

CENTRAL HIGH SCHOOL CURRICULUM GUIDE

2016 – 2017

Central Community Unit School District 301

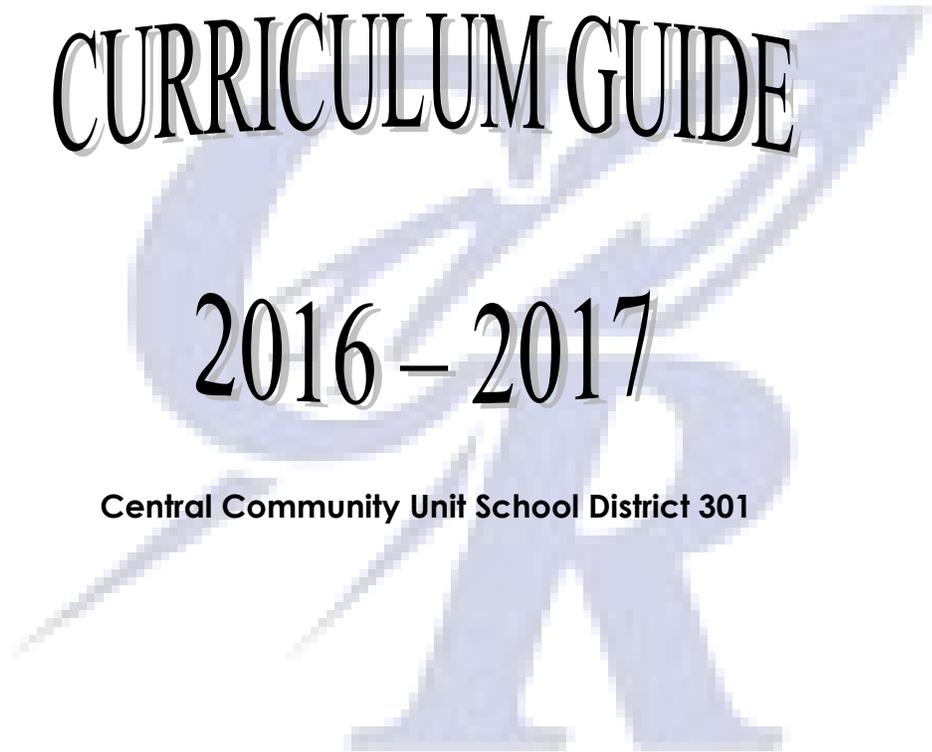


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Important Dates

- Jan. 6-8: CHS Counselors meet with current juniors to provide 2015-2016 registration information. Junior course selection window opens in Skyward January 9th.
- Jan. 20-22: CHS Counselors meet with current sophomores to provide 2015-2016 registration information. Sophomore course selection window opens in Skyward January 23rd.
- Jan. 25-27: CHS Counselors meet with current freshmen to provide 2015-2016 registration information. Freshman course selection window opens in Skyward January 28th.
- Jan. 26-Feb. 9: Students turn in course registration sheets to counselors in English classes (juniors), math classes (sophomores), and science classes (freshmen).
- Feb. 10 & 12: CHS Counselors meet with 8th Grade students at Central Middle School to finalize course selection.
- Mar. 11th: Last day for completed ECC Tech Prep and Fox Valley applications to be turned into counselors.
- April 15th: All placement tests for ECC Tech Prep students must be completed by this date.
- May 4th: ECC Tech Prep/Middle College Orientation.
- June 3: Last day for students to request changes to 2016-2017 schedule.

General Information

How To Use This Guide

This guide has been created to help you register for classes. It contains most of the information you will need to make your course selections for the upcoming school year. As you begin the process of selecting your courses, pay careful attention to the prerequisites and grade levels required for the course you are interested in to ensure you are registering only for courses for which you are eligible. The number of credit hours earned for a class are indicated.

Colleges, universities, and other post-secondary institutions require students to have successfully completed certain coursework in high school. However, not all post-secondary institutions have the same entrance requirements and some may exceed Central Community Unit School District 301's minimum graduation requirement. Students are encouraged to research entrance requirements thoroughly. More specific information on college entrance requirements can be found on Page 9. Please see your counselor for assistance.

Please note that certain courses require teacher approval or a mandatory teacher meeting. You are encouraged to discuss class placement with your counselor and current teachers, but be aware that signing up for a class does not guarantee enrollment in that class. Also, **all students must have a parent/guardian's signature on the registration sheet.**

Please contact your assigned counselor by e-mail or phone if you have questions or want to schedule an appointment:

Last Names A-Hars: Mrs. Arlene Knewitz (847-464-6037, arlene.knewitz@central301.net)
Last Names Hart-Pes: Mr. Jonathan Young (847-464-0025, jon.young@central301.net)
Last Names Pet-Z: Mrs. Sarah Schwartz (847-464-6036, sarah.schwartz@central301.net)

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Graduation Requirements

The objective of every student should be to earn a high school diploma. Before receiving a diploma, a student must successfully complete all graduation requirements as specified by the Central Community Unit School District 301 Board of Education, the Illinois State Board of Education, and The School Code of Illinois. Students receive one half credit for each class in which they receive a passing grade, except as indicated in this guide. **A total of 28 credits are required for graduation from Central High School for the Class of 2017, 27 for the Class of 2018, 26 for the Class of 2019 and 25 for the Class of 2020 and all future classes.** This total may be adjusted down if a student transfers to Central High School from another school. Graduation credits must include the following:

English	4 credits (8 semesters)
Mathematics	3 credits (6 semesters)
Science	3 credits†
Social Studies	2 credits (Class of '17 will require 3)
Humanities (Fine Arts/Foreign Language), and Career/Tech Education	1 credit (.5 of which must be Consumer Ed.)
Physical Education (P.E.)	3.5 credits
Health	.5 credits
Electives	8 credits
Total	25 credits

†Students must take, at least, two laboratory sciences to graduate. The specific laboratory sciences will be based upon the student's initial placement in science when they first enroll at Central High School.

Specific Course Requirements (The following courses MUST be completed in order for students to graduate from Central High School)

English 1 (or Honors English 1 or English 1 DB)	Algebra 1 (or General Algebra)
English 2 (or Honors English 2, English 2, or English 2 Studies)	Geometry (or Accel. Geom. or Informal Geom.)
English 3 (or English 3 Studies or AP English Literature & Comp.)	Health
United States History (or AP U.S. History)	American Government (or AP Government)
Global Studies (or Honors World History) – Beginning with Class of '18	Consumer Education (or equivalent – see Page 5)

Credits From Other Institutions: Other than credits transferred from another high school when a student establishes residence in the district, students may earn no more than two credits from a pre-approved program such as a correspondence course. Students desiring to earn more than two credits from an outside source must seek and receive permission from the principal before doing so.

Academic Standing

Students at Central High School are classified based on their number of credits successfully completed rather than the number of years they have attended high school. For the purposes of classifying students by grade, the following guidelines are used:

- To be classified as a sophomore, a student must have earned at least 6.5 credits;
- To be classified as a junior, a student must have earned at least 13 credits;
- To be classified as a senior, a student must have earned at least 20 credits;

Note: Any student who transfers to Central High School who has not had the opportunity to earn 8 credits per year at their previous school(s) will have their academic standing adjusted accordingly.

Credit Recovery Options

Students who have failed courses and are in need of credit recovery should discuss their options with their counselor. Those options can include but, are not limited to, the following:

1. Repeating the course that was failed in either District 301 summer school program or a subsequent semester;
2. Taking an equivalent course through a distance education provider such as the American School of Correspondence, Penn Foster High School, University of Missouri High School or other accredited institution. As indicated on Page 3, students may apply up to two (2) credits from such outside providers

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toward their Central High School diploma. Students seeking to take more than two credits should see their counselor first and will need to obtain permission from the principal in order to do so;

3. Students may be recommended to enroll in our in-house, computer-based credit recovery program, Phoenix. Phoenix is a limited admission program, where students can take virtually any course offered at Central High School in an online format. This type of learning is self-paced and intended for the student who is motivated to work diligently to complete credits at a faster rate than they could in the traditional classroom setting. All potential Phoenix students must be recommended by their counselor to be enrolled into the program. Please speak with your counselor to discuss this option.

Advanced Placement (AP) Courses

Advanced Placement (AP) courses offer college-level curriculum and prepare students for advanced placement tests which are administered in May of each school term. In these challenging courses, college-level material is studied and students have the opportunity to demonstrate college-level achievement. Sufficiently high scores on an AP test may enable a student to earn college credit from many colleges and universities. If such credit is a major concern, the student should check with his/her chosen college or university to determine if it grants credit for the test. College credit is not an automatic outcome of passing the AP course. Each advanced placement test has a fee. The following Advanced Placement courses are offered at Central High School:

AP Biology	AP Environmental Science	AP Statistics
AP Calculus AB	AP German Language & Culture	AP Studio Art 2D-Design
AP Calculus BC	AP Physics 1	AP Studio Art 3D-Design
AP Chemistry	AP Physics 2	AP Studio Art: Drawing
AP Computer Science A	AP Psychology	AP U.S. Government & Politics
AP English Language & Composition	AP Spanish Language & Culture	AP United States History
AP English Literature & Composition		

Note: All Advanced Placement courses are weighted to count more heavily in the calculation of Grade Point Average (GPA).

PLACEMENT IN FRESHMAN CLASSES

Except as indicated elsewhere in this guide, as a general rule, initial placement in freshman courses will be based on a combination of student performance on the MAP test, articulation between the high school and middle schools, and, in certain select cases, student performance on diagnostic tests.

PREREQUISITES

A prerequisite may be a course, a grade in a course, or a year in school. If a course has a prerequisite, it will be listed just below the course name in this guide. You must meet the prerequisites required for a course before you are allowed to enroll in it. However, if you have not met the grade requirements to enroll in the course, you may also seek a grade prerequisite waiver. Please see your counselor for this form.

SPECIAL EDUCATION

The Special Education Department provides support for students with identified disabilities. Through the evaluation process, the appropriate level of service for the student is determined. The appropriate supports and services are outlined in each student's Individualized Education Program (IEP) and are in accordance with the requirements set forth by the Individuals with Disabilities Education Act (IDEA). District 301 makes every effort to educate students in the Least Restrictive Environment (LRE). Placement in Special Education courses is made only through the recommendation of the IEP team.

COURSE LOAD

Students must register for 7 credits each school year (3.5 per semester). Students taking ECC Tech Prep/Middle College or Fox Valley courses may earn less than 7 or more than 7 credits per year depending on the program.

MEETING THE CONSUMER EDUCATION REQUIREMENT

The State of Illinois requires that all high school graduates possess minimum competencies in the area of Consumer Education. At Central High School this competency can be shown in one of three ways:

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- 1.) Successfully completing the course Consumer Education.
- 2.) Successfully completing the course Economics.
- 3.) Successfully completing the course Cooperative Education.

COURSES IN TWO SUBJECTS AREAS

Some courses at Central High School can be taken for different types of credit. If you choose one of these courses, you must declare at the time of registration what type of credit you wish to receive. The courses which offer these options are:

Introduction to Agricultural Science:	Career/Tech Education or Science
Animal Science:	Career/Tech Education or Science
Plant Science	Career/Tech Education or Science
Veterinary Technology:	Career/Tech Education or Science
Veterinary Technology 2:	Career/Tech Education or Science
Biotechnology	Career/Tech Education or Science
Alternative Energy	Career/Tech Education or Science

ART REFUND POLICY

Students dropping an Art class from their schedule after the 8th day of school in the fall will not receive a refund for Art fees paid. This pertains to both first and second semester Art courses.

FOX VALLEY CAREER CENTER – SEE PAGE 49

Fox Valley Career Center, located at Kaneland High School in Maple Park, is open to a limited number of junior and senior students. Fox Valley offers students a variety of program opportunities that are outlined in more detail on Page 49. Students enrolled in most Fox Valley courses will be transported by bus to the Fox Valley Career Center for classes during one of three sessions. When the number of students who sign up for Fox Valley is higher than spots available, student grades and teacher recommendations in the related subject areas shall be considered in deciding who will be able to enroll in any given Fox Valley program.

Note: Additional fees and/or tools may be required. Students must provide their own transportation to courses taught at Fox Valley satellite locations.

Elgin Community College (ECC) Articulated Credit

Students may receive both high school credit and Elgin Community College (ECC) credit for some courses taught at Central High School, called articulated credit. Articulated credit improves a student's education by saving time, money, and the repeating of course work already mastered. Students who earn an A or B in an articulated course at Central High School and then enroll in Elgin Community College in a degree-seeking program within 27 months of graduation from Central High School will automatically receive Elgin Community College credits. Courses approved for articulated credit between Central High School and Elgin Community College are as follows:

<u>Central High School</u>	<u>Elgin Community College</u>
Accounting 1	ACC 100
Marketing	MKT 103
Keyboarding/Software Applications	OAT 101
Microsoft Word Certification	OAT 140 & 240
Microsoft Excel Certification	OAT 141 & 241
Multimedia Production	GRD 107
CADD 2	CAD 108
Child Growth & Dev. & School-Age Child Dev.	ECE 174
Introduction to Computer Programming	CIS 105
Web Design	CIS 147
Criminal Law	CRJ 101
Automotive Technology 1 (Fox Valley)	AUT 151
Automotive Technology 2 (Fox Valley)	AUT 152
Early Childhood Education (Fox Valley)	ECE 102
Early Childhood Education 2 (Fox Valley)	ECE 124
EMT (Fox Valley)	FSS 215
Health Occupations – Certified Nursing Assistant (Fox Valley)	NUR 105
Powersports/Equipment Tech. 1 (Small Engines)(Fox Valley)	AUT 100
Welding 1 (Fox Valley)	WEL 101
Welding 2 (Fox Valley)	WEL 102
Fire Science 1 (Fox Valley)	FSS 101, 103, and 202
Fire Science 2 (Fox Valley)	FSS 203

Elgin Community College Dual Credit Opportunities

Seniors, and some juniors, may elect to attend Elgin Community College (ECC) courses during part of the regular school day and earn **both** high school and college credits through the Tech Prep and Middle College programs. Students in Tech Prep, on average, complete 6 credit hours per semester while students in Middle College, on average, complete 3 credit hours per semester. Credits earned through Tech Prep and Middle College can give students a “jump start” on an Associate's Degree from Elgin Community College.

Students enrolled in the Tech Prep and Middle College programs at ECC will be required to pay for their own books. In addition, if a student should be removed or withdraws from the ECC Tech Prep or Middle College program prior to completing the semester, the student will be required to pay for that semester.

