guide.

ELIGIBILITY: All Seminole County students entering 11th and 12th grade, with the necessary number of credits to be on track for graduation at the end of their senior year can apply for the program. A 2.0 GPA is required for admission to the carpentry program. Electrical and fire sprinkler system technology require a 2.5 GPA.

For further information, contact your high school guidance counselor or Joe Oldakowski, Program Specialist, Career and Technical Education, 407-320-0171.

CROOMS REQUIREMENTS FOR GRADUATION

TO GRADUATE, CROOMS STUDENTS MUST HAVE

26 CREDITS

PASSING SCORE ON THE FCAT

2.0 GRADE POINT AVERAGE

COMPLETION OF REQUIRED IT COURSES

<u>SUBJECT</u>	<u>CREDITS</u>
English	4
Science	4
Mathematics	4
Social Studies	3
(World History, American History, American Government (0.5) & Economics (0.5))	
Personal Fitness	.5
Physical Education	.5
Performing/Fine Arts	1
(Courses that qualify as a fine art include Web 1-4, Digital Design 1-4, Graphic Design, Electronic Music, Digital Video & Sound, Steel Band, and Game & Simulations Foundations)	
Electives	9
Of the 9 elective credits, 3 are required IT courses and are listed below:	
Computing for College and Careers or Business Software Applications 1 (9th grade)	
Intro to IT or BCP I (9th grade)	
PC Support 1 or A+ (10 grade)	

GRADE LEVEL CLASSIFICATION

9th Grade:	A student who has been promoted from 8th grade.
10th Grade:	A student who has earned five and a half (5.5) 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.

DIPLOMAS AND CERTIFICATES OF COMPLETION

Standard Diploma: Awarded to students who have successfully completed the minimum number of academic credits and required courses prescribed by the state and local school board, passed the FCAT and earned the minimum GPA requirement.

Certification of Completion: Certificate awarded to students who have completed the minimum number of credits and all other requirements prescribed by the local school board but failed to pass the FCAT or meet the minimum GPA requirement.

FCAT 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, maintain a passing grade point average, and pass the Reading and Mathematics Sunshine State Standards (SSS) portion of the Grade 10 FCAT. Students who meet these requirements, but do not pass the Grade 10 FCAT, will receive a Certificate of Completion. Students who have taken the grade 10 FCAT and failed to pass either the math or reading sections do have the option of meeting the FCAT requirement with a concordant score on either SAT or ACT.

OPPORTUNITIES FOR ADDITIONAL CREDIT

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

1. **Credit by Examination** (Nov. & April)
2. **Summer School**--beginning in the summer after the successful completion of the 8th grade and each succeeding summer in high school.
3. **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.
 - (b) Geometry--the student must successfully complete and demonstrate mastery of the performance standards.
 - (c) Any foreign language--to be taught on the high school campus. The students must successfully complete the course and demonstrate mastery of the performance standards.
 - (d) Biology--The students must successfully complete the course and demonstrate mastery of the performance standards.
4. **Dual Enrollment**
5. **Florida Virtual School**--Check www.flvs.net for more information.

Florida's Bright Futures Scholarship Program

All state scholarships, eligibility requirements and award amounts are subject to change PENDING LEGISLATIVE ACTION. The Office of Student Financial Assistance (OFSA) within the Florida Department of Education administers the renewal and disbursement activities for the Florida Bright Futures Scholarship Program, which includes the Florida Academic Scholars Award (FAS), the Florida Merit Scholars Award (FMS), and the Florida Gold Seal Vocational Scholars Award (FGS). Academic criteria for eligibility and award amounts are described below.

A 2001 law, Section 240.4015, Florida Statutes, requires the use of CLEP, AP, or IB examinations or dual enrollment courses as acceleration options by Bright Future recipients to earn college credit (not applicable for Florida Gold Seal). For specific requirements, visit the website at www.firn.edu/doe/brfutures, call toll free at 1-888-827-2004, or see your guidance counselor.

FLORIDA ACADEMIC SCHOLARS AWARD

Award Level:

Public Institution

100% of tuition and fees, and up to a total of \$600.00 per year.

Private Institution

Fixed award amount based on 100% of the average tuition and fees at a comparable Florida public institution and \$600 cost of education allowance prorated by term and hours

Grade Point Average (GPA)

3.5 weighted GPA (based on the Statewide Scholarship Weighting System) using the 15 credits listed below, combined with test scores and community service hours

May use up to 2 additional credits in subject areas below to raise GPA

Required Credits

- ◆ 4 English (3 with substantial writing)
- ◆ 4 Mathematics (Algebra 1 and higher)
- ◆ 3 Natural Sciences (2 with substantial lab)
- ◆ 3 Social Sciences
- ◆ 2 Foreign Languages (in the same language)

15 Total Credits

Community Service

(District approval needed for community service hours)

75 hours (required for applicants)

Test Scores

1270 SAT or 28 ACT (Test dates through June will be admissible)

Other Ways to Qualify (Community Service of 75 hours required)

- ◆ National Merit or Achievement Scholars and Finalists
- ◆ IB Diploma Recipient
- ◆ Students who have completed the IB curriculum with a 1270 SAT or 28 ACT
- ◆ Students who have attended a home education program according to S.232.02(4), F.S., during grade 11 & 12 with a 1270 SAT or 28 ACT

FLORIDA MEDALLION SCHOLARS AWARD

Award Level:

Public Institution

75% of tuition and fees

Private Institution

Fixed award amount based on 75% of the average tuition and fees at a comparable Florida Public Institution prorated by term and hours.

Grade Point Average (GPA)

3.0 weighted GPA (based on the Statewide Scholarship Weighting System) using the 15 credits listed below and test scores listed below.

May use up to 2 additional credits in subject areas listed below to raise GPA.

Required Credits

- ◆ 4 English (3 with substantial writing)
- ◆ 4 Mathematics (Algebra 1 and higher)
- ◆ 3 Natural Sciences (2 with substantial lab)
- ◆ 3 Social Sciences
- ◆ 2 Foreign Languages (in the same language)

15 Total Credits

Community Service

No requirements

Test Scores

970 SAT or 20 ACT

Other Ways to Qualify

- ◆ Students who have completed the IB Curriculum with a 970 SAT or 20 ACT
- ◆ Students who have attended a home education program according to S.232.02(4),F.S., during grades 11 and 12 with a 970 SAT or 20 ACT and provide documentation of the 15 college-preparatory credits required above.
- ◆ Students who have attended a home education program according to S.232.02(4),F.S., during grades 11 and 12 with a 1070 SAT or 23 ACT

FLORIDA GOLD SEAL VOCATIONAL SCHOLARS AWARD

AWARD LEVEL:

Public Institution

75% of the average tuition and fees

Private Institution

Fixed award amount based on 75% of the average tuition and fees at a comparable Florida public institution prorated by terms and hours

Grade Point Average (GPA)

3.0 weighted GPA (based on the Statewide Scholarship Weighting System) using the core 15 credits required for graduation.

3.5 unweighted GPA in a minimum of 3 credits from the same vocational program, and test scores listed below.

Required Credits

- ◆ 4 English
- ◆ 4 Mathematics
- ◆ 3 Natural Sciences
- ◆ 3 Social Sciences (Am. Hist., World Hist., Am. Govt., and Econ.)

- ◆ 1 Practical Art or 1 Performing Art or 1/2 credit in each
- ◆ 1 Physical Education (1/2 Personal Fitness and 1/2 P.E. elective)
- ◆ A minimum of 3 sequential Vocational Job-Preparatory of Technology Education

Community Service

No Requirements

Test Scores:

Must meet one of the test requirements below
CPT—Reading 83, Sentence 83, Algebra 72
ACT—Reading 18, English 17, Math 19
SAT—Verbal 440, Math 440

Other Ways to Qualify: must include a 3.5 gpa in 3 vocational courses

- ◆ 3-year career prep diploma with a 3.0 in 13 core credits
- ◆ 3-year career prep diploma with a 3.0 in 15 core credits
- ◆ GED with 3.0 gpa in core credits

Programs of Study / High School Majors

As Crooms students are planning their technology electives, they should make certain to choose three electives in a sequence to complete a program of study. The Gold Seal scholarship program requires that students take a minimum of three sequential technology education courses. (For other requirements, please see page 7 which details the Bright Futures Scholarship Program.). The High School Major initiative also recommends students complete a program of study. Completing a series of courses in a program is also the best path towards dual enrollment credit and industry certification. The sequences available to Crooms AOIT students are listed below.

8207300 – Academy of Information Technology

8207310 – Introduction to Information Technology
8209020 – Computing for College and Career
8207320 – AOIT-Programming/Database
8207350 – AOIT-Internship
CET1600 – Cisco Fundamentals
CET2615 – Cisco Advanced Router

8212500 – Administrative Assistant

8207310 – Introduction to Information Technology
8209020 – Computing for College and Career
8209510 – Digital Design 1
8212120 – Business Software Applications 1
8212160 – Business Software Applications 2

8206500 – Business Computer Programming

8207310 – Introduction to Information Technology
8209020 – Computing for College and Career
8206010 – Business Computer Programming 1
8206020 – Business Computer Programming 2
COP1000 – Introduction to Programming
COP2360 – C#
COP2362 – Advanced C#

8209600 – Digital Design

8207310 – Introduction to Information Technology
8209020 – Computing for College and Career
8209510 – Digital Design 1
8209520 – Digital Design 2
8209530 – Digital Design 3
8209540 – Digital Design 4
8209550 – Digital Design 5

8208300 - Game, Simulation, Animation Programming

8207310 – Introduction to Information Technology
8209020 – Computing for College and Career
8208110 - Game & Simulation Foundations
8208330 - Game & Simulation Programming

8208000 – Network Support Services

8207310 – Introduction to Information Technology
8209020 – Computing for College and Career
8207040 – Networking 3
8207050 – Networking 4
8207060 – Networking 5
CET1600 – Cisco Fundamentals
CET1610 – Cisco Router Technology
CET2615 – Cisco Advanced Router
CET2620 – Cisco Project-Based Learning
CET1854 - Intro to Wireless Technology
CET1675 - Intro to IP Telephony

8207400 – New Media Technology Program

8207310 – Introduction to Information Technology
8209020 – Computing for College and Career
8207110 – Web Design 1
8207420 – Digital Video and Sound Fundamentals

8207340 – PC Support Services

8207310 – Introduction to Information Technology
8209020 – Computing for College and Career
8207210 – PC Support 1
8207220 – PC Support 2

8207500 – Web Design

8207310 – Introduction to Information Technology
8209020 – Computing for College and Career
8207110 – Web Design 1
8207120 – Web Design 2
8207130 – Web Design 3
8207140 – Web Design 4
CET1600 – Cisco Fundamentals
COP2830 – Web Programming

Non-Tech Major Areas of Interest

Students are required to declare a major during their high school studies. In order to meet the state requirements for completing a major, students should complete four courses within their chosen major. Students should select their major during the registration process and may change majors each year at registration time. The Programs of Study (at left) are available to all Crooms' students as are the majors below, which constitute majors outside of the Applied Technology department.

Advanced Placement Scholar

2106420 - AP American Government
2000340 - AP Biology
1202310 - AP Calculus AB
2003370 - AP Chemistry
0200320 - AP Computer Science
1001420 - AP English Language
1001430 - AP English Literature
2003420 - AP Physics B
2100330 - AP US History
0708410 - AP Spanish
2109420 - AP World History

Language Arts

1001420 - Intensive Reading
1001420 - AP English Language & Composition
1001430 - AP English Literature & Composition
1006300 - Journalism I
1006310 - Journalism II
1006320 - Journalism III

Science

2000310 - Biology
2000320 - Biology Honors
2003340 - Chemistry
2003350 - Chemistry Honors
2003310 - Physical Science
2003390 - Physics Honors
2002430 - Integrated Science II Honors
2002450 - Integrated Science III Honors
2000340 - Advanced Placement Biology
2003370 - Advanced Placement Chemistry
2003420 - Advanced Placement Physics

Spanish Languages

0708340 - Spanish I
0708350 - Spanish II
0708360 - Spanish III Honors
0708400 - AP Spanish Language

STEM Modified-Science, Technology, Engineering

2000340 Advanced Placement Biology
1202310 Advanced Placement Calculus AB
2003370 Advanced Placement Chemistry
0200320 Advanced Placement Computer Science
2003420 Advanced Placement Physics B
1200330 Algebra II
1200340 Algebra II Honors
1201310 Analysis of Functions
8206010 Business Computer Programming 1
1202300 Calculus
2003340 Chemistry I
2003350 Chemistry I Honors
8209510 Digital Design 1 /Level 2
8209520 Digital Design 2 /Level 2
2001340 Environmental Science
1206310 Geometry
1206320 Geometry Honors
1200400 Intensive Mathematics
8207410 New Media and Digital Imaging
2003310 Physical Science
2003380 Physics I Honors
1202340 Pre-Calculus
8207110 Web Design 1 /Level 2
8207120 Web Design 2 /Level 2

Crooms Vision: To Build a Culture of
Excellence and Success for
Every Student

Crooms Mission: The mission of
Crooms Academy of Information Tech-
nology 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.

How Do I Earn College Credit at Crooms?

	Advanced Placement	Dual Enrollment	Career Pathways
Entrance Requirements	Success in honors-level courses and pre-requisite coursework if applicable. Teacher recommendation is suggested.	2.0 g.p.a. Completion of College Placement Test (CPT). Pre-requisites if applicable.	None
How is Credit Earned	By scoring a 3 or better on the AP Exam administered in May.	Through successful completion of the course.	Through successful completion of a sequence of courses and passing of the Career Pathways exam at end of the third course.
How Credit Appears on Transcript	As a 1 credit AP course weighted with the highest quality points.	As a .5 credit course on the high school transcript weighted with the highest quality points. As 3 hours of credit on the college transcript.	As a 1 credit course on the high school transcript. As 3 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.	All 2-year colleges and most 4-year colleges/ universities.
Other Course Requirements	Students must maintain a C in coursework and pass a pre-test in order to sit for the exam.	Some courses are taught at Crooms by a Crooms instructor. (^) Other courses are online courses taken at Crooms. (#) Two courses are taken on campus of SSC. (+)	Introduction to Information Technology or Computing for College and Career is the first course in the sequence.
Courses Offered	AP Human Geography AP World History AP American History AP American Govt. AP Biology AP Chemistry AP Physics B AP English Language AP English Literature AP Calculus AB AP Computer Science A AP Spanish	^CISCO Network Fund ^CISCO Router Fund ^CISCO Adv. Router ^CISCO Proj. Router ^Network Concepts ^Net Comp Main/Repair ^Web Programming 1 ^Web Programming 2 # Principles of Computer Programming # C# Programming # Advanced C # +Intro to IP Telephony +Intro to Wireless Tech	(Tests administered in courses listed below) Business Software App. 1 Business Software App. 2 Business Comp Prog 2 Digital Design 2 Web Design 2

In all of the above courses, students who enroll must remain until the completion of the course.

How Do I Earn IT Certifications 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.

Certification Exam	Corresponding Course
A+ Essentials	Network Concepts / Computer Maintenance and Repair PC Support II
A+ Practical Application	Network Concepts / Computer Maintenance and Repair PC Support II
Adobe Dreamweaver Associate	Web Design 2
Adobe Flash Associate	Web Design 2; Web Design 3; 3-D Modeling
Adobe Photoshop Associate	Digital Design 2; Digital Design 3; Graphic Design
CCNA	Networking 1; Networking 2
Net +	Networking 2
CCENT	Networking 2
CIW Design Specialist	Web Design 4

SCPS Summer School 2010 Information

- Summer School courses are offered to high school students by registration for remediation and limited acceleration contingent upon 25 or more students selecting the course.
- Summer school 2010 will be held at all high school sites. Crooms students should register for courses at their zoned high schools. Some courses will only be offered at designated schools to assure the potential of the course being offered (25 or more students).
- Summer school will operate on a four-day work schedule. No classes will be held on Fridays.
- Registration forms for summer school are available in April at all high school sites. Please ask for registration forms in your guidance office. Students will be registered on a first-come, first-served basis. Those wishing to enroll in driver education must submit a separate driver education application to their guidance office. Late registration will be held at each summer school site on the first day of summer school.
- Course offerings will be limited to remediation. Students wishing to take summer courses for acceleration should register for Florida Virtual High during April or May at www.flvs.net.
- **Students may not be absent from summer school.** Any student absent from summer school will be withdrawn and denied credit.

High School Schedule

SEMESTER I:	June 14 - July 1, 2010	7:20 a.m. – 12:50 p.m.
SEMESTER II:	July 6 - July 22, 2010	7:20 a.m. – 1:18 p.m.

Guidance Information

Grade Scale

The following is the grading system for Seminole County Schools:

Letter	Percentage	Point
A	90-100	3.6-4.0
B	80-89	2.6-3.5
C	70-79	1.6-2.5
D	60-69	.75-1.5
F	Below 60	Below .75

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. Quality points are shown below.

Letter	Quality Point
A	4
B	3
C	2
D	1
F	0

Weighted Grade Point Average

Students have a Florida GPA which is unweighted and a District GPA which is calculated using different weights for various grades. Honors, Gifted, Dual Enrollment and Advanced Placement courses weight grades of C or better. The chart below indicates the quality points each grade carries for both types of GPA.

Letter Grade	Quality Points	Quality Points	Quality Points
	Unweighted	Honors	Dual and AP
A	4	4.5	5
B	3	3.5	4
C	2	2.5	3

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 3.83. These averages are not rounded off; that is a GPA of 2.99, 3.49 and 3.79 respectively are not sufficient.

Student Incentive Program

This incentive program allows students to improve their semester grades if they have performed poorly. Students who are eligible for the program must have earned a D or F for the first semester. By completing this program, students can raise their grade by one letter. Teachers outline what students must do to complete the program, and students must finish these requirements by the end of the 3rd quarter. Also, students must maintain good attendance and a C average during the 3rd quarter to be awarded the improved grade. For honor roll purposes, the original 2nd nine weeks grade will be used to determine who makes 2nd quarter honor roll.