To enroll in a Tech Prep or Middle College program, students must:

- 1.) Complete comparable courses available at Central High School.
- 2.) Take all preparation and orientation level courses offered at Central High School prior to enrolling in Tech Prep or Middle College. The table below lists required prerequisites:

ECC Program	CHS Prerequisite(s)
Accounting	Fund. of Business, Accounting1 & 2
Automotive Services	Tech/Pre-Engineering
Calculus with Analytic Geometry II	AP Calculus AB or BC
Communications/Graphic Design	Intro. to Drawing & Painting
Computer & Information Science	Intro. to Computer Programming, Computer Networking/Hardware
Early Childhood Education	Child Growth & Dev., School-Age Child Dev.
Engineering/CAD	Tech/Pre-Engineering, CADD 1 & 2
English Composition I and II	Three years of English
Entrepreneurship	Fund. of Business and Entrepreneurship or Marketing
Heating/Air Conditioning/Refrigeration	Tech/Pre-Engineering
Industrial Manufacturing Technology	Tech/Pre-Engineering
Integrated Systems/Maintenance Technology	Tech/Pre-Engineering
Internet Design	Web Design 1; Multimedia Production recommended
Introduction to Psychology	Psychology
Introduction to Western Humanities	Global Studies or Honors World History
Management	Fund. of Business
Marketing & Retail Management	Fund. of Business, Marketing
Office Administration Technology	Keyboarding/Software Applications, Microsoft Word Certification, Microsoft Excel Certification
Paralegal	Criminal Law
Restaurant Management	Fund. of Business
Principles of Sociology	Sociology
Videography and Motion Graphics	Multimedia Production, Intro. to Drawing/Painting
Welding	Tech/Pre-Engineering

- 3.) Complete the application forms (available in the Guidance Office)
- 4.) Meet entrance requirements established by ECC for each course. All programs will require appropriate ACT subject scores or COMPASS reading and writing placement tests, while others will require additional placement tests. Please see your counselor or the specific course descriptions on pages 44-48 for details.
- 5.) In addition, when the number of students who sign up for ECC is higher than spots available, student grades and teacher recommendations in the related subject areas shall be considered in deciding who will be able to enroll in any given Tech Prep program.

College & Career Exploration

All students are assigned a counselor that they will work with over the entirety of their four years at Central High School. Students are assigned to counselors by last name and are assigned as follows:

Students Last Names A-Hars: Arlene Knewitz

Students Last Names Hart-Pes: Jonathan Young

Students Last Names Pet-Z: Sarah Schwartz

The mission of the Central High School counseling department is as follows:

The mission of the school counseling program is to provide all students with a comprehensive school counseling program centered around an engaging curriculum that encourages the highest level of student achievement through their growth in academic, career, and personal/social domains. In partnership with teachers, administrators, parents and a caring community, the school counselors will help all students to be successful lifelong learners and problem solvers.

NAVIANCE

In addition to individual meetings, classroom presentations, and evening presentations covering a variety of topics, one of the essential tools counselors use in assisting students is Naviance. Naviance is a college and career readiness platform that helps connect academic achievement to post-secondary goals. This comprehensive college and career readiness solution empowers students and families to connect learning and life and provides counselors with information they need to help students prepare for life after high school. It also allows students to create a plan for their futures by helping them discover their individual strengths and learning styles and explore college and career options based on their results.

Students will initially obtain their login information for Naviance in 8th grade. However, should students lose their login information, they may see their counselor to regain entry to the program. In addition, all parents will be provided with their own individual login where they can access the Naviance program for all students they have in the district grades 8-12.



District 301 Comprehensive Plan Grades 8 – 12

➤ **8th Grade Year: “Self-Assessment”**

- Complete Career Day Survey / Reflection
- Take Career Interest Profiler
- Take Do What You Are/Meyers-Briggs Personality Test
- Take Learning Styles Inventory
- Take Strength’s Explorer

➤ **Freshman Year: “Career Exploration”**

- 4-Year Plan (utilizing all self-assessments from 8th grade year); Map future coursework.
- Complete Career Day Survey / Reflection
- Research details of careers identified in Career Interest Profiler. Complete career research survey.

➤ **Sophomore Year: “College Exploration”**

- Complete Game Plan Survey during Semester 1
- Begin college exploration using Super Match feature during Semester 2
- Complete Career Day Survey / Reflection
- AP Exam registration (if applicable)

➤ **Junior Year: “Refining College and Career Options”**

- Begin to assemble a list under Colleges I’m Thinking About
- Register to attend presentations with college representatives who visit CHS
- Register to take ACT – outside link via Naviance
- Visit college campuses and complete College Visit Reflection after each visit
- Complete a mock college application during Semester 1
- Build a Resume during Semester 2
- AP Exam registration (if applicable)

➤ **Senior Year: “Finalizing Post High School Plans”**

- Compile list of Colleges I am Applying To
- Complete College Applications – outside links via Naviance
- Complete Senior Profile Questionnaire
- Request official transcripts to accompany college applications
- Request letters of recommendations to accompany college applications
- Register to re-take ACT (if necessary) – outside link via Naviance
- Register to attend presentations with college representatives who visit CHS
- Visit college campuses and complete College Visit Reflection after each visit
- Complete FAFSA – outside link via Naviance
- Research scholarship opportunities in Scholarship Match and Scholarship List
- AP Exam registration (if applicable)
- Complete Senior Exit Survey

Note: Grade levels where tasks are completed are subject to change.

College & University Entrance Requirements

Because there are thousands of colleges and universities and because each one determines their own individual admissions requirements, we highly encourage students to thoroughly check the admissions web sites of the colleges and universities they are interested in applying to as well as consult with their counselor. However, in general, most four year universities require the following at a minimum:

English: 4 years
 Mathematics: 3 years (which must include Algebra 1, Geometry, and Algebra 2); 4 years recommended
 Science: 3 years laboratory science
 Social Studies: 3 years
 Humanities/Foreign Lang.: 2 years (some universities specifically require foreign language)

Entrance Requirements for Top CHS College Destinations

<u>University</u>	<u>GPA</u>	<u>ACT Composite</u>	<u>Foreign Lang. Requirement for Admission</u>
Aurora University	2.5	19	Not required
Augustana College	3.5	23-29	2 years of one foreign language.
Illinois State University	3.15-3.83	22-26	2 years of one foreign language OR 2 years of fine arts.
University of Iowa	3.66	23-28	2 years of one foreign language.
Iowa State University	3.54	25	Not required
University of Minnesota	N/A Class rank 77-93%	28	2 years of one foreign language.
University of Missouri		25.9	2 years of one foreign language.
North Central College	3.56	24	Not required. Strongly recommended.
Northern Illinois University	2.72-3.52	19-25	2 years of foreign language or combination of language, art, music, or theatre.
Purdue University	3.5-4.0	25-31	2 years of one foreign language.
Southern Illinois University – Carbondale	2.38-3.47	19-26	Not required. Used toward fulfillment of 2-year elective requirement. Must include two semesters of the same language.
University of Illinois – Chicago	3.03-3.60	22-26	2 years of one language recommended.
University of Illinois – Urbana/Champaign	N/A Class rank 83-96%	27-32	2 years of one language required. 4 years recommended.
Western Illinois University	2.69-3.30	18-23	Not required.

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NCAA Initial Eligibility Standards

There are guidelines published and enforced by the National Collegiate Athletic Association (NCAA) which govern eligibility for athletic scholarships at Division I and II colleges. The NCAA judges course work of high school students and determines whether it meets the requirements for a scholarship.

NCAA Division I Initial-Eligibility Requirements

Core Courses

- **Initial full-time collegiate enrollment before August 1, 2016:**
 - **Sixteen (16) core courses** are required (see chart below for subject-area requirements).
- **Initial full-time collegiate enrollment on or after August 1, 2016:**
 - **Sixteen (16) core courses** are required (see chart below for subject-area requirements).
 - Ten (10) core courses completed before the seventh semester; seven (7) of the 10 must be in English, math, or natural/physical science.
 - These courses/grades are “locked in” at start of seventh semester (cannot be repeated for grade-point average [GPA] improvement to meet initial-eligibility requirements for competition).
 - *Students who do not meet core-course progression requirements may still be eligible to receive athletics aid and practice in the initial year of enrollment by meeting academic redshirt requirements (see below).*
- Beginning August 1, 2016, it will be possible for a Division 1 college-bound student-athlete to still receive athletics aid and the ability to practice with the team if he or she fails to meet the 10 course requirement, but would not be able to compete.

Test Scores (ACT/SAT)

- Students must present a corresponding test score and core-course GPA on the sliding scale (see following page).
 - **SAT:** critical reading and math sections.
 - Best subscore from each section is used to determine the SAT combined score for initial eligibility.
 - **ACT:** English, math, reading, and science sections.
 - Best subscores from each section is used to determine the ACT sum score for initial eligibility.
- All ACT and SAT attempts before initial full-time collegiate enrollment may be used for initial eligibility.
- **Enter 9999 during ACT or SAT registration to ensure the testing agency reports your score directly to the NCAA Eligibility Center. Test scores on transcripts will not be used.**

Core Grade-Point Average

- Only core courses that appear on the high school’s List of NCAA Courses on the NCAA Eligibility Center’s website (www.eligibilitycenter.org) will be used to calculate your core-course GPA. Use this list as a guide.
- **Initial full-time collegiate enrollment before August 1, 2016:**
 - Students must present a corresponding test score (ACT sum score or SAT combined score) and core-course GPA (minimum 2.000) on Sliding Scale A (see following page).
 - Core-course GPA is calculated using the **best 16 core courses** that meet subject-area requirements.
- **Initial full-time collegiate enrollment on or after August 1, 2016:**
 - Students must present a corresponding test score (ACT sum score or SAT combined score) and core-course GPA (minimum 2.300) on Sliding Scale B (see following page).
 - Core-course GPA is calculated using the **best 16 core courses** that meet both progression (10 before seventh semester; seven in English, math, or science; “locked in”) and subject-area requirements.

DIVISION I Core-Course Requirement (16):	DIVISION I -2016 Qualifier Requirements	DIVISION 1 – 2016 Academic Redshirt Requirements
4 years of English 3 years of math (Algebra I or higher) 2 years of natural/physical science (1 year of lab if offered) 1 year of additional English, math, or natural/physical science. 2 years of social science. 4 years of additional courses (any area above, foreign language, or comparative religion/philosophy).	<i>*Athletics aid, practice, and competition</i> 16 core courses <ul style="list-style-type: none"> ○ Ten (10) core courses completed before the start of seventh semester. Seven (7) of the 10 must be in English, math, or natural/physical science. <ul style="list-style-type: none"> - “Locked in” for core-course GPA calculation ○ Corresponding test score (ACT sum or SAT combined score) and core-course GPA (min. 2.300) on Sliding Scale B. ○ Graduate from high school. 	<i>*Athletics aid and practice (no competition)</i> 16 core courses <ul style="list-style-type: none"> ○ No grades/credits “locked in” (repeated courses after the seventh semester begins may be used for initial eligibility). ○ Corresponding test score (ACT sum score or SAT combined score) and core-course GPA (minimum 2.000) on Sliding Scale B. ○ Graduate from high school.

For more information, visit www.eligibilitycenter.org

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NCAA Division II Initial-Eligibility Requirements

Core Courses

- **Division II currently requires 16 core courses.** See the chart below.
- **Beginning August 1, 2018,** to become a full or partial qualifier for Division II, all college-bound student-athletes must complete the 16 core-course requirement.

Test Scores (ACT/SAT)

- **Division II** currently requires a minimum SAT score of 820 or an ACT sum score of 68. **Beginning August 1, 2018,** Division II will use a sliding scale to match test scores and core-course grade-point averages (GPA). The sliding scale for those requirements is shown on the following page.
- The SAT score used for NCAA purposes includes **only** the critical reading and math sections. The writing section of the SAT is not used.
- The ACT score used for NCAA purposes is a **sum** of the following four sections on the ACT: English, math, reading and science.
- **When registering for the SAT or ACT, use the NCAA Eligibility Center code of 9999 to ensure all SAT and ACT scores are reported directly to the NCAA Eligibility Center from the testing agency. Test scores that appear on transcripts will not be used.**

Core Grade-Point Average

- Be sure to look at Central High School's list of NCAA-approved core courses on the Eligibility Center Web site (www.eligibilitycenter.org). Only courses that appear on Central High School's approved List of NCAA Courses will be used in the calculation of the core GPA. Use the list as a guide.
- The current **Division II** core GPA requirement is a minimum of 2.000. **Division II** core GPA required to be eligible for competition on or after August 1, 2018, IS 2.200 (corresponding test-score requirements are listed on the Sliding Scale on the following page).
- The minimum **Division II** core GPA required to receive athletics aid and practice as a partial qualifier on or after August 1, 2018, is 2.000 (corresponding test-score requirements are listed on the Sliding Scale on the following page).
- Remember, the NCAA core GPA is calculated using NCAA core courses only.

DIVISION II 16 Core Courses

3 years of English
2 years of math (Algebra I or higher)
2 years of natural/physical science (1 year of lab if offered)
3 years of additional English, math, or natural/physical science.
2 years of social science.
4 years of additional courses (any area above, foreign language, or comparative religion/philosophy).

Career and Technical Education

Career and Technical Education courses offer students the opportunity to explore and prepare for post-secondary programs at community/technical or four-year colleges. A course or sequence of courses can also provide students with entry-level employment skills as well as provide options for further post-secondary training. CTE courses can develop 'life skills' necessary for economic success, provide informational technology skills, expand educational opportunities, develop marketable skills and habits to apply to any career, acquire international business knowledge, encourage creativity and entrepreneurial thinking, broaden lifelong work and study options, pretest career interests before going to college, and provide two educational options in one -- college prep and career prep.

COURSE OFFERINGS

Business Marketing and Computer Technology



1000 FUNDAMENTALS OF BUSINESS
Semester Course
0.5 Credits
Grade Level: 9-10;
11-12 w/teacher permission

All students will encounter the world of business as business activities affect their daily lives as they work, spend, save, invest, travel and play. This course introduces the role of business in the lives of individuals, consumers, workers, and citizens and provides an integrated view of the dynamic and exciting world of business with meaningful, real world information. This course covers small-business management, fundamentals, terminology, organizations, careers, ethics, economics, technology, finance, risk management, and decision-making and serves as an introduction to other business courses. This course is recommended for all students and should definitely be taken by any student continuing in Accounting, Entrepreneurship and/or Marketing.

1005 ACCOUNTING
Year Course 1 Credit
Grade Level: 10-12

In Accounting, students learn the basic accounting equation, classification of accounts, rules of debits and credits, journalizing, and posting. The students complete transactions for a service business, including financial statements, bank reconciliations, and closing entries for the end of the accounting cycle. During the second semester students will learn to perform these duties for a merchandising business. The work for this course will be completed using an on-line workbook 100. *Articulates with Elgin Community College ACC 100.*

1008 ACCOUNTING 2
Year Course 1 Credit
Grade Level: 11-12 Prerequisite: Accounting

Reviews the accounting cycle for a merchandising business and then delves into advanced accounting for assets, liabilities, and equity. Students study marketable securities and how to record them, accounting for accounts receivable, notes receivable, inventories, and investments besides how to depreciate plant, property, equipment, and intangible assets, and how to handle equity distribution under the various forms of ownership.

1015 MARKETING
Year Course 1 Credit
Grade Level: 11-12

The study of the planning and development of a product, service, or idea. Introduces the processes and functions involved in providing a product or service to a customer. Special emphasis is on the creative side of advertising and promotion using print, broadcast, and online media. *Articulates with Elgin Community College MKT 103.*

1025 ENTREPRENEURSHIP
Semester Course 0.5 Credits
Grade Level: 11-12

A course designed to investigate current trends in small business development. Students study the characteristics of the entrepreneur and develop a plan for the business of their choice. Guest speakers are used.

1030 KEYBOARDING/SOFTWARE APPLICATIONS
Semester Course 0.5 Credits
Grade Level: 9-12



Personal computers are an essential part of your toolkit. They are far more important than the portable typewriters that students relied on a generation ago. What hasn't changed is the need for typing, or keyboarding, skills, so you need to learn how to type on a keyboard without looking at your fingers. This course is an entry-level one semester course that emphasizes keyboarding improvement in speed, accuracy, proper technique and document formatting. While learning

1090 COMPUTER NETWORKING/HARDWARE

Year Course **1 Credit**
Grade Level: 11-12

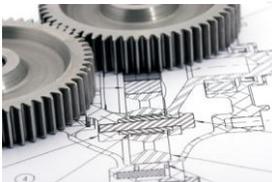
Students will develop skills to install, setup, configure, test, troubleshoot, and maintain personal computers and peripherals. Will learn the skills needed to setup, configure, test, troubleshoot, maintain, and administer a data network. Will learn basic operating system commands, install and configure networks, set up user rights and accounts and establish user security and permissions.