Athletic Eligibility

An incoming ninth grader must have been regularly promoted, not assigned, from the eighth grade according to the district's pupil progression plan to be eligible for participation in interscholastic or extracurricular activities during the fall semester.

For students entering ninth grade, a 2.0 cumulative GPA must be maintained for participation in interscholastic extracurricular activities.

The SAT versus The ACT

SAT Reasoning Test – register online at: www.collegeboard.com (\$45.00 fee)

Section	Content	Number of Questions	Time
Critical Reading	Extended Reasoning	36-40	70 minutes (two 25-minute sections and one 20-minute section)
	Literal Comprehension	4-6	
	Vocabulary in Context	4-6	
	Sentence Completions	19	
Mathematics	Number and Operations	11-14	70 minutes (two 25-minute sections and one 20-minute section)
	Algebra and Functions	19-22	
	Geometry and Measurement	14-16	
	Data Analysis, Statistics, and Probability	5-8	
Writing	Essay	1	60 minutes (one 25-minute essay, one 25-minute multiple-choice section, and one 10-minute multiple-choice section)
	Improving Sentences	25	
	Identifying Sentence Errors	18	
	Improving Paragraphs	6	

ACT – register online at www.actstudent.org (\$47.00 fee includes writing)

Section	Content	Number of Questions	Time
English	Usage/Mechanics	40	45 minutes
	Punctuation	10	
	Grammar and Usage	12	
	Sentence Structure	18	
	Rhetorical Skills	35	
	Strategy	12	
Reading	Organization	11	35 minutes
	Style	12	
	Prose Fiction	10	
	Humanities	10	
	Social Studies	10	
Mathematics	Natural Science	10	60 minutes
	Pre-Algebra	14	
	Elementary Algebra	10	
	Intermediate Algebra	9	
	Coordinate Geometry	9	
	Plane Geometry	14	
Science	Trigonometry	4	35 minutes
	Biology, Chemistry, Earth/Space Sciences, Physics		
	Data Representation	15	
	Research Summaries	18	
	Conflicting Viewpoints	7	
Writing	Essay	1	30 minutes

Competitive scores:

@ UCF: AVG. SAT score = 1218 ACT = 26.4 GPA = 3.74
 @ FSU: SAT scores = 1190-1330 ACT = 26-25 GPA = 3.74 - 4.2
 @ UF: SAT scores = 1210-1400 ACT = 26-31 GPA = 4.0 - 4.4

SAT Test Dates: 10/9/10, 11/6/10, 12/4/10, 1/22/11, 3/12/11, 5/7/11, 6/4/11

ACT Test Dates: 9/11/10, 10/23/10, 12/11/10, 2/12/11, 4/9/11, 6/11/11

Juniors should begin practicing during semester 1 and take the SAT or ACT during semester 2.

Seniors should take the SAT or ACT for the last time either October or November. College applications are typically due November 1.

Course Descriptions: Reading

9th Grade Intensive Reading 1000410

2 credits

Grade 9

This DIRECT INSTRUCTION course is a double block created for students who are not fluent readers and need an intense level of additional support on reading skills necessary to pass the FCAT. Using SRA Reach, Rewards, Impact, and Reasoning and Writing materials, the class provides direct instruction in decoding, word analysis, fluency, systematic vocabulary development, and reading comprehension. The WISE software program provides a computerized supplement for independent practice. Placement is based on previous FCAT level and individual fluency assessment.

1 credit

1000400

Grade 9

This SOAR I course is a single block created for fluent students who need a less intense level of support of literacy skills necessary to pass the FCAT. The course uses thematic text sets in a literature circle format 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 WISE software program provides a computerized supplement for independent practice. Placement is based on previous FCAT level and individual fluency assessment.

10th Grade Intensive Reading

2 credits

1000410

Grade 10

This Scholastic READ 180 program is a double block created for students who are not yet fluent readers and need additional support on reading skills necessary to pass the FCAT. 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. The READ180 program is wide-ranging; building fluency, vocabulary and comprehension. Placement is based on previous FCAT level and individual fluency assessment.

1 credit

1000400

Grade 10

This SOAR II course is a single block created for fluent students who need a less intense level of additional support on literacy skills necessary to pass the FCAT. The course uses thematic text sets in a literature circle format 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 WISE software program provides a computerized supplement for independent practice. Placement is based on previous FCAT level and individual fluency assessment.

11th Grade Intensive Reading 1000400

1 credit

Grade 11

This SOAR III course is a single block created for fluent students who need a less intense level of additional support on literacy skills necessary to pass the FCAT. The course uses thematic text sets in a literature circle format to develop and build literacy strategies and comprehension skills. Students work on vocabulary and critical thinking skills while reading both fiction and non-fiction material. The WISE software program provides a computerized supplement for independent practice. Placement is based on previous FCAT level and individual fluency assessment.

11th/12th Grade Intensive Reading 1000410

2 credits

Grade 11th/12th

This course is a double block created for students who are not fluent readers and need an intense level of additional support on reading skills necessary to pass the FCAT. At the beginning the class uses Rewards materials for decoding and fluency building. In addition, the class uses a variety of fiction and non-fiction, including Newsweek magazine and Impact to provide practice with vocabulary, reading comprehension, and test taking skills. The WISE software program provides a computerized supplement for independent practice. Placement is based on previous FCAT levels and individual fluency assessment.

Advanced Reading - Honors Credit 1001480

1 credit

Grade 9

This honors level course is designed for proficient 9th grade readers. The purpose of this course is to enable students to refine communication, critical-thinking and study skills important for success in higher level coursework and post secondary education. Students will develop the skills and confidence to analyze and respond critically, both orally and in writing, to a range of literary, informational, and technical texts. Students will become more confident, independent readers, thinkers and learners through success in this course.

1008320/1004300

1 credit

Grade 10

The purpose of this course is to enable 10th grade students who are proficient readers to refine communication, critical-thinking and study skills important for success in higher level coursework and post secondary education. Students will learn and apply the principles of semantics and logic to construct meaning of text. Students will develop the skills and confidence to analyze and respond critically, both orally and in writing, to a range of literary, informational, and technical texts.

Course Descriptions: Fine Arts / Electives

Electronic Music I **1304300**

Prerequisite: None

1 Credit

Grades 10-12

This course is designed to introduce students to the fundamentals of music technology, composition, and theory. No prior musical experience is necessary. The class uses MIDI and recording technology as well as digital notation and sequencing software to assist students in the understanding and creation of musical compositions that range from 16th century counterpoint to today's popular dance music.

Electronic Music II **1304310**

Prerequisite: Electronic Music I

1 Credit

Grades 11, 12

This is an advanced course in which students continue expanding upon their musical knowledge. Students may choose to specialize in traditional composition (scoring and arranging for traditional instruments) or electronic music manipulation (recording technology, mixing and mastering).

Electronic Music III **1304320**

Prerequisite: Electronic Music II

1 Credit

Grade 12

This is an advanced course in which students continue expanding upon the musical knowledge developed in Electronic Music II. Students may choose to specialize in traditional composition (scoring and arranging for traditional instruments) or electronic music manipulation (recording technology, mixing and mastering).

Steel Band Class **1302420**

1 Credit

Grade 10-12

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.

Graphic Design **0106300**

1 Credit

Grades 10-12

This course is highly recommended for incoming 9th grade students. It will meet the one-credit performing arts graduation requirement and give students an opportunity to meet other incoming 9th grade students and get indoctrinated into the Crooms way of life. In this course, students learn the elements of art and the principles of design and apply that knowledge through computer software application programs such as Adobe Illustrator and Adobe Photoshop. Students will create graphically designed images and products that communicate ideas through formal, expressive, and conceptual elements.

Graphic Design II **0106310**

Prerequisite: Graphic Design I

1 Credit

Grades 11-12

This course is highly recommended for incoming 9th grade students. It will meet the one-credit performing arts graduation requirement and give students an opportunity to meet other incoming 9th grade students and get indoctrinated into the Crooms way of life. In this

Leadership **2400300**

Prerequisite: None

1 Credit

Grades 10-12

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.

PSAT / SAT Preparation **1700350**

.5 Credit

Grades 10-12

This course will prepare students for taking college entrance exams such as the SAT and ACT. Students will focus on strengthening skills in the following areas: vocabulary, literature, analysis, critical thinking, and test-taking strategies.

Course Descriptions: Foreign Language

Spanish I 0708340

Prerequisite: None

1 Credit

Grades 9-12

This introductory course is for students with little or no prior knowledge of the language. Students are exposed to a variety of authentic materials and a text rich in culture and literature. They will develop their listening and speaking skills in Spanish through conversation. Reading and writing skills, focusing on the present tense, will also 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 study of literature from Spain and Latin America. The course offers further insights into the Hispanic culture.

Spanish IV Honors 0708370

Prerequisite: Spanish III

1 Credit

Grades 11-12

This independent study course will continue the mastery of the language skills acquired from Spanish III. It is designed for highly motivated students who want to continue their studies in Spanish. Students who want to study another year of Spanish before going to Spanish AP are encouraged to take this course.

Spanish Language AP 0708400

Prerequisite: Spanish III

1 Credit

Grade 12

This course involves intensive practice of the language skills needed to master the AP Spanish Language exam. A strong emphasis is placed on impromptu conversation and writing, including essays. Listening and reading comprehension at the advanced level are also a part of the curriculum.

Chinese I 0711300

1 Credit

Grades 9-12

This introductory course is for students with little or no prior knowledge of the language. Students are exposed to a variety of authentic materials and a text rich in culture and literature. They will develop their listening and speaking skills in Chinese through conversation. Reading and writing skills will also be emphasized.

Chinese II 0711310

Prerequisite: Chinese I

1 Credit

Grades 10-12

Chinese II is for students who have successfully completed Chinese I class. It is the second year of a multi-year Mandarin Chinese course. In this class, students will continue to expand their vocabulary in learning Simplified Chinese characters using the Pinyin phonetic symbols to aid in pronunciation. Emphasis will be placed on grammatical rules in sentence structures so that students can write short Chinese essays. Students will also practice daily spoken Chinese to continue to develop their skills in listening, speaking, reading and writing the Chinese language at an intermediate level. The study of Chinese culture is also an important aspect of this language course.

Chinese III 0711320

Prerequisite: Chinese II

1 Credit

Grades 11-12

The purpose of this course is to enable students to enhance proficiency in Chinese through a linguistic, communicative, and cultural approach to language learning. There is continued emphasis on the development of listening, speaking, reading and writing skills. Experiences with Chinese literature are broadened. Cross-cultural understanding is fostered and real-life applications are emphasized.

Course Descriptions: Language Arts

English I 1001310

Prerequisite: None

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 FCAT power benchmarks as assessed on the 9th grade FCAT 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 FCAT Read will also be placed in an Intensive Reading class.

English I Honors 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 FCAT power benchmarks as assessed on the 9th grade FCAT 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 1001340

1 Credit

Grade 10

This course continues to incorporate reading and writing skills developed in English 1. 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 FCAT Writes exam (given in February) and FCAT Reads (given in March). ** All students testing below grade level (levels 1&2) on the 9th and 10th grade FCAT Read will also be placed in an Intensive Reading class.

English II Honors 1001350

1 Credit

Grade 10

This course continues to incorporate higher level reading and writing skills developed in English 1. 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 FCAT Writes exam (given in February) and FCAT Reads (given in March). Students in this course can expect outside reading and writing.

English III 1001370

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. ** All students testing below grade level (levels 1&2) on the 9th and 10th grade FCAT Read will also be placed in an Intensive Reading class.

English III Honors 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. Students in this course can expect outside reading and writing.



Course Descriptions: Language Arts & Journalism

AP English Language & Composition 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.

English IV 1001400

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 Senior Summit class. 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.

English IV Honors 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 Senior Summit class. 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 Literature & Composition 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.

Journalism I/Newspaper 1006300

Prerequisite: None

1 Credit

Grades 10-12

This course is an introduction to publications. Students will be introduced to journalistic media, desktop publishing, layout and design, and photo editing. Students will learn journalism skills including interviewing, reporting on a variety of events, editing for accuracy, and photo journalism. The students will be on the yearbook staff. Students will be expected to work in teams as well as individuals. Students should be aware that some assignments include activities that are outside of school hours.

Digital Design IV / Yearbook 8209540

Prerequisite: Digital Design / Graphic Design

1 Credit

Grades 11-12

Students will work on all aspects of the school yearbook. This yearbook is a team project that captures school life in a photo-journalism publication including news, sports, features, business and advertising. Students will apply their desktop publishing and photo manipulation skills. Participation in this course will require students to be available beyond the school day.

Digital Design V / Yearbook 8209550

Prerequisite: Digital Design IV

1 Credit

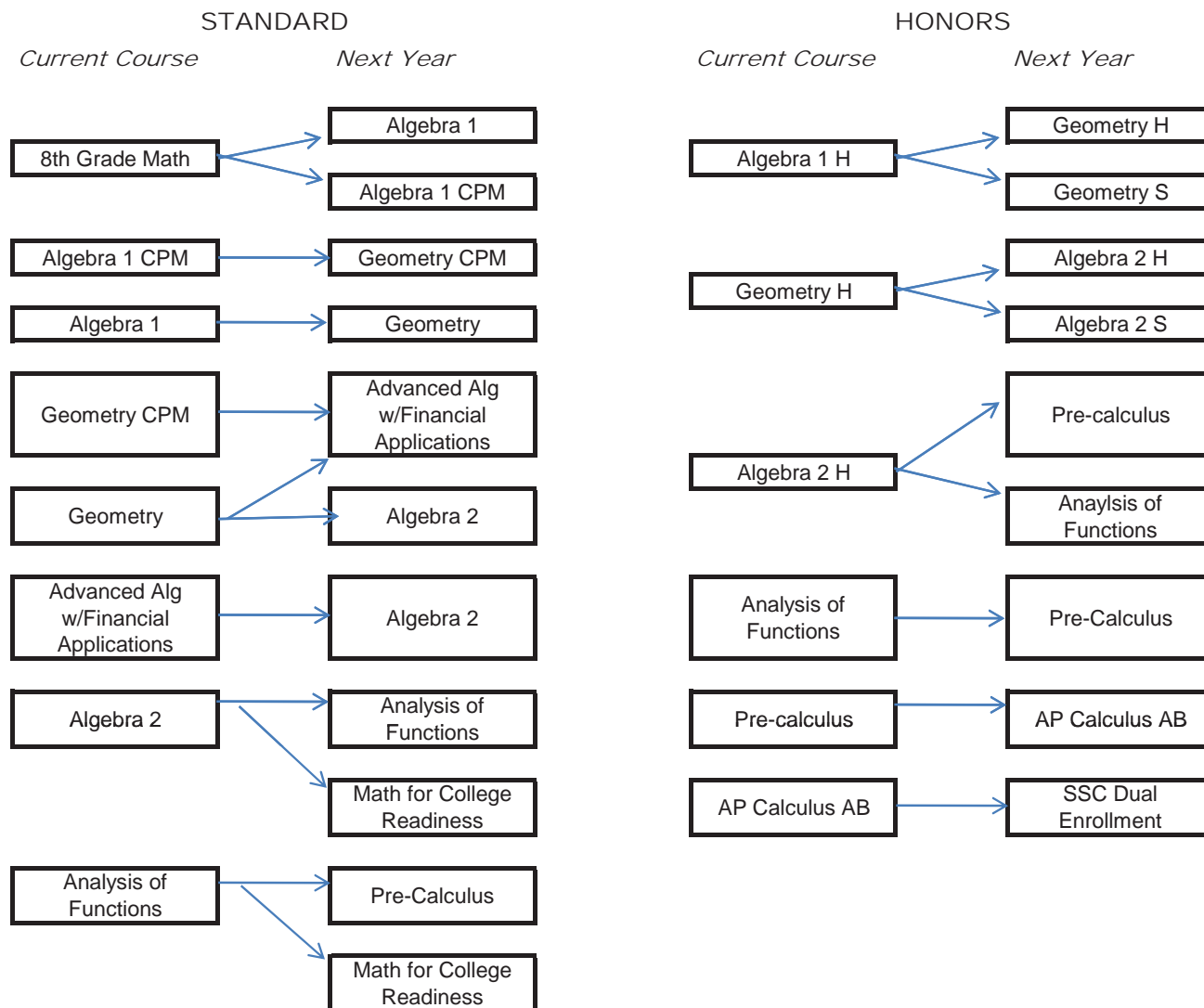
Grade 12

These second/third year yearbook students will take on leadership positions in the editorial and publishing staff. Students should be comfortable delegating tasks, supporting the efforts of first-year staff members, meeting deadlines, and assuming leadership responsibilities. Students should be aware that many assignments take place after school hours.

Course Descriptions: Mathematics

MATH DEPARTMENT PROGRESSION PLAN

2010 - 2011



Enrollment in Algebra 1 CPM and Geometry CPM will be determined by FCAT Math scores.

Students who are non-proficient in math will be enrolled in Intensive Math in addition to their math course.

Math for College Readiness is for SENIORS ONLY. Students will be placed in this course based on their CPT scores.

The following courses are designed for students who need additional instruction in FCAT math skills. They should be taken in conjunction with another math class.

Intensive Math I 1200400

Prerequisite: None

1 Credit

Grades 9-10

The purpose of this course is to enable students to develop mathematics skills and concepts through remedial instruction and practice. The content includes critical thinking, problem solving, and test taking skills and strategies.

Intensive Math II 1200400

Prerequisite: none

1 Credit

Grades 11-12

This course is a continuation of Intensive Math I, allowing for remedial instruction in mathematics skills and concepts through critical thinking, problem solving, and test taking skills and strategies.

Course Descriptions: Mathematics

Algebra I 1200310

Prerequisite: None

1 Credit

Grades 9-12

This course is designed to provide the foundation for future secondary mathematics courses and develop skills needed to solve mathematical problems. Topics shall include, but are not limited to, functions, linear equations, and inequalities, systems of linear equation and inequalities, polynomials, operations with radical expressions, solving quadratic equations, and ratio and proportions. Algebra I or its equivalent is required for high school graduation.