1052 MULTI-MEDIA PRODUCTION

Year Course **1 Credit**
Grade Level: 9-12

The core of this class is creativity! Let your mind, gifts, and talents come alive here! It introduces students to the exciting world of multimedia, a combination of sound, animation, graphics, and video. Students will work with a variety of software including programs used for sound and video production, multimedia presentations, web and desktop publishing, and photo & image editing. This course incorporates lecture, tutorials, and hands-on activities, which build skills and techniques for a variety of software programs to create and edit multimedia content. Once students have developed proficiency with these software programs, they will complete individual and group projects utilizing interactive methodologies to turn their creative visions into projects. *Articulates with Elgin Community College GRD 107. Course may be repeated.*

Technology and Engineering



**1055 TECHNOLOGY/
PRE-ENGINEERING 1**
Semester Course
0.5

Credits
Grade Level: 9-12

In this course students will explore the nature of technology, technology systems, and the history, evolution, and characteristics of technology as well as its impact on our society, culture, economy, politics, and environment. Topics include: Technology Today & Tomorrow, Communication Engineering & Design, and Energy & Power Engineering & Design. Several hands-on activities in each unit lets students apply the engineering design process to design and make a product.

1056 TECHNOLOGY/PRE-ENGINEERING 2
Semester Course **0.5 Credits**
Grade Level: 9-12 **Prerequisite: Pre-Eng. 1**

In this course students will explore the nature of technology, technology systems, and the history, evolution, and characteristics of technology as well as its impact on our society, culture, economy, politics,

and environment. Topics include: Construction Engineering & Design, Transportation Engineering & Design, and Bio-Related Engineering & Design. Several hands-on activities in each unit lets students apply the engineering design process to design and make a product.

1060 CADD – INTRODUCTION TO COMPUTER-AIDED DESIGN

Year Course **1 Credit**
Grade Level: 9-12 **Prerequisite: Pre-Algebra**

In this course, students use AutoCAD and Inventor to explore skills required for technical drawings, graphic communications, and career studies within the engineering field. Topics include: 2D and 3D constructions, dimensioning, intermediate level mathematics, and fundamentals for Technical drawing. Course provides an introduction to AutoCAD and Inventor establishes a good basis for exploring and growing in the exciting field of Computer Aided Engineering. Autodesk AutoCAD certification will be offered upon completion.

1065 CADD – 3D MODELING

Year Course **1 Credit**
Grade Level: 10-12 **Prerequisite: CADD Intro. to Computer-Aided Design**

In this course students use Autodesk Inventor to continue the CADD skills of Technical drawing and introduces the student to engineering drawing and advanced 3D modeling. Topics include: 3D constructions, 3D solid modeling, rendering and assembly, 3D mechanical design, documentation, and product simulation. *Digital Prototyping* with Inventor helps you to design and validate your products before they are built to deliver better products, reduce development costs, and get to market faster. Autodesk Inventor certification will be offered upon completion. 3D printing will be introduced in this course. *Articulates with Elgin Community College CAD 108*

1067 CADD – ARCHITECTURAL DRAFTING & DESIGN

Year Course **1 Credit**
Grade Level: 11-12 **Prerequisite: CADD Intro. to Computer-Aided Design**

Students will use Autodesk Revit to produce/design various architectural drawings. Building Information Modeling (BIM), empowers design and construction professionals to bring ideas from concept to construction. Revit is an application that includes features for architectural design, MEP and structural engineering, and construction. Autodesk Revit certification will be offered upon completion.



1070 WOODS TECHNOLOGY 1
Year Course 1

Credit
Grade Level: 9-12
Prerequisite:
Tech. Pre-Engineering or concurrent

In this course, students learn how to use a variety of tools and machines to complete basic woodworking practices in a safe and hands-on environment. Topics include safety, planning, designing, and building assigned projects.

1075 WOODS TECHNOLOGY 2

Year Course 1 Credit
Grade Level: 10-12 Prerequisite: "C" or better in Woods 1

In this course, students learn advanced woodworking principles, including furniture design, advanced construction, joint making, finishing, and cabinet construction. Students use what they've learned to design their own project plans and assess cost and materials needed.

1080 BUILDING TRADES

Year Course 1 Credit
Grade Level: 10-12 Prerequisite: Woods 1

Introduces students to various aspects of residential design and construction techniques through lectures, text reading, and hands-on design and construction of a framed building.

Agricultural Science



1200 INTRODUCTION TO AGRICULTURAL SCIENCE
Year Course 1 Credit
Grade Level: 9-10

The agricultural education program has two integral components consisting of classroom instruction and participation in the FFA organization. Each component is designed to prepare every student for academic and/or career success after high school. In the classroom, students will study the basic concepts in all areas of agriculture that include the following: animal science, plant and soil science, horticulture, agribusiness management and alternative energy. Leadership, communication, and citizenship skills are developed through participation in the FFA organization.

1205 VETERINARY TECHNOLOGY
Semester Course 0.5 Credits
Grade Level: 10-12 Prerequisite: Intro Ag. Science, BSAA Animals

Topics covered include: Small and companion animal industry, large animal industry, animal health, animal pharmaceuticals, veterinary office practices, animal restraint in the vet clinic, anatomy, and physiology. A class dissection of a small mammal is included, but an alternative project can be completed instead.

1206 VETERINARY TECHNOLOGY 2
Semester Course 0.5 Credits
Grade Level: 11-12 Prerequisite: Vet. Technology

This course further educates each student in the topics related to veterinary science. Topics include: veterinary medicine, animal ethics and welfare issues, animal nutrition, anatomy, physiology, animal CPR, and veterinary lab procedures.

1210 BIOLOGICAL SCIENCE APPLICATIONS IN AGRICULTURE (BSAA): ANIMALS
Semester Course 0.5 Credits
Grade Level: 10-12 Prerequisite: Intro Ag. Sci. or Instructor approval

This course applies scientific principles to relevant agricultural applications. The major areas of emphasis in animal science include: growth and development, chicken embryology, animal behavior, reproduction, digestive systems, animal waste, genetics, and nutrition. Students will be raising live, baby chicks in the classroom to enhance their learning on specific animal topics. Students will not be required to take them home.

1211 BIOLOGICAL SCIENCE APPLICATIONS IN AGRICULTURE (BSAA): PLANTS
Semester Course 0.5 Credits
Grade Level: 10-12 Prerequisite: Intro. Ag. Sci. or Instructor approval

This course applies scientific principles to relevant agricultural applications. The major area of emphasis will be plant science with topics that include: plant anatomy, physiology, health and nutrition, growth, management, and reproduction.

1215 BIOTECHNOLOGY
Semester Course 0.5 Credits
Grade Level: 10-12 Prerequisite: Intro. Ag. Sci. or Instructor approval

Topics will include: Plant – cloning, genetically modified organisms (GMO's), gene maps, electrophoresis, and gene transfers. Animal – cloning, genotyping, animal growth, gene transfers, and immunoassays.

1216 ALTERNATIVE ENERGY
Semester Course 0.5 Credits
Grade Level: 10-12 Prerequisite: Intro. Ag. Sci. or Instructor approval

Topics will include: energy concepts, bio-processing, biomass, wind energy, solar energy, water, and biofuel energy. This class is mainly project based where students will be building solar powered cars, wind turbines, making biodiesel, etc. to enhance the content covered in class.

Elective Courses and Grad. Requirements

1020 CONSUMER EDUCATION (GRADUATION REQ.) Semester Course 0.5 Credits Grade Level: 11-12

Introduces the skills needed in managing consumer resources and promotes critical thinking, problem solving, and action. Students develop an understanding of their societal role as a consumer and will develop skills to function and recognize the importance of acting as informed, educated, and responsible consumers.

1085 CHILD GROWTH & DEVELOPMENT Semester Course 0.5 Credits Grade Level: 9-12

Students will gain knowledge and understanding of child development from prenatal through early adolescence stages. We will study and apply physical, social, emotional, and intellectual principles.

1086 SCHOOL-AGE CHILD DEVELOPMENT Semester Course 0.5 Credits Grade Level: 9-12 Prerequisite: Child Growth

Students will gain knowledge and understanding of school-age child development from age 4 through early adolescence stages. We will study and apply through observation and hands-on interaction physical, social, emotional, and intellectual principles. *Articulates with Elgin Community College ECE 174.*

Career and Technical Education Capstone Courses

1095 CAREER INTERNSHIP Semester Course 0.5 Credits Grade Level: 12 Prerequisite: Application, Dept. approval

An internship is a well-defined short-term work/learning experience to help you, the student, prepare for a chosen career field. You will be applying the skills you learned in your classroom to a career experience. Typically, you will be working on projects while working alongside practicing professionals. An internship is not a part-time job. It is an extension of the Career and Technology Education Program at CHS. Most importantly, it is an opportunity for you, the intern, to increase your knowledge in a career choice by being challenged in a business or educational environment.

9400 COOPERATIVE EDUCATION – CLASSROOM Year Course 1 Credit

Grade Level: 12

Prerequisite:

Dept. perm.; Must take orientation and preparation level in area of interest



Cooperative Leadership and Internship Program (CLIP). Co-operative education combines academic study with practical work experience. The employment is a practical application directed towards the student's academic course of study. The co-operative education student is paid for their work experience, which is supervised and evaluated by both the employer and the co-operative education teacher. It gives students an opportunity to test skills learned in the classroom, and to expand their knowledge through related work experience. This experience provides students with a chance to practice the latest theories and approaches in their particular discipline. Working in several industries gives them a competitive edge when going out into the workforce and the opportunity to earn for their education.

9405 COOPERATIVE EDUCATION – ON THE JOB TRAINING

Year Course

2 Credits

Grade Level: 12

Prerequisite: Department perm.

Cooperative Leadership and Internship Program (CLIP). Students are responsible for securing their own employment in an appropriate (approved) work site. Must work a minimum of 15 hours per week. Must attempt to seek employment in a chosen area of career interest.

1115 AP COMPUTER SCIENCE A*

Year Course

1 Credit

Grade Level: 11-12

Prerequisite: Algebra 2 & Intro. to Comp. Programming recommended

Advanced Placement Computer Science is a rigorous, college-level course designed to prepare students for the AP[®] Computer Science A examination using the Java programming language. This course emphasizes object-oriented programming methodology with a concentration on problem solving and algorithm development. It also includes the study of data structures, design, and abstraction. Many topics in this course are mathematically intensive and require a firm understanding of algebraic concepts and experience in problem solving. Students should be comfortable with functions and the concepts found in the uses of functional notation, such as $f(x) = x + 2$ and $f(x) = g(h(x))$. This course builds upon a foundation of mathematical reasoning that should be acquired before attempting this course. Documentation plays a central role in the programming methodology. **This course counts as Math credit only.**

CAREER PATHWAYS COURSE FLOW

Business, Marketing & Computers—College and Career Ready

ORIENTATION COURSES (Choose 1 or more)

- Fundamentals of Business
- Computer Applications
- Keyboarding/Software Applications*
- Microsoft Excel Certification*
- Microsoft Word Certification*



- Enterprise Management & Operations
- Accounting/Bookkeeping



- Product Marketing



- Computer Programming
- Business Systems Networking & Telecommunications
- Webpage Development & Design

SKILL COURSES

- Accounting*
- Accounting 2
- Marketing*
- Entrepreneurship

- Marketing*
- Entrepreneurship

- Web Design*
- Intro. to Computer Programming
- Computer Networking & Hardware

CAPSTONE CAREER EXPERIENCE

- Career Internship
- Cooperative Education

FOX VALLEY AND ECC COURSES

ECC: Accounting—Management--Marketing—Office Administration—Entrepreneurship, Computers & Informational Science—Internet Design Fox Valley: Computer Technology—Game Programming, PC Repair, Web Development *Articulated college credit

Agricultural Science—College and Career Ready

ORIENTATION COURSES (Choose 1 or more)

- Introduction to Agricultural Science



Agricultural Science (General)

SKILL COURSES

- Biological Science Applications in Agriculture: Animals
- Biological Science Applications in Agriculture: Plants
- Biotechnology
- Alternate Energy

- Biological Science Applications in Agriculture: Animals
- Veterinary Technology
- Veterinary Technology 2

CAPSTONE CAREER EXPERIENCE

- Career Internship
- Cooperative Education

FOX VALLEY COURSES

Fox Valley: Horticulture 1 & 2

Technology & Engineering—College and Career Ready

ORIENTATION COURSES (Choose 1 or more)

- CADD 1 (for Drafting and Design)

- Technology/Pre-engineering 1
- Technology/Pre-engineering 2



Drafting & Design Technology (General)



Digital Arts



Cabinetmaking & Millwork

SKILL COURSES

- CADD 2 3D Modeling*
- CADD 3 Architectural Design

- Multimedia*

- Woods Technology 1
- Woods Technology 2
- Building Trades

CAPSTONE CAREER EXPERIENCE

- Career Internship
- Cooperative Education

FOX VALLEY & ECC COURSES

ECC: Industrial Manufacturing Tech.—Engineering/CAD—Welding Fabrication Tech.—Heating and Air Conditioning
 Fox Valley: Welding 1 & 2, Electrician 1 & 2 ECC: Graphic Design, Videography and Motion Graphics Fox Valley: Graphic Communications 1 & 2

*Articulated college credit

	<p>CTE Family and Consumer Science: Child Growth & Development School-Age Child Development* Career Internship Cooperative Education</p> <p style="text-align: right;">*Articulated college credit</p>
 <p>Child Care & Support Service Management Child Care Provider</p>	<p>CTE Family and Consumer Science: Child Growth & Development School-Age Child Development* Career Internship Cooperative Education</p> <p>Fox Valley: Early Childhood Education 1 & 2, Cosmetology 1 & 2, Barbering, Esthetics ECC—Child Care</p> <p style="text-align: right;">*Articulated college credit</p>
	<p>Social Studies -- Modern World History-- Government and Law CTE—Intro to Business, Computer Technology courses, Accounting, Word, Excel Career Internship Cooperative Education ECC—Criminal Justice</p>
	<p>Health-- Health 1 & 2 Science—Biology, Chemistry CTE— Word and Excel, Bio Technology Career Internship Cooperative Education ECC—Basic Nurse Assistant—Health Professions Fox Valley—Basic Nurse Asst. , Emergency Medical Tech. EMT, Exploring Medical Fields</p>



CTE—Intro to Business, Computer Technology courses
Marketing, Accounting, Entrepreneurship
Career Internship
Cooperative Education
ECC—Restaurant Management



Modern World History --Law
CTE—computer technology
Career Internship
Cooperative Education
ECC—Public Safety Communications, Fire Science
Fox Valley—Fire Science 1 & 2, Law Enforcement



CTE—Technology Pre-Engineering
Career Internship
Cooperative Education
ECC—Automotive Service Technology
Fox Valley—Automotive Technology 1 & 2, Power sports & equipment Tech.
(small Engines)

Humanities: Fine Arts/Foreign Language

COURSE OFFERINGS

Music Education



2000 INTRODUCTION TO BAND
Semester Course 0.5 Credits
Grade Level: 9-12

For students who wish to learn to play a band instrument. Students must have a band instrument available or be willing to rent one. Students participate in all marching and concert band activities.