Algebra I Honors 1200320

Prerequisite: None

1 Credit

Grades 9-12

This course includes a rigorous, in-depth study of all the topics included in Algebra I as well as absolute value equations and inequalities, operations with rational expressions, solving rational equations and characteristics of quadratic graphs.

Geometry 1206310

Prerequisite: Algebra I

1 Credit

Grades 9-12

Critical thinking as well as practical applications of geometric skills and concepts in the real world are covered. Topics include, but not limited to, logic and reasoning, proofs, the study of Euclidean geometry of lines, planes, angles, triangles, similarity, congruence, geometric inequalities, polygons and circles, area and volume, and constructions.

Geometry Honors 1206320

Prerequisite: Algebra I

1 Credit

Grades 9-12

This course includes a rigorous, in-depth study of all of the Geometry topics as well as, but not limited to, truth tables, vectors, Fibonacci sequence, coordinate geometry proofs involving circles and problems involving cross sections of solids.

Algebra II 1200330

Prerequisite: Geometry

1 Credit

Grades 9-12

This course is designed to continue the study of the structure of Algebra by providing the foundations for applying these skills to other math and science fields. Topics include, but are not limited to, complex numbers, absolute value equations, linear equations and inequalities, functions and their inverses, systems of linear equations and inequalities, polynomials, rational expressions and equations, radical expressions and equations, quadratic equations, exponential and logarithmic functions and sequences and series.

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, all of which were previously studied in 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.

Advanced Algebra w/ Financial Applications 1200500

Prerequisite: Algebra I & Geometry

1 Credit

Grades 11-12

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.

Analysis of Functions

Course Descriptions: Math

1201310

Prerequisite: Algebra II

1 Credit

Grades 10-12

This course is designed for college bound students in preparation for College Algebra. Topics include, but are not limited to, an in-depth study of graphing, piece-wise functions, equation solving, word problems, polynomial functions, discontinuities, exponential and logarithmic functions, and trigonometric functions and their inverses.

Pre-calculus

1202340

Prerequisite: Algebra II

1 Credit

Grades 9-12

This course is designed to provide a foundation for the study of Calculus. Topics include, but are not limited to, an analysis of polynomial and trigonometric functions, Pythagorean and trigonometric identities, law of sines, law of cosines, sum and difference formulas, half angle and double angle formulas, conic sections, vectors, parametric equations, polar coordinates, finite and infinite sequences and series, and limits and continuity.

Mathematics for College Readiness

1200700

Prerequisite: Algebra II

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 not limited to, linear equations, quadratic equations, radical equations, polynomials, exponential equations, compound and simple interest, matrices, properties of exponents, solving systems of equations, and descriptive statistics. This course is supplemented with a graphing calculator. Students who qualify will be placed in this course based on the CPT (College Placement Test) scores taken at the end of their junior year.

AP Calculus AB

1202310

Prerequisite: Pre-Calculus

1 Credit

Grades 10-12

This course is intended for students who have a thorough knowledge of college preparatory mathematics. It is a course in introductory calculus with elementary (algebraic, trigonometric, exponential and logarithmic) functions. Topics include, but are not limited to functions and graphs, limits and continuity, derivatives and integrals, and their applications. This course is taught utilizing graphing calculators.

AP Statistics

Prerequisite: Pre-Calculus

1 Credit

Grades 11-12

This course can be taken as an elective course.

It will not substitute for one of students' four required math courses. This course is the equivalent of a one-semester, introductory, non-calculus-based, college course in statistics. The purpose of the course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data.

Course Descriptions: 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.

Fitness Issues for Adolescents

1501310

Prerequisite: None

.5 Credit

Grades 10-12

The purpose of this course is to enable students to extend their knowledge of fitness concepts and improve their fitness components. Students will learn about fitness issues facing adolescences. The course will utilize modern modes of fitness such as Dance-Dance Revolution, eye-toys, cycles, treadmills, weights, and physio-balls to engage students in fun, healthy activities. Students will learn to use heart rate monitors and pedometers. Students will also learn about nutrition and the importance of an active lifestyle.

Team Sports I

1503350

Prerequisite: None

.5 Credit

Grades 10-12

This course focuses on the origin, 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 learn various fitness activities and exhibit an improved or maintained level of health related fitness. Students will describe and demonstrate strategies utilized in selected team sports.

Team Sports II

1503360

Prerequisite: Team Sports I

.5 Credit

Grades 10-12

This course focuses on the development of fundamental and advanced skills, techniques, rules and terminology, and offensive and defensive strategies of selected team sports and continues to cover topics taught in Team Sports I.

Life Management Skills

0800300

.5 Credit

Grades 9-12

Health Life Management Skills is an interactive course designed to provide instruction in nutrition, diseases, substances, human reproduction, life cycle, relationships, communications, conflict resolution, family responsibilities, community health, consumer issues, media, the fundamentals of first aid and safety, health care products and special topics involving technology in the health field.

Personal Fitness

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 using their heart rate as a guide and measuring tool. Polar heart rate monitors, pedometers, FX Cycles (virtual workouts), treadmill, recumbent cycle, Kasier and universal weight training systems are utilized. Hands on software and hardware (Trifit) packages are utilized in this course. This course is required for graduation.

Recreational Activities

1502470

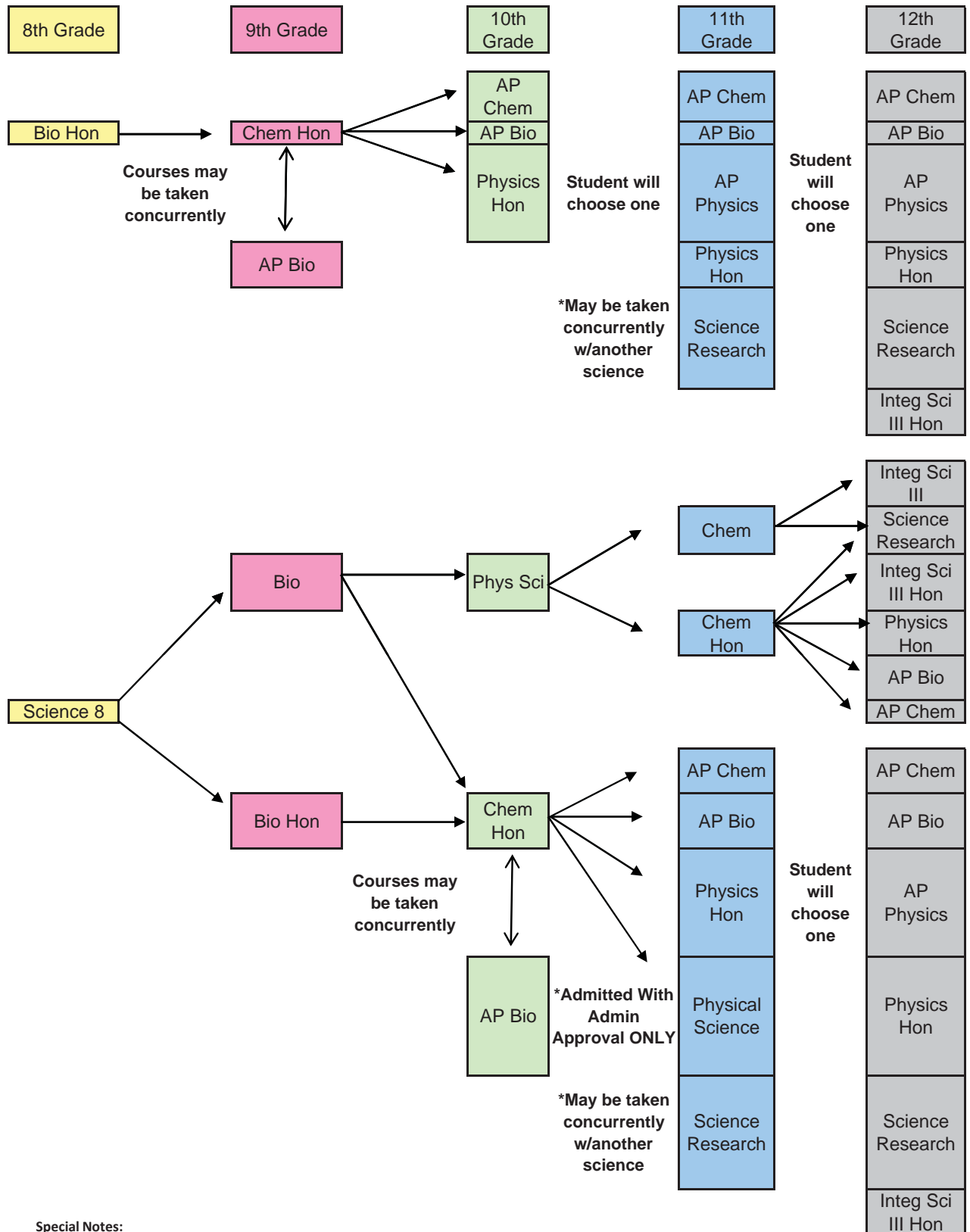
.5 Credit

Grades 10-12

The purpose of this course is to expose students to a variety of recreational sports, games and team building activities. Within the curriculum, students will learn about sports from other countries and cultures as well as those whose roots began in the the United States. Students will develop knowledge and skills and should appreciate both aspects of sports: spectator and participant. This is an activity course and students are expected to participate.

Course Descriptions: Science

Crooms AOIT Science Sequence



Special Notes:

- Rising 10th grade students who are non-proficient in reading and/or math should be placed in Physical Science.
- Any schedule changes at semester for yearlong science courses REQUIRE administrative approval.

Course Descriptions: Science

Biology I 2000310

Prerequisite: None

1 Credit

Grade 9

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 2000320

Prerequisite: None

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.

Chemistry I Honors 2003350

Prerequisite: Biology I Honors

1 Credit

Grade 10

In this course, students will be provided with the study of composition, properties and changes associated with matter. The content shall include, but not be limited to the following: 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 essential components of the course.

Chemistry I 2003340

Prerequisite: Physical Science

1 Credit

Grades 11-12

The purpose of this course is to introduce students to the study of the composition, properties and changes associated with matter. Topics include, but are not limited to, 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 an essential component of the course.

Physical Science 2003310

Prerequisite: Biology

1 Credit

Grade 10

The purpose of this course is to provide opportunities to study the concepts of matter, energy, and forces, and their applications through exploratory investigations and activities.

Physics I Honors 2003390

**Prerequisite: Chemistry Honors, completed
Algebra II or concurrently enrolled.**

1 Credit

Grades 11-12

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.

Integrated Science III 2002440

1 Credit

Grade 12

The purpose of this course is to provide opportunities to investigate the theories and ideas associated with the biological, earth, and physical sciences in a way that is relevant and usable. Students construct science knowledge by formulating questions, making predictions, planning experiments, making observations, classifying, interpreting and analyzing data, drawing conclusions, and communicating.

Course Descriptions: Science & Social Studies

Integrated Science III Honors 2002450

1 Credit

Grades 12

The purpose of this course is to give students the opportunity to participate in a hands-on, project-based science course that combines cooperative learning and community service as a venue for applying scientific thinking and experiments. Students construct science knowledge by formulating questions, making predictions, planning experiments, making observations, classifying, interpreting, and analyzing data, drawing conclusions, and communicating.

Research and Critical Thinking 1700300

1 Credit

Grades 10-12

The Research I course is designed to promote research experiences for those motivated and inquiring science students who are willing to commit to the time and effort that this course requires. This course is open to students in grades 10-12 but is specifically developed for interested and creative students who want an opportunity to acquire research and laboratory skills through planning and implementing investigations which may lead to advancing career and educational goals. Original research that relates to real-world issues will be encouraged with the supervising science teacher's help in facilitating laboratory time and equipment needed. Research conducted in this course should be suitable for participation in a variety of individual and team projects and contests such as local science fairs, SECME, and NCSSMST.

AP Biology 2000340

Prerequisite: Biology Honors

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 Chemistry 2003370

Prerequisite: Chemistry & Algebra II Honors

1 Credit

Grade 11-12

Content includes, but is not limited to, the structure of matter, the states of matter, chemical reactions, and descriptive chemistry.

AP Physics B 2003420

Prerequisite: Physics & Algebra II honors

1 Credit

Grades 11-12

This course prepares students for appropriate placement in college physics courses. The content shall include, but is not limited to, kinematics, Newton's laws of motion, conservation laws in classical mechanics, topics in mechanics, kinetic theory and thermodynamics, electrostatics, electric circuits, magnetism, waves and optics, and modern physics. In order to take this course, students must have already taken or are currently taking Algebra II honors.

World History 2109310

1 Credit

Grade 10

World History Honors 2109320

1 Credit

Grade 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.

AP World History 2109420

1 credit

Grade 10

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.

Course Descriptions: Social Studies

American History 2100310

1 Credit

Grade 11

American History Honors 2100320

1 Credit

Grade 11

This course is designed to help students develop an understanding of American history. The course begins with a six week review from colonization to the Reconstruction era. 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.

AP American History 2100330

Prerequisite: None

1 credit

Grade 11

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.

American Government 2106310

Prerequisite: None

.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.

AP American Government 2106420

Prerequisite: None

.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 2102310

Prerequisite: None

.5 Credit

Grade 12

This course is a study of the ways society uses its limited resources to satisfy unlimited wants and the effect Information Technology has had on our economy. Content includes basic economic problems, the market system and structures, the roles of labor, business and financial institutions, the role of the consumer and producer, international trade, and the history of economic thought.

Economics Honors 2102320

Prerequisite: None

.5 credit

Grade 12

Through this course, students will understand the choices they must make as producers consumers, investors, and tax payers. The study of economics provides students with the knowledge and decision-making tools necessary for understanding how a society must organize its limited resources to satisfy its unlimited wants.

AP Human Geography 2103400

Prerequisite: None

1 credit

Grade 9-12

The purpose of this course is to enable students to develop higher levels of concepts and skills related to Human Geography. The content will include regions, population studies, cultural concepts and spatial representation, political geography, land use, urbanization, issues related to space, place, and scale, and economic geography.

Course Descriptions: Technology / Foundation

The following two courses are required courses for all 9th graders.*

**AOIT Intro to Information Technology
8207310**

Prerequisite: None

1 Credit

Grade 9

This course is designed to provide an introduction to information technology concepts and careers as well as the impact information technology has on the world, people, and industry. This is a required course for all AOIT students. **Exemption for programming students is an option.** Students who wish to enroll in Business Computer Programming I during their freshmen year may be exempt from this class.

* Students may choose to take a Computing for College & Careers proficiency exam before beginning their 9th grade year. If they pass, they will be placed in Business Software Applications I instead of CCC.

**Computing for College & Careers
8209020**

Prerequisite: None

1 Credit

Grade 9

This course is designed to provide a basic overview of current business and information systems and trends and to introduce students to the basic skills and foundations required for today's business environments. Emphasis is placed on developing proficiency with touch keyboarding and fundamental computer applications, so that they may be used as communication tools for enhancing personal and workplace proficiency in an information-based society. This is a required course for all AOIT students.

Exemption through pre-test is an option.*

PC Support 1

8207210

Prerequisite: CCC and Intro to IT

1 Credit

Grade 10

This course focuses on basic system support, maintenance, and entry-level network concepts. Emphasis is placed on developing and understanding various computer hardware devices and solutions including installation, trouble-shooting, diagnostic techniques, repair of system components, and common safety and preventative maintenance procedures. Students will also learn basic networking as well as customer service skills. This course will prepare students for the A+ Core exam 220-231 which is the first part of becoming a certified computer service technician.

PC Support 2

8207220

Prerequisite: PC Support 1

1 Credit

Grades 11-12

This course focuses on operating system technologies from the most basic disk operating system (DOS) up to the latest Microsoft Windows OS. Areas like data backup and support, system's OS maintenance, and network security issues are also covered. Additionally, this course will engage students in setting up and running an in-house computer repair shop for community members. Students will gain real-world experience diagnosing and repairing computer problems as well as experience in working with clients and running a business.

**Network Concepts / Network Computer
Maintenance & Repair**

**(A+ Computer Hardware and
Operating Systems)**

CET 1486C / CET 1173

Prerequisite: Intro to IT

1 Credit

Grades 10-12

This course focuses on system support, maintenance, and basic network concepts. The content includes computer software and hardware applications including installation, troubleshooting, diagnostic techniques, and repair of system components, operating systems, and application software; common safety and preventive maintenance procedures; basic networking including physical and logical network connectivity; and effective behaviors that contribute to customer satisfaction. This course will prepare the student for the COMPTia A+ Hardware and Operating Systems Exams.

All 10th grade students are required to take either PC Support or AOIT Technical Support.

Course Descriptions: Technology / Foundation

9th grade students who pass a CCC proficiency test are required to take Business Software Applications I in its place.

Business Software Applications 1 **8212120**

Prerequisite: CCC, Intro to IT

1 Credit **Grades 10–12**

This course is designed to develop proficiency in using the advanced features of software programs to perform office-related tasks. Students will continue to improve their knowledge and computer skills in word processing, spreadsheets, databases, e-mail, Internet browsers, multimedia presentations, web publishing and digital publishing.

Business Software Applications 2 **8212160**

Prerequisite: Business Software Applications 1
1 Credit **Grades 10–12**

This course is designed to use technology to produce high quality employment portfolios, research job opportunities, and compile and disseminate job-seeking documents. Students will continue to improve their knowledge and computer skills in word processing, spreadsheets, databases, e-mail, Internet browsers, multimedia presentations, web publishing and digital publishing.

Business and Entrepreneurial Principles (honors) **8215120**

Prerequisite: CCC or BSA I

1 Credit **Grades 10–12**

This course is designed to provide an introduction to business organization, management, and entrepreneurial principles. Topics include communication skills, various forms of business ownership and organizational structures, supervisory/management skills, leadership skills, human resources management activities, business ethics, and cultural diversity. Emphasis is placed on job readiness and career development. The use of computers is an integral part of this program. Students will have hands-on experience in setting up and managing a business using virtual business software.