2005 BAND
Year Course 1 Credit
Grade Level: 9-12 Prerequisite: Prior exp. on a band instrument

Study and perform a wide variety of band literature, including instruction in rhythm, blend, balance, and tone quality. Students participate in all marching and concert band activities. *Course may be repeated.*

2010 JAZZ ENSEMBLE
Year Course 1 Credit
Grade Level: 9-12 Prerequisite: Instr. Approval

Study and perform jazz and pop literature, theory, and history. Students participate in all marching and concert band activities. *Course may be repeated.*

2012 PERCUSSION ENSEMBLE
Semester Course 0.5 Credits
Grade Level: 9-12

Open to all students who are interested in learning about and performing on the vast types of percussion instruments. Students will perform multiple concerts per semester as well as participating in the Marching Band program. Curriculum will include history,

development, theory, and technique in a performance-oriented setting. *Course may be repeated.*

2015 MUSIC KEYBOARDING 1
Semester Course 0.5 Credits
Grade Level: 9-12 Prerequisite: No prior exp.

Introduces students to basic keyboard skills and provides opportunities to experience and understand the keyboard synthesizer. Keyboard synthesizers and headphones will be provided. Any student with prior experience should strongly consider enrolling in Level 2 or 3. Contact instructor if uncertain.

2020 MUSIC KEYBOARDING 2
Semester Course 0.5 Credits
Grade Level: 9-12 Prerequisite: Music Keyb. 1 or prior experience

A continuation of Musical Keyboarding. Students will increase their knowledge in chord accompaniments, music rudiments, and various playing styles.

2021 MUSIC KEYBOARDING 3
Semester Course 0.5 Credits
Grade Level: 10-12 Prerequisite: Music Keyb. 2 or instructor approval

For the keyboard student who is beyond level 2. Students in this class go much more in depth into standard keyboard literature and will participate in performances.

2023 INTRODUCTION TO CHORUS
Semester Course 0.5 Credits
Grade Level: 9-12

For beginning chorus students to learn basic skills in music theory, aural skills, and musicianship before enrollment in Chorus.

2025 CHORUS
Year Course 1 Credit
Grade Level: 9-12 Prerequisite: Intro. to Chorus or instructor approval

Study and perform traditional and contemporary choral literature. Students learn the fundamentals of good singing, music notation, sight reading, breath control, tone production, and listening techniques. *Course may be repeated.*

2030 CHORALE
Year Course 1 Credit
Grade Level: 11-12 Prerequisite: Prev. chorus exp., audition, and instructor approval

Study advanced choral literature in a small ensemble setting. Emphasis on performing techniques and music reading skills. *Course may be repeated.*

2035 TRADITIONS OF MUSIC**Semester Course** **0.5 Credits**
Grade Level: 9-12

This is a music survey course which explores the origins of music and the effect of previous musical styles and composers on current popular music.

2036 MUSIC VIDEO PRODUCTION**Semester Course** **0.5 Credits**
Grade Level: 11-12

Students will create music videos combining appropriate visual and musical sources from various historical periods. Will also develop senior video for graduation. Must have access to a digital video recorder. Preference to seniors.

2037 AMERICAN ROUTES IN MUSIC**Semester Course** **0.5 Credits**
Grade Level: 9-12 **Prerequisite: "C" or better**
In Traditions of Music

Students will develop and understand a deeper appreciation of musical forms throughout the 20th Century. Emphasis is on the development of jazz, country, Broadway, rock & roll, and many others.

2038 MUSIC THEORY 1**Semester Course** **0.5 Credits**
Grade Level: 11-12 **Prerequisite: Strong music**
background & instr. approv.

For the serious music student. Suggested for any student considering a music major or minor in college. Concentrates on principles of music theory with emphasis on practical knowledge, basic 4-part writing, and aural development.

2039 MUSIC THEORY 2**Semester Course** **0.5 Credits**
Grade Level: 11-12 **Prerequisite: Music Theory**
1 or instr. approval

A continuation of Music Theory 1 with more emphasis on ear training, sight-singing, chromatic harmonic analysis, and more complex 4-part writing. Arranging for ensembles and compositional styles and techniques will be done as well.

Theater Education

**2040 THEATER 1****Semester Course** **0.5 Credits**
Grade Level: 9-12

Perform individually and in small groups, studying pantomime, improvisation, and basic acting techniques for drama and comedy. The technical aspects of theater history may also be covered.

2045 THEATER 2**Semester Course** **0.5 Credits**
Grade Level: 9-12 **Prerequisite: Theater 1**

A continuation of the Theater 1 class. Students will study advanced concepts in acting and production. Emphasis is on memorization and scene preparation.

2046 THEATER 3**Semester Course** **0.5 Credits**
Grade Level: 11-12 **Prerequisite: Theater 1 & 2**

A continuation of Theater 2 class. Students will create, stylize, and perform advanced theatrical concepts. Emphasis is on varying theatrical periods and classroom participation.

2047 TECHNICAL THEATER 1**Semester Course** **0.5 Credits**
Grade Level: 10-12

Introduction to elements of play production, including use of tools, elements of set construction, basic stage lighting, make-up, and costuming.

2048 TECHNICAL THEATER 2**Semester Course** **0.5 Credits**
Grade Level: 10-12 **Prerequisite: Tech. Theater 1**

This course will expand knowledge of play production and will introduce elements of design for sets, lights, etc. More opportunity to specialize in one area.

Art Education



2056 INTRODUCTION TO DRAWING & PAINTING

Year Course 1 Credit
Grade Level: 9-12

Students will visually and manually explore the elements and principles of art and design through drawing and painting media. Students will experiment with various media, including but not limited to the following: Pencil, pen/ink, colored pencil, oil pastel, marker, and acrylic paint. *See Art Refund Policy.*

2061 INTRODUCTION TO SCULPTURE & CERAMICS

Year Course 1 Credit
Grade Level: 9-12

Students will visually and manually explore the elements of art and principles of design through sculpture media. Students will experiment with various media, including but not limited to: Illustration board, paper, newspaper, paper mache, mixed media, recycled media, surface media (paint, tape, etc.), fabric, and clay. *See Art Refund Policy.*

2065 INTERMEDIATE DRAWING

Year Course 1.0 Credits
Grade Level: 10-12 **Prerequisite: Intro to Drawing/Painting**

Students will develop a personal style while exploring the elements of art and principles of design, utilizing various drawing media. Students will study the human form and will create original drawings using various media that are based on formalism, imitationalism and emotionalism. Students will also create a series of six drawings that develop a definitive mark and convey a cohesive concept. Series will be completed in drawing medium of student's choice. *See Art Refund Policy.*

2068 INTERMEDIATE SCULPTURE & CERAMICS

Year Course 1.0 Credits
Grade Level: 9-12 **Prerequisite: Intro. to Sculpture/Ceramics**

Students develop a personal style while exploring the elements of art and principles of design, utilizing various sculpting media including clay. Students will develop a series of sculptures conveying a cohesive concept in choice of sculpting media. *See Art Refund Policy.*

*Indicates weighted grades in this course.

2070 PHOTOGRAPHY 1

Year Course 1 Credit
Grade Level: 9-12

Students will explore the elements and principles of design, lighting techniques, motion experimentation, angle compositions, and color theory through the use of photography. Semester one will include basic darkroom and camera techniques and digital photography. Students must provide their own manual 35mm SLR camera with manual aperture and shutter settings. Additional fees will be assessed for photo paper. *See Art Refund Policy.*

2075 PHOTOGRAPHY 2

Year Course 1 Credit
Grade Level: 10-12 **Prerequisite: "B" or better in Photo 1 or instr. approval**

Students will explore photography by experimentation of medium and technique. Students will compose a series of photographs, conveying a cohesive concept. Students must provide their own manual 35mm SLR camera with manual aperture and shutter settings. Additional fees will be assessed for photo paper. *See Art Refund Policy.*

2085 INTERMEDIATE PAINTING

Year Course 1.0 Credits
Grade Level: 10-12 **Prerequisite: Intro. to Drawing/Painting**

Students will develop a personal style while exploring the elements of art and principles of design, utilizing various painting media on 2-dimensional surfaces. Acrylic, watercolor and oil mediums will be explored. Students will create a series of original paintings that convey a cohesive concept in choice of paint media, while developing a definitive mark. *See Art Refund Policy.*

2205 ADVANCED PLACEMENT (AP) STUDIO ART 2-D DESIGN*

Year Course 1 Credit
Grade Level: 11-12 **Prerequisite: Photo 1 & 2 w/A or B in both; summer work; portfolio review in January; instructor approval.**

This class is designed for highly motivated students to do college-level work. A portfolio of about 30 pieces will be submitted in April. The photography pieces should demonstrate your understanding of design principles as applied to photography. The student will have to provide some materials including film. *See Art Refund Policy.*

**2210 ADVANCED PLACEMENT (AP) STUDIO ART
DRAWING***

Year Course

Grade Level: 12

1 Credit

**Prerequisite: 2 yrs. 2D-Art
work, A or B in both; summer
work; portfolio rev. Jan.; Instr.
approval.**

Students will compile a series of works that explore a drawing / painting concept, synthesizing the elements & principles of art and design as they relate to drawing and / or painting. Students will compile and submit a portfolio that contains actual works and slides of the work created throughout the course. Students will create original, outstanding exemplary works of art, while developing a definitive style and mark.

See Art Refund Policy.

**2215 ADVANCED PLACEMENT (AP) STUDIO ART
3-D DESIGN***

Year Course

Grade Level: 12

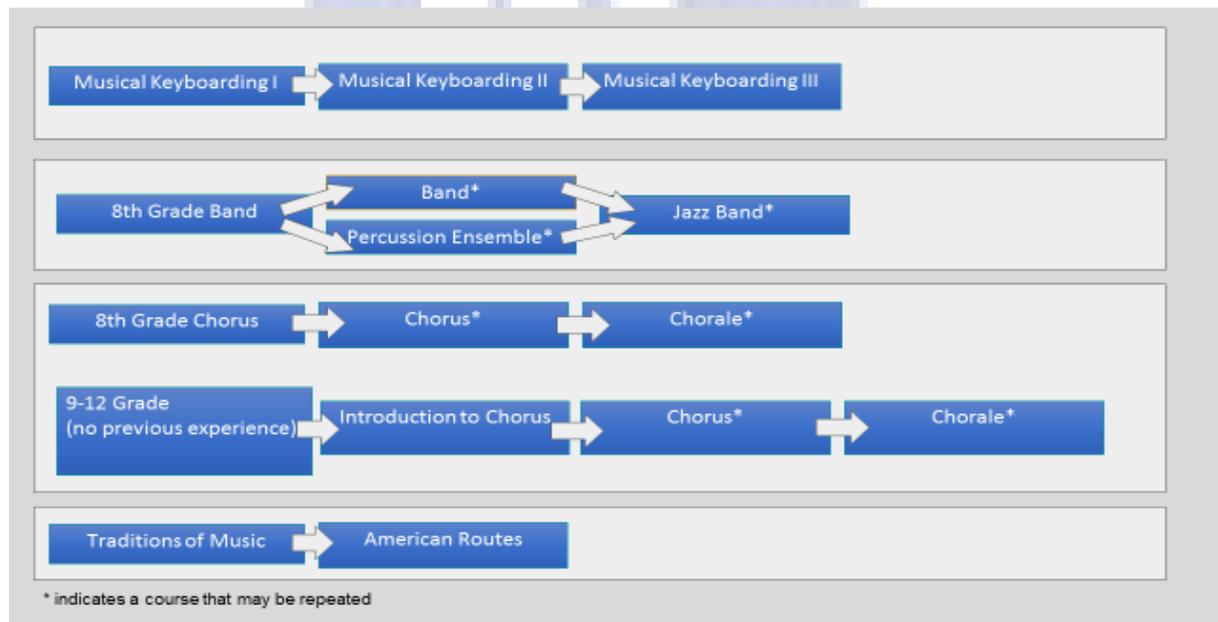
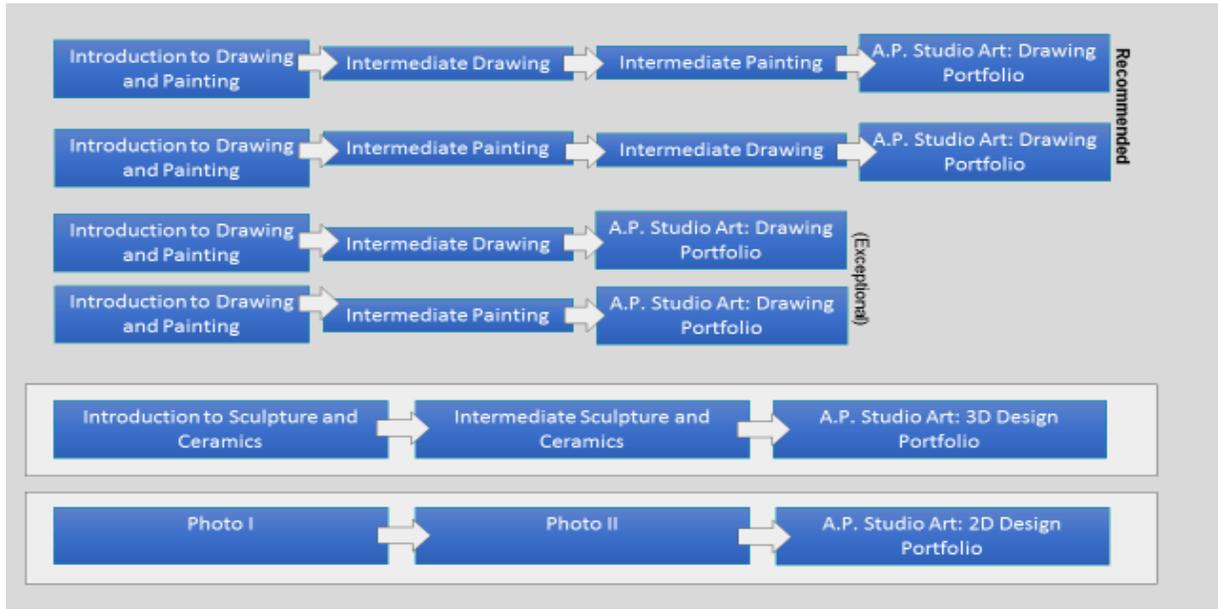
1 Credit

**Prerequisite: 2 yrs. 3D-Art
work, A or B in both;
summer work; portfolio
rev. Jan.; Instr. approval.**

Students will compile a series of works that explore a sculptural concept, synthesizing the elements & principles of art and design as they relate to sculpture. Students will create original exemplary works of art. Students will compile a portfolio that contains slides of the work created throughout the course, while developing a definitive style and mark. *See Art Refund Policy.*

***Indicates weighted grades in this course.**

FINE ARTS COURSE FLOW CHART



Foreign Language



3000 SPANISH 1

Year Course

Grade Level: 9-12

1 Credit

Designed to introduce students to Spanish language and culture, Spanish I emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Spanish culture is introduced through the art, literature, customs, and history of Spanish-speaking people.

3005 SPANISH 2

Year Course

Grade Level: 9-12

1 Credit

Prerequisite: "C" or better in Spanish 1 or Instr. approval

Spanish 2 builds upon skills developed in Spanish I, extending students' ability to understand and express themselves in Spanish and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Spanish-speaking people to deepen their understanding of the culture(s).

3010 SPANISH 3

Year Course

Grade Level: 10-12

1 Credit

Prerequisite: "C" or better in Spanish 2 or Instr. approval

Spanish 3 focuses on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

3015 SPANISH 4

Year Course

Grade Level: 11-12

1 Credit

Prerequisite: "C" or better in Spanish 3 or Instr. approval.

Spanish 4 focuses on advancing students' skills and abilities to read, write, speak, and understand the Spanish language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

3022 ADVANCED PLACEMENT (AP) SPANISH LANGUAGE & CULTURE*

Year Course

Grade Level: 11-12

1 Credit

Prerequisite: "B" or better in Spanish 3/4 or Instr. approval

Designed by the College Board to parallel third-year college-level courses in Spanish Composition and Conversation, AP Spanish Language builds upon prior knowledge and develop students' ability to understand others and express themselves (in Spanish) accurately, coherently, and fluently in both formal and informal situations. Students will develop a vocabulary large enough to understand literary texts, magazine/newspaper articles, films and television productions, and so on.

3025 GERMAN 1

Year Course

Grade Level: 9-12

1 Credit

Designed to introduce students to German language and culture, German I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. German culture is introduced through the art, literature, customs, and history of the German-speaking people.

3030 GERMAN 2**Year Course**
Grade Level: 9-12**1 Credit**
Prerequisite: "C" or better in German 1 or instr. approval

German 2 builds upon skills developed in German I, extending students' ability to understand and express themselves in German and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of German-speaking people to deepen their understanding of the culture(s).

3035 GERMAN 3**Year Course**
Grade Level: 10-12**1 Credit**
Prerequisite: "C" or better in German 2 or instr. approval

German 3 focuses on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

3040 GERMAN 4**Year Course**
Grade Level: 11-12**1 Credit**
Prerequisite: "C" or better in German 3 or instr. approval.

German 4 focuses on advancing students' skills and abilities to read, write, speak, and understand the German language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

3047 ADVANCED PLACEMENT (AP) GERMAN LANGUAGE & CULTURE***Year Course**
Grade Level: 11-12**1 Credit**
Prerequisite: "B" or better in German 3/4 or instr. approval

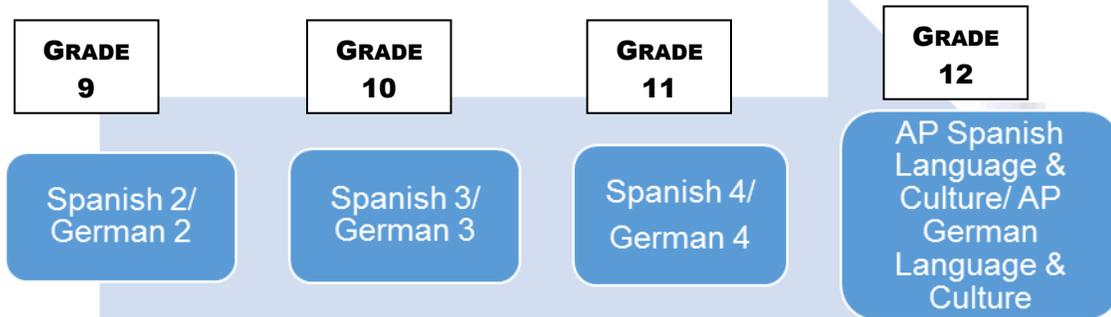
Designed to parallel third-year college-level courses in German Language, AP German Language courses build upon prior knowledge and develop students' ability to understand spoken German in various conversational situations, to express themselves (in German) accurately and fluently, and to have a command of the structure of the German language. Students will develop a vocabulary large enough to understand literature, magazine/newspaper articles, films and television productions, and so on.

*Indicates weighted grades in this course.

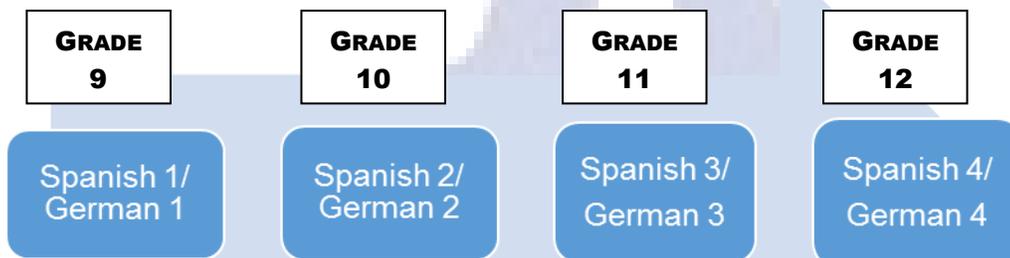
FOREIGN LANGUAGE SUGGESTED COURSE FLOW

SPANISH/GERMAN ADVANCED TRACK:

Grade 8: Spanish 1/German 1



SPANISH/GERMAN GRADE LEVEL TRACK:



English

COURSE OFFERINGS

4000 ENGLISH 1

Year Course **1 Credit**
Grade Level: 9 **Prerequisite: Please see Pg. 4**



Students study various styles of composition and research, elements of grammar, writing mechanics, and vocabulary. Course content includes the study of short stories, novels, nonfiction, and poetry.

4005 ENGLISH 1 DOUBLE BLOCK

Year Course **2 Credits**
Grade Level: 9 **Prerequisite: Please see Pg. 4**

Students study various styles of composition and research, elements of grammar, writing mechanics, and vocabulary. Course content includes the study of short stories, novels, nonfiction, and poetry. Students work to improve their reading and writing levels by building vocabulary and comprehension skills and by developing a variety of strategies to help students succeed in all academic areas.

4010 READING FOR SUCCESS DOUBLE BLOCK

Year Course **2 Credits**
Grade Level: 9-12 **Prerequisite: Test scores & recommendation**

This course is a year-long reading intervention designed to help the struggling reader learn the necessary skills and strategies to read at a proficient level. Emphasis is on reading fluency and comprehension of fiction and nonfiction text. Students will also work on written organization and expression. Student achievement data and teacher recommendation will determine placement in this course. This course serves as credit for English.

4012 HONORS ENGLISH 1*

Year Course **1 Credit**
Grade Level: 9 **Prerequisite: Please see Pg. 4**

This course is an honors survey class in which the focus is placed on complex literature, vocabulary, composition, research, and informative speaking. Students analyze fiction, nonfiction, drama, and legends. This foundational course requires in-depth analysis, evaluation, and critical thinking and writing.

***Indicates weighted grades in this course.**

4020 ENGLISH 2

Year Course **1 Credit**
Grade Level: 10 **Prerequisite: English 1**

This course covers the literature written in the United States from the Colonial Period to the present. Focus is placed on the content, background, and authors of a wide variety of prose, poetry, and nonfiction. Students will write extended essays, reading responses, narratives, and research papers each quarter.

4022 HONORS ENGLISH 2*

Year Course **1 Credit**
Grade Level: 10 **Prerequisite: Honors Placement or Teacher recommendation**

This course covers the literature written in the United States from the Colonial Period to the present. A focus is placed on the content, background, and authors of a wide variety of prose and poetry. Students will study the literary periods and the historical development of American literature. Students will write extensively, including research, argument, literary analysis, and reading responses. In addition, students will create original projects and speak informatively.

4025 ENGLISH 2 STUDIES

Year Course **1 Credit**
Grade Level: 10 **Prerequisite: English 1 & Teacher Recommendation**

This course covers the literature written in the United States from the Colonial Period to the present. Focus is placed on the content, background, and authors of a wide variety of prose, poetry, and nonfiction. Students work to improve their reading and writing levels by building vocabulary and comprehension skills and by developing a variety of strategies to help students succeed in all academic areas.

4028 ENGLISH 3

Year Course **1 Credit**
Grade Level: 11 **Prerequisite: English 2**

This year long course is designed to prepare students for both academic and professional writing, in addition to public speaking. Students will also examine literature using both fiction and non-fiction texts. Emphasis will be placed on determining the correct voice, tone, formality, and genre for each situation.

4033 ENGLISH 3 STUDIES

Year Course **1 Credit**
Grade Level: 11 **Prerequisite: English 2**

This year long course is designed to prepare students for both academic and professional writing, in addition to public speaking. Reading strategies will also be taught while examining literature using both fiction and non-fiction texts. Emphasis will be placed on determining the correct voice, tone, formality, and genre for each situation, while increasing the reading skill of each student.

4038 CONTEMPORARY LITERATURE
Semester Course 0.5 Credits
Grade Level: 12 Prerequisite: English 3

This course is a survey of post-modern literature with an emphasis on discussion and argument. Focuses on the global and multicultural nature of contemporary society through various styles and genres: poems, essays, short stories, plays, and novels.

4040 ADVANCED PLACEMENT (AP) ENGLISH LITERATURE & COMPOSITION*
Year Course 1 Credit
Grade Level: 11 Prerequisite: Honors English 2

Combines English Literature and expository writing. Emphasis is on analysis and interpretation of individual literary works. Stresses the process of writing essays. This course is required for AP English Language & Composition.

4044 BRITISH LITERATURE
Semester Course 0.5 Credits
Grade Level: 12 Prerequisite: English 3

The study of British Literature from *Beowulf* through modern literature and will include Medieval, Renaissance, and the Romantic periods while studying authors such as Shakespeare, Chaucer, and Stevenson.

4050 ADVANCED PLACEMENT (AP) ENGLISH LANGUAGE & COMPOSITION*
Year Course 1 Credit
Grade Level: 12 Prerequisite: AP English Literature & Composition or instructor approval.

This course is a college-level study of challenging texts written in a variety of disciplines and rhetorical contexts. Writing and reading will stress critical analysis and interpretation. Students will read and analyze complex text, synthesize research materials, and write in both formal and informal contexts.

*Indicates weighted grades in this course.

4055 SPEECH COMMUNICATION
Semester Course 0.5 Credits
Grade Level: 12 Prerequisite: English 1

Covers the principles of communication. Speeches that inform, persuade, inspire, and convince are required, culminating in a polished speech that reflects good communication skills.

4065 JOURNALISM 1
Year Course 1 Credit
Grade Level: 10-12 Prerequisite: "C" or better in English 1

Students learn journalistic jargon, write news stories, including sports, editorials, features, columns, and reviews. Interviewing skills are stressed, and the school newspaper is published.

4070 JOURNALISM 2

Year Course 1 Credit
Grade Level: 11-12 Prerequisite: Journalism 1

Students write extensively in the basic news media forms – straight news, sports, features, editorials, and columns. Specific skills may be developed in editing, newspaper management, layouts, and advertising.

4080 ADVANCED COMPOSITION
Semester Course 0.5 Credits
Grade Level: 12 Prerequisite: English 3

Instruction and practice in the many types of writing, i.e. narrative, argumentative, research-based, descriptive, literary criticism, etc. Some reading will be required.

4090 WRITER'S CRAFT
Semester Course 0.5 Credits
Grade Level: 12 Prerequisite: English 3

Recommended for students who struggle in writing. Focus is placed on the fundamentals of writing, including grammar, mechanics, and spelling as well as the different types of writing. This class may not be taken in conjunction with Advanced Composition.

4095 CREATIVE WRITING
Semester Course 0.5 Credits
Grade Level: 12

This course explores writing as an art. Students will read and analyze poetry, short stories, essays and excerpts, and create works of fiction, non-fiction, research, poetry, and drama. Students will critique their own work and that of their classmates. Throughout the semester students will compile a portfolio of revised work.

4105 SCIENCE FICTION/FANTASY LITERATURE
Semester Course 0.5 Credits
Grade Level: 12 Prerequisite: English 3

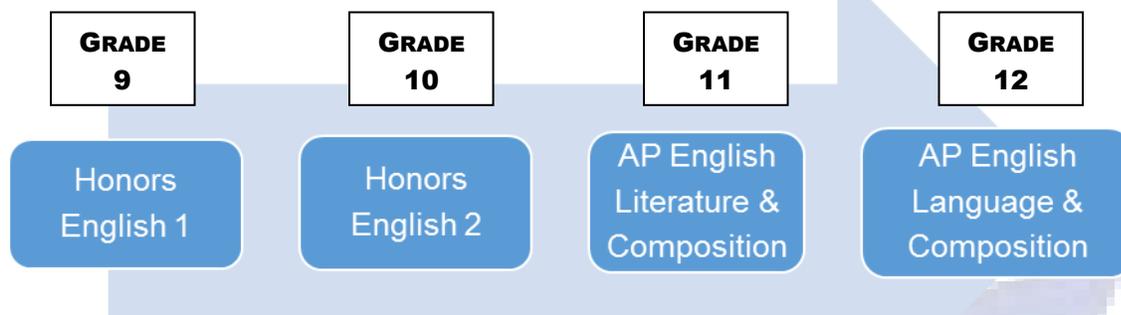
Students explore the genres of science fiction and fantasy. Readings will include short stories, nonfiction, and current events. Critical thinking, reading, writing, and research skills are required.

4125/5044 READING & MATH STRATEGIES
Semester Course 0.5 Credits
Grade Level: 11 Prerequisite: Recommendation only

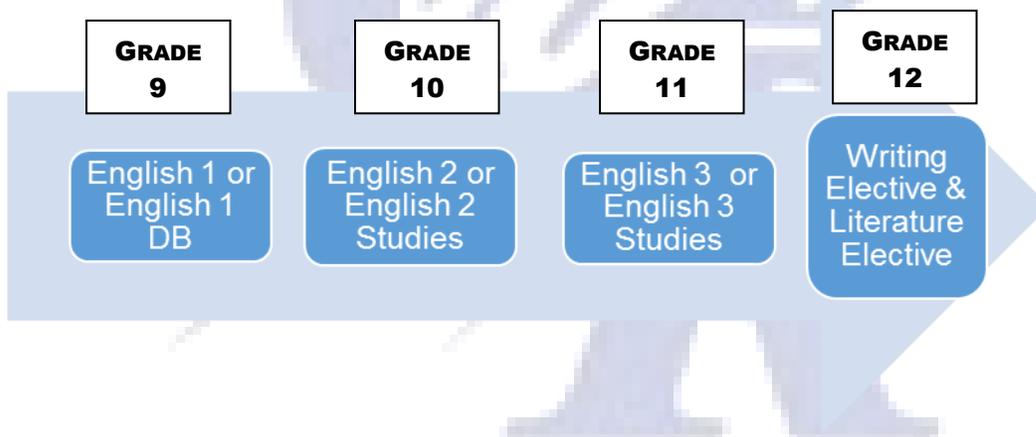
Semester course designed for those students who are not meeting the Illinois State Learning Standards for 11th graders. Nine weeks will be devoted to reading strategies, and nine weeks will be devoted to math application skills. This course will sharpen reading and math skills necessary for successful participation in high school courses and tests requiring reading comprehension and mathematical application. Student achievement data and teacher recommendation will determine placement in this course. ***This course does NOT earn a student credit in English or Math. Credit earned will be applied to student's general elective requirements.***

ENGLISH COURSE FLOW

HONORS/AP ENGLISH SUGGESTED COURSE FLOW



COLLEGE/CAREER-READY ENGLISH SUGGESTED COURSE FLOW



Literature/Reading Elective Options: British Literature, Contemporary Literature, or Science Fiction/Fantasy Literature.

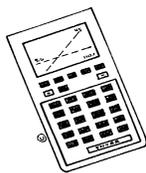
Writing Elective Options: Advanced Composition, Writer's Craft, and Creative Writing.

Other Elective Options: Journalism 1, Journalism 2, Speech.

Mathematics

COURSE OFFERINGS

Note: All courses Algebra 1 and above require a graphing calculator (TI 83 or above).