AOIT Internship **8207350**

1 Credit **Grade 12**

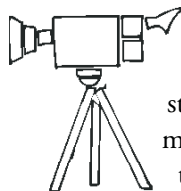
The AOIT internship course provides students with the opportunity to stimulate their career interest and to demonstrate human relations, communications, and employability skills necessary for entry-level employment in the information technology industry. Students will enhance and apply instructional competencies learned in the classroom through the internship experience. **This internship is required for students who expect to earn a National Academy Foundation certificate upon graduation.**

Digital Video and Sound **8207420**

Prerequisite: CCC or BSA 1

1 Credit **Grades 10–12**

This course covers advanced planning and video editing for audio/video presentations. Students design presentations through various steps of development, implementation, and final output. Students will gain experience on both PC and Apple platforms, using non-linear editing programs such as Adobe Premiere Pro and Final Cut Pro.



Multimedia Technologies **0107400**

Prerequisite: Digital Video and Sound

1 Credit **Grade 11-12**

This is the second-year course for students interested in video production. In this course, students will create computer-generated multimedia images and presentations that communicate ideas through formal, expressive, and conceptual elements. Additionally, students will demonstrate use of collaborative skills to maintain the studio and to offer multimedia presentations in the school and/or community.

Course Descriptions: Computer Applications

Digital Design 1 8209510

Prerequisite: CCC or BSA 1

1 Credit

Grades 10–12

This course introduces students to the study of appropriate digital media and other topics. Students will electronically create and publish newsletters, flyers, greeting cards, calendars, brochures, stationery, and more in this multisoftware course. Students will participate in a work-based learning experience. Software taught during the course will include Adobe InDesign and Adobe Photoshop.

Digital Design 2 8209520

Prerequisite: Digital Design 1

1 Credit

Grades 11–12

This course continues the development of basic entry-level skills required for careers in the digital publishing industry. Content includes layout, and design activities; decision-making activities; and digital imaging. Software taught during the course will include Photoshop, Illustrator as well as InDesign. Students will also create projects for use in the school and community.

Digital Design 3 8209530

Prerequisite: Digital Design 2

1 Credit

Grade 12

In this course students will apply their knowledge of InDesign and graphic arts software to create and publish real projects for teachers, businesses and community.

3-D Computer Modeling 0200370

Prerequisite: Digital Design/Graphic Design

1 Credit

Grades 10–12

Students will develop a basic understanding of the use and function of three dimensional art in the entertainment industry. Students will use 3D animation and sculpting programs to design visual presentations for use in computer animation, live action film effects integration, and model creation for computer entertainment industry.

Web Design 1/Web Programming I 8207110 / COP 2830

Prerequisite: CCC or BSA 1

1 Credit

Grades 10–12

This course teaches key skills required to design, author and publish XHTML pages with CSS. This includes creating a basic XHTML document, organizing Web documents, creating links, using advanced XHTML features, and creating forms to capture and transfer data. Students will have hands-on experience setting up and creating Web pages on an Intranet.

Web Design 2 8207120

Prerequisite: None

1 Credit

Grades 10–12

This course provides advanced skills for Internet, Intranet, and Web Design by enhancing and enriching the concepts of web page layout and theory. Students learn to use Macromedia Dreamweaver and Fireworks to design and lay out web pages. They will learn to use Macromedia Flash to produce web page animation and graphic-rich, interactive web sites. The class offers students opportunity to earn Adobe certification and credit for SSC through Career Pathways.

Web Design 3 8207130

Prerequisite: Web Design 2

1 Credit

Grades 11-12

This course involves advanced design concepts for creating web pages. Students will use their advanced skills to create and maintain web sites for school and other organizations. Emphasis will be on achieving proficiency in industry-standard site design.

Web Design 4/Web Programming II 8207140 / COP 2832

Prerequisite: Web Design 1

1 Credit

Grade 11-12

This course focuses on advanced web programming. The content includes information technology career research; advanced HTML, DHTML, and XML commands and web page design; advanced web topics such as webscripting and web server administration. Specific web languages covered in this course are JavaScript and PHP/MYSQL, while also examining ASP, AJAX, CGI, SSI, Perl, and Java Server.

Course Descriptions: Computer Apps & Science

Business Computer Programming 1 Principles of Computer Programming (Visual BASIC)

8206010 /COP 1000

Prerequisite: Algebra I, CCC or BSA 1

1 Credit

Grades 9–12

This course provides a study of Visual BASIC.NET and its application to Windows programs. Students will design, implement and document computer programs utilizing the Visual BASIC.NET programming language. Visual BASIC.NET is visually oriented and is an event-driven programming language.

Business Computer Programming 2 (C++)

8206020

Prerequisite: Bus. Comp. Programming 1

1 Credit

Grades 10–12

This course provides a study of C++. The programming concepts and techniques taught in this course include development and use of programming language(s), sequential, logical problem solving, algorithms and flowcharts, syntax, vocabulary, and data structures in programming, writing, testing, and debugging computer programs, and ethical and social implications.

Game & Simulation Programming 8208330

Prerequisite: Business Comp Programming 1

1 Credit

Grades 11–12

This course is focused on students acquiring the appropriate programming skills for rendering a game or simulation product, including program control, conditional branching, memory management, score-keeping, timed event strategies and methodologies, and implementation issues.

C# Programming COP2360

Prerequisite: Bus. Comp. Programming 1

1 Credit

Grades 11–12

This course provides an introduction to the C# programming language. Students will learn the basic features of the language including selection, iteration, data types, and scope. In addition, the course will cover the object-oriented aspects of the language including encapsulation, inheritance, and polymorphism.

AOIT Programming/Database Honors 8207320

Prerequisite: CCC or BSA 1

.5 Credit

Grades 11–12

This course is designed to provide the foundation for future software engineers or DBAs. It is a two semester course from the Oracle Academy. The first semester, DataBase Fundamentals, takes business requirements and transforms them into an operational database. Content includes creation of Entity-Relationship Diagrams, mapping information into a relational database design, the creation of relationship tables and composition of a formal design presentation. The second semester, Data Control Functions, introduces data-server technology and Structured Query Language. Content includes creation and maintenance of database objects, storage retrieval and manipulation of data using SQL. At the completion of the course, students will be able to create reports and data management applications and sit for the Oracle 10g certification.

Advanced C# Programming COP2362

Prerequisite: C# Programming

1 Credit

Grades 11–12

The student will use the more advanced features of the C# programming language to create complex applications that utilize graphical user interfaces, databases, multithreading, Internet communications, and multimedia.

AP Computer Science A 0200320

Prerequisite: Business Comp Programming 1

1 Credit

Grades 11–12

This course emphasizes programming methodology and procedural abstraction using object-oriented programming. The course is taught in the Java programming language and includes the study of algorithms, data structures, and data abstraction. The content will include, but not be limited to, the content specified by the Advanced Placement Program.

Course Descriptions: Computer Science Networking

Networking 1
(CCNA 1 & 2)
CET 1600 / CET 1610

1 Credit

Grades 10–12

This course is designed to prepare students to understand and apply the basics of networking hardware. The course covers the OSI Model and industry standards; network topologies; IP addressing, including subnet masks; basic network design; beginning router configurations; routed and routing protocols. This is the first of two courses which will prepare students for the Cisco Certified Networking Associate Exam.

Networking 2
(CCNA 3 & 4)
CET 2615 / CET 2620

1 Credit

Prerequisite: Networking 1 & 2

Grades 11–12

This course is designed to prepare students to apply and understand the advanced principles and applications of networking hardware. The course covers the advanced router configurations; LAN switching; network management; and advanced network design. Students will work on advanced network design projects and advanced network management projects. This is the last course to prepare students for the Cisco Certified Networking Associate Exam.

Networking 3 Honors
(Microsoft)
8207040

1 Credit

Prerequisite: CCC or BSA I

Grades 10–12

This course is designed to prepare students to apply and understand the basics of the Microsoft Windows XP Client Software. The course covers the XP environment, installing and configuring XP, securing XP, troubleshooting, supporting applications, interoperability, and printing. Students will install, configure, customize, optimize, integrate a network and troubleshoot Windows XP in a single-domain environment.

Networking 4 Honors
(Microsoft)
8207050

1 Credit

Prerequisite: Networking 3

Grade 12

This course is designed to provide students with the necessary skills to plan, analyze, optimize, and troubleshoot Windows XP Server in an Enterprise Environment. Students will also gain understanding of the internal and network architecture of Microsoft Windows XP. Students will set up, configure, use, and support Transmission Control Protocol/Internet Protocol (TCP/IP) on Microsoft Windows XP operating system in a networked environment.

Introduction to Wireless Technologies
CET1854

1 Credit

Grades 11–12

Prerequisites: Net 1 and 2

This course is designed to provide students with a complete foundation of knowledge for entering into or advancing in the wireless networking industry. It covers basic RF theory to link budget math, including topics from troubleshooting to performing a site survey. This course delivers hands-on training that will benefit the novice as well as the experienced network professional. This course is offered onsite at SCC on Monday and Wednesday afternoons, and students must provide their own transportation.