5022 INFORMAL GEOMETRY

Year Course 1

Credit

Grade Level: 10-11 **Prerequisite: General Alg. and Teacher Placement**

Informal Geometry emphasizes a practical approach to the study of geometry and deemphasizes an abstract, formal approach. Topics include plane and solid figures, inductive methods of reasoning and use of logic, concepts of congruence, similarity, parallelism, perpendicularity and proportion, and rules of angle measurement.

5025 PRE-ALGEBRA

Year Course 1 Credit

Grade Level: 9

Pre-Algebra courses increase students' foundational math skills and prepare them for Algebra 1 by covering a variety of topics, such as properties of rational numbers, ratio, proportion, estimation, exponents and radicals, the rectangular coordinate system, formulas, and solving first-degree equations and inequalities.

5035 ALGEBRA 1

Year Course 1 Credit

Grade Level: 9-10 **Prerequisite: Pre-Algebra**

Algebra 1 includes the study of properties and operations of the real number system, evaluating rational algebraic expressions, graphing and solving first and second degree equations, translating word problems into equations, operations with and factoring of polynomials, solving simple quadratic equations, and descriptive statistics.

5045 ALGEBRA 2

Year Course 1 Credit

Grade Level: 9-12 **Prerequisite: Algebra 1**

Algebra 2 course topics include field properties and theorems, set theory, operations with rational and irrational expressions, factoring of rational expressions, in-depth study of linear equations and inequalities, quadratic equations, solving systems of linear and quadratic equations, graphing and solving constant linear and quadratic equations, properties of higher degree equations, and operations with rational and irrational exponents and work with the complex number system.

5052 ACCELERATED ALGEBRA 2

Year Course 1 Credit

Grade Level: 9-12 **Prerequisite: Accelerated Geometry or A/B in Algebra 1 and instructor conf.**

This course includes all concepts in Algebra 2 and extends the algebraic concepts. Course topics include (but are not limited to) operations with rational and irrational expressions, factoring of rational expressions, linear equations and inequalities, quadratic equations, solving system of linear and quadratic equations, properties of higher degree equations, complex numbers, logarithms, conic sections, and rational and irrational exponents.

5055 GEOMETRY

Year Course 1 Credit

Grade Level: 10-12 **Prerequisite: Algebra 1**

Geometry emphasizes an abstract and formal approach. Topics included are properties of plane and solid figures, deductive methods of reasoning and use of logic, the study of postulates, theorems and formal proofs, concepts of congruence, similarity, parallelism, perpendicularity and proportion, rules of angle measurement in triangles, polygons, and circles.

5067 ACCELERATED GEOMETRY

Year Course 1 Credit

Grade Level: 9-10 **Prerequisite: A or B in Algebra 1**

Accelerated Geometry covers the same topics as in Geometry demanding more critical thinking skills. Course content will emphasize more stringent proofs. Extension topics will include topics in trigonometry and more complex composite polyhedrons.

5070 TRIGONOMETRY

Semester Course 0.5 Credits

Grade Level: 10-12 **Prerequisite: Geometry and C or better in Algebra 2.**

Trigonometry courses prepare students for eventual work in calculus and include the following topics: Trigonometric and circular functions, their inverses and graphs, relations among the parts of a triangle, trigonometric identities and equations, solutions of right and oblique triangles.

5075 HONORS PRE-CALCULUS*

Year Course 1 Credit

Grade Level: 10-12 **Prerequisite: A in Accel. Algebra 2**

Honors Pre-Calculus is designed to prepare the student for successful completion of AP Calculus BC. This course will cover all topics of Pre-Calculus with the addition of the following topics: limits and continuity. Can be taken concurrently with first semester trigonometry.

5077 PRE-CALCULUS

Year Course 1 Credit

Grade Level: 10-12 **Prerequisite: B in Acc. Algebra 2 or College Alg.**

Pre-Calculus combines the study of Trigonometry, Elementary Functions, Analytical Geometry, and Math Analysis topics as preparation for Calculus. Topics include the study of complex numbers, polynomial, logarithmic, exponential, rational, right trigonometric and circular functions, and their relations, inverses and graphs, solutions of right and oblique triangles, vectors, the polar coordinate system, conic sections, matrix algebra, sequences, and series. Can be taken concurrently with first semester Trigonometry.

5080 COLLEGE ALGEBRA

Semester Course **0.5 Credits**
Grade Level: 10-12 **Prerequisite: Geometry and Algebra 2 w/C or better in Algebra 2**

College Algebra extends algebraic concepts for students who have already taken Algebra 2. Course topics include (but are not limited to) operations with rational and irrational expressions, factoring of rational expressions, linear equations and inequalities, quadratic equations, solving systems of linear and quadratic equations, properties of higher degree equations, complex number system, logarithmic functions and operations with rational and irrational exponents.

5085 PROBABILITY & STATISTICS

Semester Course **0.5 Credits**
Grade Level: 11-12 **Prerequisite: Algebra 2**

Probability & Statistics is an introductory statistics course. Topics will include exploring data, numerical and graphical summaries, correlation, association, linear regression, data collection, experimental design and formal probability.

5092 TRANSITION TO COLLEGE MATH

Year Course **1 Credit**
Grade Level: 12 **Prerequisite: Geometry & Algebra 2**

This course will target skills for college-bound students who passed Algebra II with a C or D and are not ready for college-level mathematics. Students will study basic and intermediate algebra topics using college entrance standards with an emphasis on skill retention and applications. This course includes: fundamental skill building with an emphasis on fractional arithmetic, concrete applications on functions, modeling and checking for reasonableness of solutions. Additionally, this course will develop college-level study skills.

5097 CALCULUS

Year Course **1 Credit**
Grade Level: 11-12 **Prerequisite: Pre-Calculus**

Calculus includes the study of limits, differentiation, integration, and their applications.

5100 ADVANCED PLACEMENT (AP) CALCULUS AB*

Year Course **1 Credit**
Grade Level: 11-12 **Prerequisite: 85% In Pre-Calculus**

This course yields a weighted grade. Following the College Board's suggested curriculum, this course is designed to parallel college-level calculus courses. AP Calculus AB provides students with an intuitive understanding of concepts of calculus and experience with its methods and applications. Topics in this course include the following and are presented

in a time frame that will allow the students to take the AP exam in early May: limits, continuity, differential and integral calculus and their applications.

5105 ADVANCED PLACEMENT (AP) STATISTICS*

Year Course **1 Credit**
Grade Level: 11-12 **Prerequisite: B or better in College Algebra or Accelerated Algebra 2**

This course yields a weighted grade. Following the College Board's suggested curriculum, this course is designed to parallel college-level statistics courses. AP Statistics includes the following topics and are presented in a time frame that will allow the students to take the AP exam in early May: An introduction to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: exploring data, sampling and experimentation, anticipating patterns, and statistical inference.

5110 ADVANCED PLACEMENT (AP) CALCULUS BC*

Year Course **1 Credit**
Grade Level: 11-12 **Prerequisite: Honors Pre-Calculus**

This course yields a weighted grade. Following the College Board's suggested curriculum, this course is designed to parallel college-level calculus courses. AP Calculus BC provides students with an intuitive understanding of concepts of calculus and experience with its methods and applications, and also requires additional knowledge of the theoretical tools of calculus. Topics of the course include the topics covered in AP Calculus AB as well as the following topics: vector functions, parametric equations and polar coordinates, rigorous definitions of finite and non-existent limits, derivatives of vector functions and parametrically defined functions, advanced techniques of integration and advanced applications of the definite integral, sequences, and series. The topics are presented in a time frame that will allow the student to take the AP exam in early May.

1115 AP COMPUTER SCIENCE A*

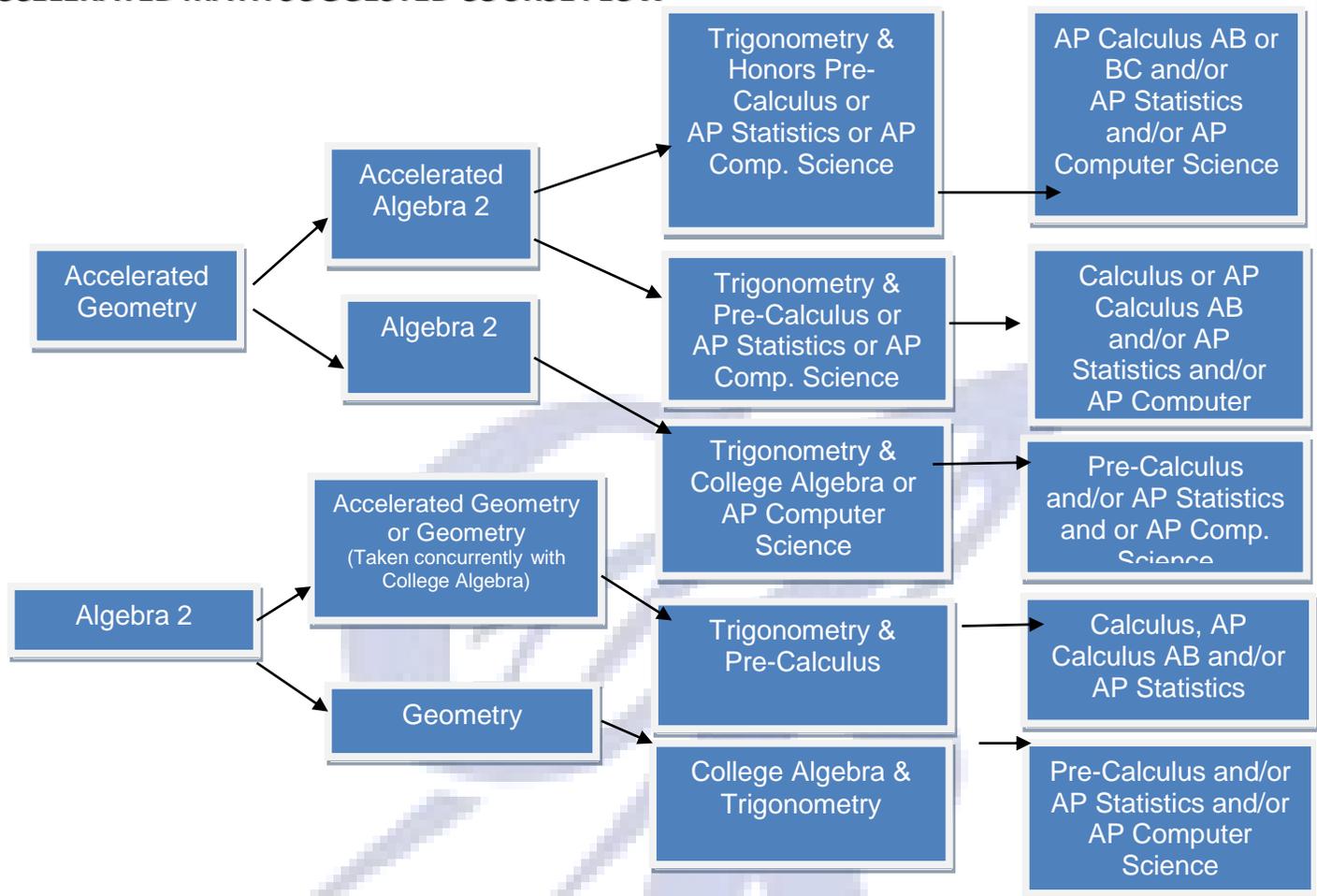
Year Course **1 Credit**
Grade Level: 11-12 **Prerequisite: Algebra 2 & Intro. to Comp. Programming recommended**

Advanced Placement Computer Science is a rigorous, college-level course designed to prepare students for the AP® Computer Science A examination using the Java programming language. This course emphasizes object-oriented programming methodology with a concentration on problem solving and algorithm development. It also includes the study of data structures, design, and abstraction. Many topics in this course are mathematically intensive and require a firm understanding of algebraic concepts and experience in problem solving. Students should be comfortable with functions and the concepts found in the uses of functional notation, such as $f(x) = x + 2$ and $f(x) = g(h(x))$. This course builds upon a foundation of mathematical reasoning that should be acquired before attempting this course. Documentation plays a central role in the programming methodology.

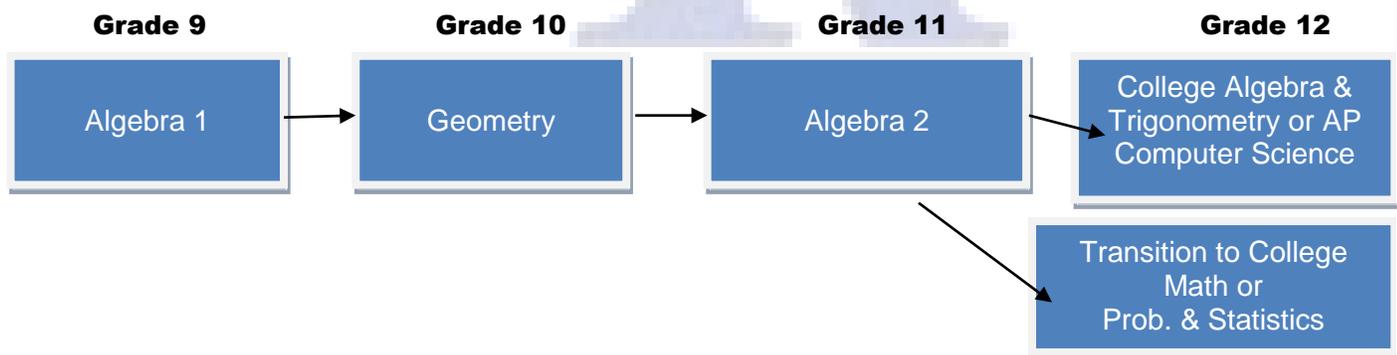
*Indicates weighted grades in this course.

MATH COURSE FLOW

ACCELERATED MATH SUGGESTED COURSE FLOW



COLLEGE/CAREER-READY MATH SUGGESTED COURSE FLOW



Physical Education/Health/ Drivers Education

COURSE OFFERINGS



6012 PHYSICAL EDUCATION 9 Co-Ed
Semester Course
0.5 Credits
Grade Level: 9

The freshmen Physical Education class is a one-semester class that is designed to introduce students to individual fitness and the beginning of lifetime fitness. Students will learn basic concepts of fitness and wellness that will be expanded in later Physical Education classes. Using their personal results as guidelines determined from utilizing Fitnessgram data they will integrate their personal goals into short-term and long-term fitness goals. This class is baseline for which students will choose progression of their class choices throughout their high school career.

6017 PHYSICAL EDUCATION 10 Co-Ed
Semester Course
0.5 Credits
Grade Level: 10

This course will provide a wide variety of experiences that will enable students to develop a positive attitude toward health-enhancing physical activities throughout their lifetime. It will expose sophomores to various team and individual sports. Students will possess the skills to choose activities that will enhance personal fitness and lifelong wellness and the skills necessary to develop personal fitness programs to meet specific needs. Students will understand that an acceptable level of the health-related components of physical fitness is recognized as a key element of a healthy lifestyle. The Fitnessgram fitness assessment will be administered as well to document student progress.

6030 PHYSICAL EDUCATION 11/12 BOYS
Semester Course
0.5 Credits
Grade Level: 11-12

Instruction, practice, and participating are provided in a non-coed setting in a variety of lifetime sports and physical education activities. It is imperative that students are made aware of and encouraged to participate in regular physical activity. This class is designed to be a building block for a future of physically active adults. This course will cover the basic components of fitness which includes: cardiovascular health; muscular strength and endurance; flexibility; body composition and stress management. Activities include but are not limited to, individual sports, dual sports and team sports. The students learn proper methods, strategies, safety precautions and physical benefits associated with each health related fitness component. The Fitnessgram assessment will be administered as well.

6035 PHYSICAL EDUCATION 11/12 GIRLS
Semester Course
0.5 Credits
Grade Level: 11-12

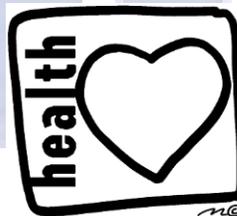
Instruction, practice, and participating are provided in a non-coed setting in a variety of lifetime sports and physical education activities. It is imperative that students are made aware of and encouraged to participate in regular physical activity. This class is designed to be a building block for a future of physically active adults. This course will cover the basic components of fitness which includes: cardiovascular health; muscular strength and endurance; flexibility; body composition and stress management. Activities include but are not limited to, individual sports, dual sports and team sports. The students learn proper methods, strategies, safety precautions and physical benefits associated with each health related fitness component. The Fitnessgram assessment will be administered as well.

6050 DRIVERS EDUCATION
Semester Course
0.5 Credits
Grade Level: 9-12
Prerequisite: 2.0 GPA (cum. or prev. sem.) & 15 yrs. old prior to 1st day of class.



Prepares students to take the Illinois State Driver's Exam. Units include automobiles, maintenance, effects of alcohol and drugs on driver's reactions, city, highway, and expressway driving, Rules of the Road, safety, and maneuvers.

6060 HEALTH (GRADUATION REQ.)
Semester Course
0.5 Credits
Grade Level: 9



Covers attitudes and practices related to healthy living. Units include self-image, relationships, human anatomy including reproduction, AIDS and other communicable diseases and community health. Taken in lieu of one semester of P.E. in the freshman year.

6061 ADVANCED HEALTH
Semester Course
0.5 Credits
Grade Level: 11-12
Prerequisite: Health

Advanced Health is designed to provoke thought, knowledge, and understanding of global, cultural, community, family, and individual health. Students will participate in many discussions, self-reflections, outside activities, and projects that all facilitate positive individual growth. Some topics to be covered in class include, but are not limited to: mental and emotional health, death/dying/loss, alternative medicines, medical

mysteries, men's and women's health issues, health careers, ethical dilemmas, cultural health issues, and heredity. The teacher, students, and current health issues will all have input on what is covered in class. Also included will be CPR, AED, and First Aid certification.

6070 WALKING & WELLNESS

Semester Course **0.5 Credits**
Grade Level: 10-12

This is an outside walking program that will be outside unless there is lightning or the wind chill is below 0 with a variety of alternative activities being completed during inclement weather. Students will keep a daily log of required walking & wellness information and will complete a semester project. Each student will need proper attire for weather conditions.

6080 RESISTANCE TRAINING 1

Semester Course **0.5 Credits**
Grade Level: 10-12 **Prerequisite: PE 9**

Foundations of weight training. The purpose of this course is to provide students with an opportunity to acquire basic knowledge and skills in weight training that may be used in physical fitness pursuits today as well as in later life, improve muscular strength and endurance, and enhance body image. Students will benefit from a comprehensive resistance training program/workout by the instructor. Students will also demonstrate proper spotting techniques for all lifts and exercises which require spotting. Evaluation of risk and safety factors that may affect participation in weight training and fitness throughout a lifetime is included.

6086 RESISTANCE TRAINING 2

Semester Course **0.5 Credits**
Grade Level: 10-12 **Prerequisite: RT 1**

Workout guidelines and development. Students will be given the opportunity to extend the acquisition of knowledge and development introduced in Resistance Training 1 that may be used in physical fitness pursuits today as well as in later life, further improve strength, endurance, and further enhance body image. Students will be given the opportunity to apply what they have

learned by exploring how to create their own individual workouts. An emphasis will also be placed on safety and responsible behavior while weight training. Students will demonstrate proper spotting techniques for all lifts and exercises which require spotting. Evaluation of risk and safety factors that may affect participation in weight training and fitness throughout a lifetime is included.

6087 RESISTANCE TRAINING 3

Semester Course **0.5 Credits**
Grade Level: 10-12 **Prerequisite: RT 1 and/or 2**

Lifelong fitness. This course is designed for students to utilize Resistance Training 1 and 2 concepts, knowledge, and techniques into a combination of workouts pre-determined by instructors. Students will be given an opportunity to increase their knowledge base of weight training to be used in physical fitness pursuits today as well as later in life. An emphasis will be placed on safety and responsible behavior while weight training. Students will also demonstrate proper spotting techniques for all lifts and exercises which require spotting. Evaluation of risk and safety factors that may affect participation in weight training and fitness throughout a lifetime is included.

6082 INDIVIDUAL PERSONAL TRAINING

Semester Course **0.5 Credits**
Grade Level: 11-12 **Prerequisite: RT 1 & 2**

This course is designed for students to create their own individual workout goals. Units include: Parts of a workout, types of workouts, and designing workouts to meet individual fitness goals. This course also gives students the opportunity to increase their knowledge of fitness concepts and conditioning techniques used for obtaining optimal physical fitness. Students will benefit from comprehensive weight training and designing their own workouts. Students will be empowered to make wise choices, meet challenges, and develop positive behaviors in fitness, wellness, and movement activity for a lifetime.

Science

COURSE OFFERINGS

7000 INTRODUCTION TO PHYSICAL SCIENCE **

Year Course 1 Credit

Grade Level: 9

A lab-based science class integrating physical science concepts with the processes used to gain scientific knowledge. Topics include scientific measurement, properties of matter, separation, and identification techniques.

7005 EARTH SCIENCE

Semester Course 0.5 Credits

Grade Level: 9-12

Earth Science is a semester long course which will provide students with an understanding of Earth's influence on you and your influence on the Earth. Students will understand the fundamental concepts of Earth's many systems, know how to find and assess scientifically credible information about Earth, communicate about Earth science in a meaningful way, and will be able to make informed and responsible decisions regarding Earth and its resources.

7015 ASTRONOMY

Semester Course 0.5 Credits

Grade Level: 10-12 Prerequisite: Algebra 1

Topics include the history of astronomy, the nature of light, telescopes, the solar system, stellar evolution, origin of the universe, and space exploration. Students will need to make some night observations.

7029 ENVIRONMENTAL SCIENCE

Semester Course 0.5 Credits

Grade Level: 9-12

This is an interdisciplinary course, which provides students with the scientific principles and concepts necessary to understand the natural world, identify environmental problems, and examine alternative solutions. This course will explore the Earth by studying alternative energy, resource use, and management and sustainability. A background in Earth Science is recommended for this course.

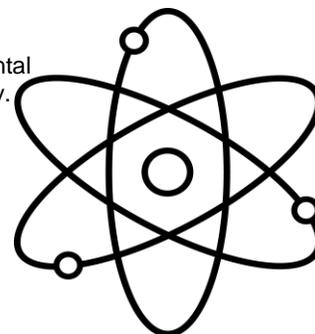
7036 ADVANCED PLACEMENT (AP) ENVIRONMENTAL SCIENCE*

Year Course 1 Credit

Grade Level: 11-12 Prerequisite: Two years lab science

This course is designed to be the equivalent of a one-semester, introductory college course in environmental science, through which students engage with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental Science is interdisciplinary, embracing

topics from geology, biology, environmental studies, environmental science, chemistry, and geography.



7023 ACCELERATED MOLECULAR BIOLOGY**

Year Course

1 Credit

Grade Level: 9

**Prerequisite:
Please see Page 4**

A study of life and life processes from a biochemical perspective. Topics of study include scientific inquiry, biochemistry, cell structure and function, energy, genetics, evolution, and ecology. This Pre-AP class requires mastery and application of skills acquired throughout both semesters providing a comprehensive view of topics relevant to biological study today. This course places greater emphasis on critical thinking and mathematical analysis of experimental data than Molecular Biology (Course 7025).

7025 MOLECULAR BIOLOGY**

Year Course 1 Credit

Grade Level: 10-12

A study of life and life processes from a biochemical perspective. Topics of study include scientific inquiry, biochemistry, cell structure and function, energy, genetics, evolution, and ecology. This Pre-AP class requires mastery and application of skills acquired throughout both semesters providing a comprehensive view of topics relevant to biological study today.

***Indicates weighted grades in this laboratory course.**

****laboratory science class**

7030 BIOLOGY**

Year Course 1 Credit

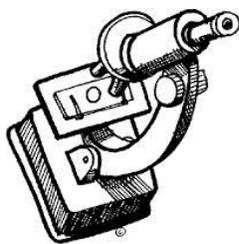
Grade Level: 10-12 Prerequisite: Instr. recomm.

Biology is a relevant study of the living world around us. Students study and survey the complexity of living organisms and explore the interdependence of diverse life forms on Earth. During the first semester of study, students build a solid foundation of Taxonomy, Ecology, and Evolution. The following semester explores the chemical make-up of individual organisms through the study of their DNA and genetics, basic chemistry, and concluding with a study of organ systems and dissection of representative invertebrates and vertebrates. This class builds on the skills gained throughout the year to provide a comprehensive view of many topics relevant to biological study today.

7032 ADVANCED PLACEMENT (AP) BIOLOGY*

Year Course 1 Credit

Grade Level: 11-12 Prerequisite: "B" in both sems. of Molecular Biology & Chemistry



This course is equivalent to an introductory freshman-level college biology class.

Emphasis is placed on lab skills, critical thinking, logic, and the problem solving skills needed to pass the AP exam. Must maintain C or better in first semester.

7045 CHEMISTRY**

Year Course
Grade Level: 10-12

1 Credit
Prerequisite: "C" or better in both sems. of Molecular Biology & Algebra 1 or "A" in both semesters of Biology and C or better in both sems. of Algebra 1

Chemistry involves the study of atomic structure, the composition and properties of matter, and reactions of substances. Concepts such as chemical formulas and equations, chemical reactions (types, balancing, and stoichiometry), states of matter (including the Gas Laws), solutions, and acids and bases will be explored.

7042 ACCELERATED CHEMISTRY**

Year Course
Grade Level: 10-12

1 Credit
Prerequisite: "B" or better in both sems. of Molecular Biology & Algebra 1

Same concepts as general chemistry but at a faster pace and with more in-depth discussion of topics.

7050 ADVANCED PLACEMENT (AP) CHEMISTRY*

Year Course
Grade Level: 11-12

1 Credit
Prerequisite: "B" or better both sems. of Accel. Chem. or "A" or better both sems. of Chemistry w/necessary lab work to be done prior to start of class.

Equivalent to an introductory freshman-level college chemistry class. Emphasis is placed on lab skills, critical thinking, logic, and problem solving skills needed to pass the AP exam. Must maintain C or better first semester. Topics include accelerated chemistry topics plus thermochemistry,

equilibrium, kinetics, electrochemistry, various solution equilibrium, organic chemistry, and nuclear chemistry.

7060 PHYSICS**

Year Course
Grade Level: 11-12

1 Credit
Prerequisite: "C" or better in Algebra 2

A study of the relationship between matter and energy. Topics include the study of motion, Newton's Laws with regard to forces, motion in two dimension, momentum, work, power, simple machines, energy, heat, electricity and magnetism, optics, sound, and modern topics such as high energy physics. Physics should not be considered a simple continuation of the science curriculum. Strong Algebra skills are expected and assumed as is a high level of student responsibility.

7069 ADVANCED PLACEMENT (AP) PHYSICS 1*

Year Course
Grade Level: 11-12

1 Credit
Prerequisite: "B" or better in Accelerated Algebra 2, Algebra 2, or College Algebra

This course is the equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics, including rotational dynamics and angular momentum, work, energy, and power; and mechanical waves and sound. It will also introduce electric circuits.

7065 ADVANCED PLACEMENT (AP) PHYSICS 2*

Year Course
Grade Level: 12

1 Credit
Prerequisite: AP Physics 1

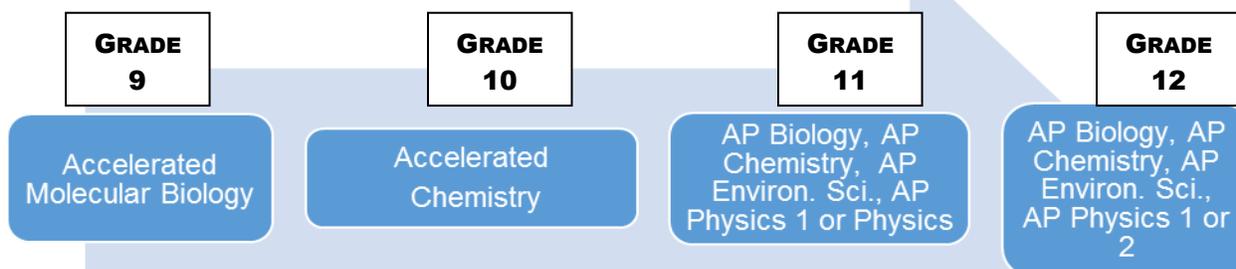
This course is an algebra-based, introductory college-level physics course that explores topics such as fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics. Through inquiry-based learning students will develop scientific critical thinking and reasoning skills.

Note: All Agriculture classes (Courses 1200, 1205, 1206, 1210, 1211, 1215, and 1216) may also be taken for Science credit. Please see course descriptions in the Career/Tech Education section for specific information on these courses).

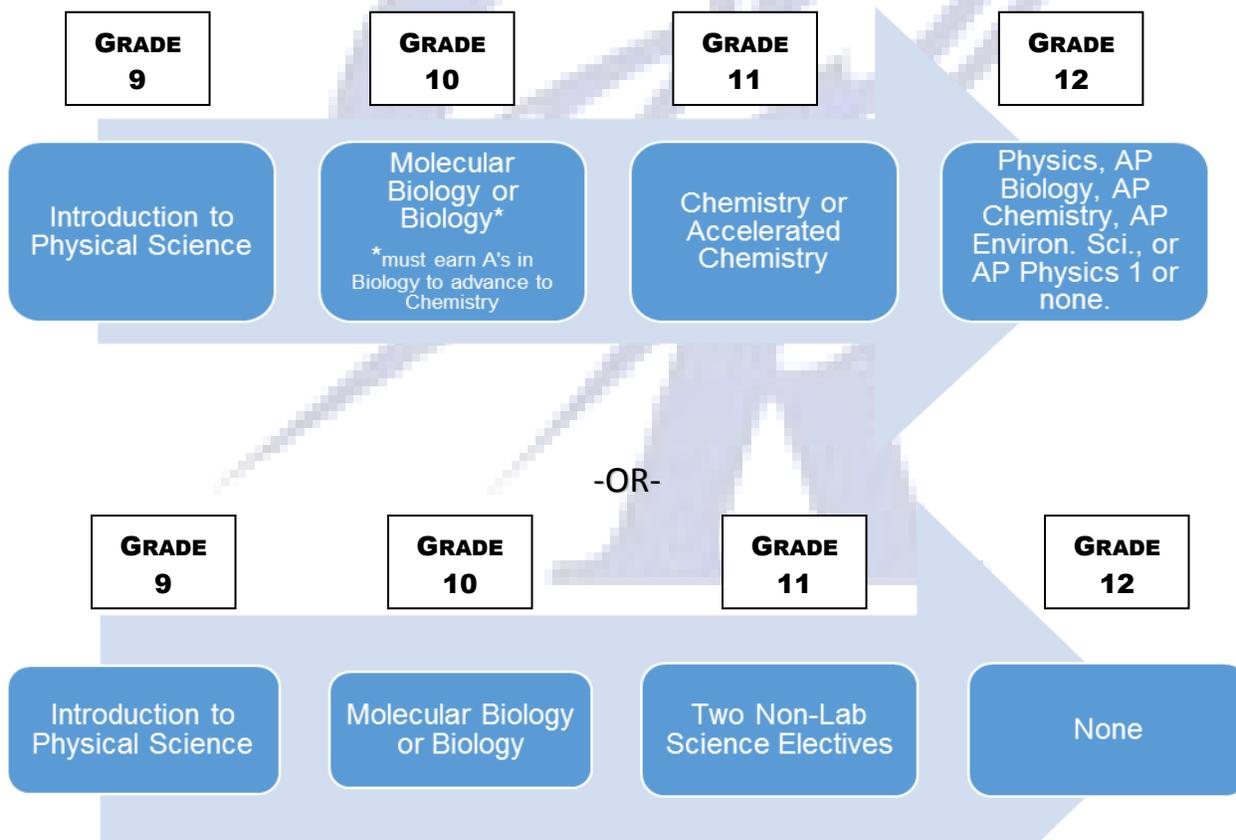
*Indicates weighted grades in this laboratory course.
**laboratory science class

SCIENCE COURSE FLOW

ACCELERATED/AP SCIENCE SUGGESTED COURSE FLOW



COLLEGE/CAREER-READY SCIENCE SUGGESTED COURSE FLOW



Note: All students must take, at least, two laboratory sciences and one additional credit of elective science.