Introduction to IP Telephony
CET1675

1 Credit

Grades 11–12

Prerequisites: Net 1 and 2

This course explains how companies are using IP Telephony equipment and software to efficiently upgrade existing telephone systems. The course will additionally give the student a fundamental understanding of the architecture of voice communication and how signaling, call quality and public switched telephone network 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. This course is offered onsite at SCC on Monday and Wednesday afternoons, and students must provide their own transportation.

Course Descriptions: Networking

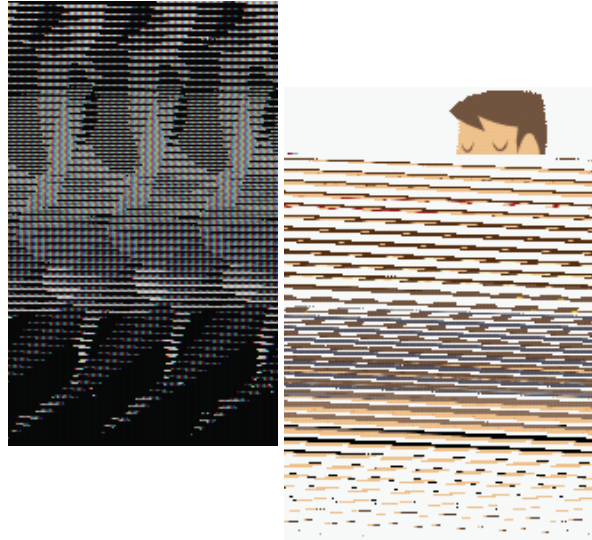
Introduction to UNIX/C Programming (Networking 5 Honors) 8207060

Prerequisite: CCC or BSA 1

.5 Credit

Grade 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, C programming, and shell scripts. The course will utilize Red Hat Linux.



Game & Simulation Foundations 8208110

1 Credit

Grade 10-12

This course is designed to provide an introduction to game and simulation concepts and careers, the impact game and simulation has on society and industry, and basic game-simulation design concepts such as rule design, play mechanics, and media integration. This course compares and contrasts games and simulations, key development methodologies and tools, careers, and industry-related information. This course also covers strategies, processes, and methods for conceptualizing a game or simulation application; storyboarding techniques; and development tools.

Emergent Technologies - iPhone Apps 0200360

Prerequisite: BCP 1

.5 Credit

Grade 10-12

If you are interested in iPhone application development, then this is the course for you. In this semester course, you will learn to write iPhone applications. Prior programming experience is not required but highly recommended.

Emergent Technologies - Social Networks 0200360

.5 Credit

Grade 10-12

This course introduces students to a variety of new and emerging technologies used in today's online environment. It covers various social networking platforms, content and learning management tools, web conferencing, immersive environments, and other trends in social computing.

On the Job Training

Seniors who have met all other graduation requirements and would like to schedule additional period(s) in their AOIT internship, may sign up for this course. Students can earn high school credit while working in a cooperative situation with a business, but only after they have fulfilled their internship requirements.

Business Cooperative Education - OJT 8200410

Prerequisite: CCC or BSA 1, AOIT Internship
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.

Number	Course	Credit	Term	Page
0200370	3-D COMPUTER MODELING	1	YR	29
COP2362	ADV C# PROGRAM	0.5	SEM	31
2100330	Adv Pl Amer History	1	YR	26
2000340	Adv Pl Biology	1	YR	25
1202310	Adv Pl Calculus Ab	1	YR	21
2003370	Adv Pl Chemistry	1	YR	25
0200320	Adv Pl Computer Science	1	YR	30
1001420	Adv Pl Eng Lang Composition	1	YR	18
1001430	Adv Pl Eng Lit Composition	1	YR	18
2103400	Adv Pl Human Geography	1	YR	26
2102370	Adv Pl Macroeconomics	0.5	SEM	27
2003420	Adv Pl Physics	1	YR	25
0708400	Adv Pl Spanish Language	1	YR	16
1210320	Adv Pl Statistics	1	YR	21
2106420	Adv Pl Us Govt/Pol	0.5	SEM	26
2109420	Adv Pl World His	1	YR	26
1001480	Advanced Reading 9	1	YR	14
1008320	Advanced Reading 10	1	YR	14
1200310	Algebra I	1	YR	20
1200320	Algebra I Hon	1	YR	20
1200330	Algebra II	1	YR	20
1200340	Algebra II Hon	1	YR	20
2100320	American History Honor	1	YR	26
2106310	American Government	0.5	SEM	26
2100310	American History	1	YR	26
1201310	Analysis Of Function	1	YR	21
8207350	AOIT Internship	1	YR	28
8207320	AOIT-PGM/DATABASE - Oracle	0.5	SEM	30
2000310	Biology I	1	YR	24
2000320	Biology I Hon	1	YR	24
8215120	Bus And Entrep Principles	1	YR	28
8200410	Bus Coop Education OJT	1	YR	33
8206010	BUS CPT PGM 1/Prin of Pgm	1	YR	30
8206020	BUS CPT PGM 2	1	YR	30
8212120	Bus Software App 1	1	YR	28
8212160	Bus Software App 2	1	YR	28
COP2360	C# PROGRAMMING	0.5	SEM	30
2003340	Chemistry I	1	YR	24
2003350	Chemistry I Hon	1	YR	24
0711300	Chinese I	1	YR	16
0711310	Chinese II	1	YR	16
0711320	Chinese III	1	YR	16
8209020	Computing for College & Career	1	YR	27
8207420	Dig Video Sound Fundamentals	1	YR	28
8209510	Digital Design 1	1	YR	29
8209520	Digital Design 2	1	YR	29
8209530	Digital Design 3	1	YR	29
8209540	Digital Design 4/Yearbook	1	YR	18
2102310	Economics	0.5	SEM	26
1304300	Elect Music I	1	YR	15
1304310	Elect Music II	1	YR	15
1304320	Elect Music III	1	YR	15
1001320	English I Hon	1	YR	17
1001350	English II Hon	1	YR	17

Number	Course	Credit	Term	Page
1001380	English III Hon	1	YR	17
1001410	English IV Hon	1	YR	18
1001370	English III	1	YR	17
1001400	English IV	1	YR	18
1501310	Fitness Issues for Adolescents	0.5	SEM	22
8208110	Game & Simulation Foundations	1	YR	32
8208330	Game & Simulation Programming	1	YR	30
1206310	Geometry	1	YR	20
1206320	Geometry Hon	1	YR	21
0106300	Graphic Design I	1	YR	15
0106310	Graphic Design II	1	YR	15
2002440	Integrated Science 3	1	YR	24
2002450	Integrated Science 3 Hon	1	YR	25
1200400	Intensive Math I & II	1	YR	19
1000410	Intensive Read 9-12: double block	1	YR	14
1000400	Intensive Read 9-12: single block	1	YR	14
CET1675	INTRO IP TELEPHONY	0.5	SEM	31
8207060	Intro to UNIX/Red Hat Linux	0.5	YR	32
CET1854	INTRO WIRELESS TECHNOLOGY	0.5	SEM	31
8207310	Introduction to Info Technology	1	YR	27
1006300	Journ I/Yearbook	1	YR	18
2400300	Leadership Skills	1	YR	15
0800300	Life Management Skills	0.5	SEM	22
1200700	Math for College Readiness	1	YR	21
0107400	Multimedia Technology	1	YR	28
CET1173	NET COMP MAIN/NET CONC	1	YR	27
CET1600	Networking 1	1	YR	31
CET2615	Networking 2	1	YR	31
8207040	Networking 3	1	YR	31
8207050	Networking 4	1	YR	31
8207210	Pc Support 1	1	YR	27
8207220	Pc Support 2	1	YR	27
1501300	Personal Fitness	0.5	SEM	22
2003310	Physical Science	1	YR	24
2003390	Physics I Hon	1	YR	24
1202340	Pre-Calculus	1	YR	21
1700350	PSAT/ SATprep	0.5	SEM	15
1502470	Recreational Activities	0.5	SEM	22
1700300	Research & Critical Thinking	1	YR	25
0708340	Spanish I	1	YR	16
0708350	Spanish II	1	YR	16
0708360	Spanish III Honors	1	YR	16
1302420	Steel Band	1	YR	15
1503350	Team Sports 1	0.5	SEM	22
1503360	Team Sports 2	0.5	SEM	22
8207110	Web Design 1/Web Prog	1	YR	29
8207120	Web Design 2	1	YR	29
8207130	Web Design 3	1	YR	29
8207140	Web Design 4 / Web Programming	1	YR	29
2109310	World History	1	YR	25
2109320	World History Hon	1	YR	25

		Four Year Plan				
SUBJECTS	Crooms 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 or Algebra II			
Science	4	4	Biology (standard & honors)			
Social Studies	3	3		World History AP World History	American History AP American History	Economics / Amer. Govt. AP Amer. Govt. Honors Economics
Personal Fitness	.5	.5	Personal Fitness			
Physical Education	.5	.5	Physical Education			
Performing Arts**	1	1				
Foreign Language		2				
Required IT Elective			Intro to Information Technology or BCP 1	PC Support or A+		
IT Elective			Computing for College & Careers or BSA I			
IT Elective						
Total	26					

* Some advanced placement coursework is also recommended for college-bound students.