Elective options are: Chemistry (laboratory, 10-12), Accelerated Chemistry (laboratory, 10-12), AP Chemistry (laboratory, 11-12), Physics (laboratory, 11-12), AP Physics 1 (laboratory, 11-12), AP Biology (laboratory, 11-12), Earth Science (non-laboratory, 9-12), Environmental Science (non-laboratory, 9-12), AP Environmental Science (laboratory, 11-12), Astronomy (non-laboratory, 10-12), Introduction to Agricultural Science (non-laboratory, 9-10), Animal Science (non-laboratory, 10-12), Plant Science (non-laboratory, 9-12), Veterinary Technology (non-laboratory, 10-12), Veterinary Technology 2 (non-laboratory, 11-12), Biotechnology (non-laboratory, 10-12), Alternative Energy (non-laboratory, 10-12).

Social Studies

COURSE OFFERINGS



8000 MODERN WORLD HISTORY

Semester Course
Grade Level: 9

0.5 Credits

Students will conceptualize the development of modern global political, economic, social, and military systems spanning from the Industrial Revolution to present and examine the impacts of key nations in relation to global diplomacy and coalition organizations.

8001 GLOBAL STUDIES (GRADUATION REQ.)

Semester Course
Grade Level: 9

0.5 Credits

Global Studies will concentrate on the regions of China, India, the Middle East, Africa, and South America. Students will apply real world skills to the understanding of the economy, social systems, people, and the environment. The class is designed to have a hands-on, student-centered approach to the study of the world through charts, graphs, primary source documents, creative writing, and general ACT and standardized testing skills.

8002 HONORS MODERN WORLD HISTORY

Semester Course
Grade Level: 9

0.5 Credits

Designed for students who are self-motivated and enjoy concentrated focus on historical topics. Students will become familiar with researching historical documents, analyzing historical events, and synthesizing that information in writing. *Fulfills Global Studies graduation requirement. However, students may elect to take both courses.*

8004 ADVENTURES IN SOCIAL STUDIES

Semester Course
Grade Level: 9-10

0.5 Credits

An encompassing view of social studies that begins with exploration of the new world and ends with contemporary issues in the U.S. today. Other topics covered: The Civil War, the History of Illinois, and geography.

8030 UNITED STATES HISTORY (GRADUATION REQ.)

Year Course
Grade Level: 10

1 Credit

A survey of U.S. history from post World War I through contemporary times. The focus is on historical



controversies that determined our history. Students do readings, research, and reports.

8037 ADVANCED PLACEMENT (AP) U.S. HISTORY*

Year Course
Grade Level: 10

1.2 Credits

Prerequisite: Placement test incl. writing sample & dept. recommend.

Designed to provide students with the analytic skills and factual knowledge necessary to deal critically with problems and materials in U.S. History. A survey of United States History from pre-colonization to present. Equivalent to demands made by full-year introductory college course. *Fulfills U.S. History graduation requirement.*

8035 UNITED STATES HISTORICAL PERSPECTIVES IN CINEMA

Semester Course
Grade Level: 11-12

0.5 Credits

Prerequisite: U.S. History

A chronological journey of history through the use of cinema, in which students will analyze the historical accuracy and significance of the topics covered. Each movie will include a portfolio project or test and a written movie review. A fair amount of writing will be required for this class. Some of the movies covered: The Patriot (American Revolution), Dances With Wolves (Closing of the Frontier), Cinderella Man (the Great Depression), Thirteen Days (Cuban Missile Crisis), Black Hawk Down (Modern Warfare), The Insider (Legal Action vs. the tobacco industry), and World Trade Center (Sept. 11th).

8036 WORLD HISTORICAL PERSPECTIVES IN CINEMA

Semester Course
Grade Level: 11-12

0.5 Credits

Prerequisite: U.S. History

A chronological journey of history through the use of cinema, in which students will analyze the historical accuracy and significance of the topics covered. Each movie will include a portfolio project or test and a written movie review. A fair amount of writing will be required for this class. Some of the movies covered: 10,000 B.C. (early civilizations), Gladiator (Rome), Kingdom of Heaven (Crusades), Braveheart (Britain), 1492 (Exploration), The Last Samurai (Japan), Hotel Rwanda (Africa), and Slumdog Millionaire (India).

**Indicates weighted grades in this course.*

8040 AMERICAN GOVERNMENT (GRADUATION REQ.)

Semester Course 0.5 Credits
Grade Level: 11-12

Analyze government and political processes. America's system of interrelationships among national, state, and local levels are investigated. Students take the U.S. and Illinois Constitution Exams.

8042 ADVANCED PLACEMENT (AP) U.S. GOVERNMENT & POLITICS*

Semester Course 0.5 Credits
Grade Level: 11-12 Prerequisite: "A" in U.S. History or "B" in AP U.S. History

Students will analyze and interpret the government and political processes of the United States using theoretical perspectives. Equivalent to demands made by an introductory college course. *Fulfills American Government graduation requirement.*

8045 SOCIOLOGY

Semester Course 0.5 Credits
Grade Level: 11-12 Prerequisite: "C" or better in U.S. History or instr. recommend.
♦10 w/Instr. approval

This course focuses on human interrelationships, analysis of culture and social problems, leadership in American society, effects of poverty, formation of stereotypes, and social mobility are considered. Also includes Exploration of Gangs in America unit.

8050 PSYCHOLOGY

Semester Course 0.5 Credits
Grade Level: 11-12 Prerequisite: "C" or better in U.S. History or instr. recommendation
♦10 w/Instr. approval

Includes current trends and careers, especially sleep and dream analysis, motivation and emotions, theories of personality, psychological disorders, and treatments.

8051 PSYCHOLOGY 2

Semester Course 0.5 Credits
Grade Level: 11-12 Prerequisite: "B" or better in Psychology or instr. recommend.

Includes the areas of Biology & Behavior, Sensation & Perception, Learning, Memory, Thinking & Language, Intelligence, Psychological Tests, and Sports Psychology.

8070 ADVANCED PLACEMENT (AP) PSYCHOLOGY*

Year Course 1 Credit
Grade Level: 11-12 Prerequisite: "B" or better in both semesters of U.S. History

The purpose of the course is to introduce the systematic and scientific study of the behavior and mental processes of human beings and other animals. Included will be a study of the major subfields of psychology: Body and Behavior, Altered States of Consciousness, Sensation and Perception, Learning, Memory, Thinking, Motivation, Personality, and Psychological Disorders. Students also learn about the ethics and methods psychologists use in their science and practice.

8055 SOCIOLOGICAL DYNAMICS OF THE INDIVIDUAL & FAMILY

Semester Course 0.5 Credits
Grade Level: 11-12

Designed to assist individuals in achieving life satisfaction through responsible participation as adults in the home and community. Emphasizes realistic expectations of marriage, parenting, and family life, etc.

8065 ECONOMICS

Semester Course 0.5 Credits
Grade Level: 11-12

Covers resources, the factors of production, the roles of competition, business and government, supply and demand, comparative economic systems, and the role of the consumer in the U.S. economy.

8080 AMERICAN JUDICIAL SYSTEM (CRIMINAL LAW)

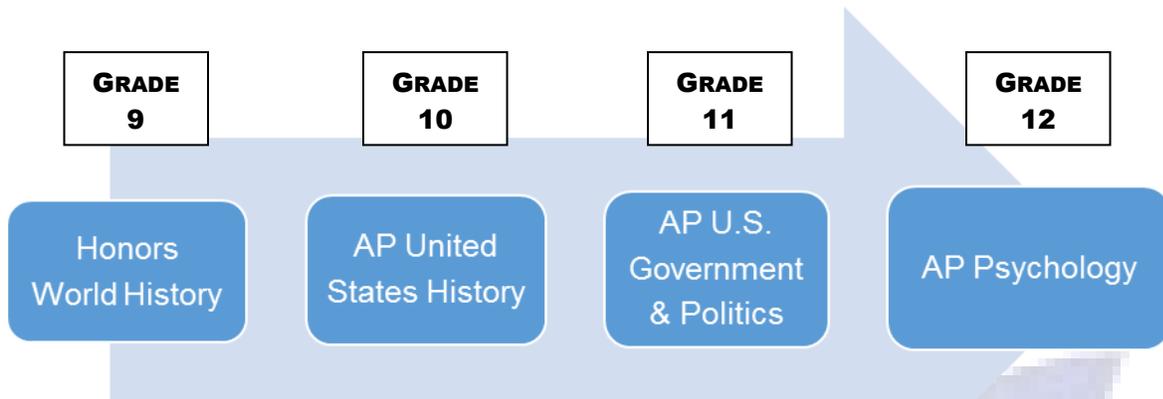
Semester Course 0.5 Credits
Grade Level: 11-12

Students examine crime, the structure and applications of criminal law and the judicial system. Study Supreme Court cases on search and seizure, Miranda, jury trial, and others. Students will participate in a mock trial. *Articulates with Elgin Community College CRJ 101*

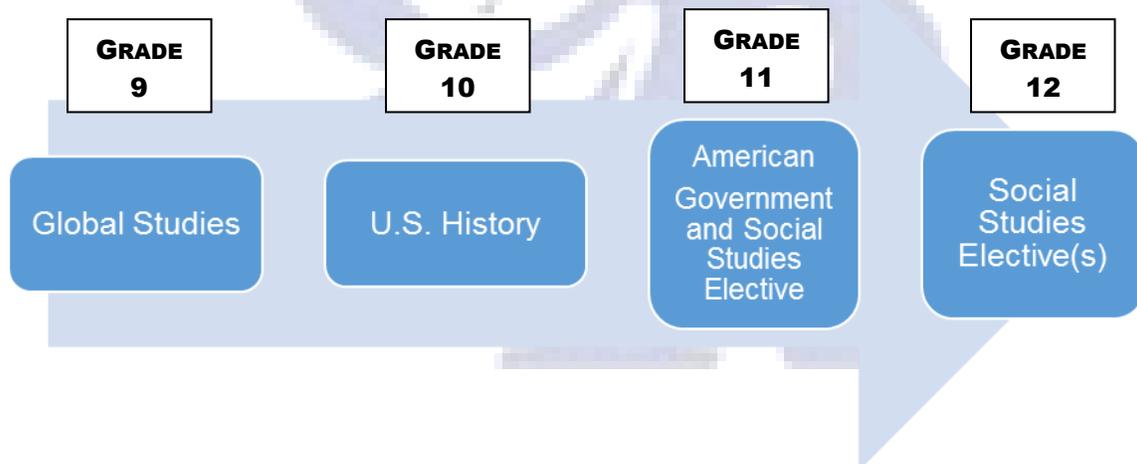
*Indicates weighted grades in this course.

SOCIAL STUDIES COURSE FLOW

HONORS/AP SOCIAL STUDIES SUGGESTED COURSE FLOW



COLLEGE/CAREER-READY SOCIAL STUDIES COURSE FLOW



Elgin Community College Tech Prep



Elgin
Community
College

COURSE OFFERINGS

9250 AUTOMOTIVE SERVICE TECHNOLOGY TP†

Year Course 4 Credits
Grade Level: 11-12 Prerequisite: See Page 7

A series of three courses taught at ECC:

AUT 151 – Auto Engine Service & Repair
AUT 171 – Auto Suspension & Wheel Alignment
AUT 172 – Auto Brake System
Students receive both high school and college credit.

9255 ENGINEERING/CAD TP†

Year Course 4 Credits
Grade Level: 12 Prerequisite: See Page 7

A series of four courses taught at ECC:

CAD 120 – Introduction to SolidWorks
CAD 101/EGR 101 – General Engineering Drawing
CAD 121 – Advanced Concepts in SolidWorks
CAD 206 – Industrial Design Problems
Students receive both high school and college credit. College level math required for EGR 101 (COMPASS Algebra 55 and above.)

9265 GRAPHIC DESIGN TP†

Year Course 4 Credits
Grade Level: 12 Prerequisite: See Page 7

A series of four courses taught at ECC:

GRD 107 – Introduction to Digital Design
GRD 101 – Introduction to Graphic Design
GRD 103 – Conceptual Visualization
GRD 106 – Layout Design
Students receive both high school and college credit.

9270 HEATING, AIR CONDITIONING, AND REFRIGERATION TP†

Year Course 4 Credits
Grade Level: 11-12 Prerequisite: See Page 7

A series of five courses taught at ECC:

HAC 101 – Air Conditioning & Refrigeration 1
HAC 114 – Basic Electricity & HVACR Controls
HAC 119 – Refrigerant Recovery Certification
HAC 102 – Air Conditioning & Refrigeration 2
HAC 103 – Basic Heating Gas/Oil
Students receive both high school and college credit. Courses are held in the evening.

9275 INDUSTRIAL MANUFACTURING TECHNOLOGY TP†

Year Course 4 Credits
Grade Level: 12 Prerequisite: See Page 7

A series of four courses taught at ECC:

IMT 103 – Industrial Manufacturing Tech 1
IMT 104 – Industrial Manufacturing Tech 2
IMT 108 – Industrial Manufacturing Tech 3
IMT 109 – Industrial Manufacturing Tech 4
Students receive both high school and college credit.

9280 EARLY CHILDHOOD EDUCATION TP†

Year Course 4 Credits
Grade Level: 12 Prerequisite: See Page 7

A series of four courses taught at ECC:

ECE 102 – Introduction to Early Childhood Education
ECE 124 – Curriculum Planning/Young Children
ECE 100 – Health, Safety, & Nutrition/Young Child
ECE 174 – Child Growth & Development
Students receive both high school and college credit.

9263 OFFICE ADMINISTRATION TECHNOLOGY TP†

Year Course 4 Credits
Grade Level: 12 Prerequisite: See Page 7

A series of six courses taught at ECC:

CIS 100 – Introduction to Computers
BUS 101 – Business Communications
OAT 126 – Word Processing Applications 1
OAT 127 – Word Processing Applications 2
OAT 141 – Spreadsheet 1
OAT 132 – Applied Business Language Skills
Students receive both high school and college credit. ECC Keyboarding Proficiency required or B or higher in high school articulated keyboarding class.

9290 PARALEGAL TP†

Year Course 4 Credits
Grade Level: 12 Prerequisite: See Page 7

A series of four courses taught at ECC:

BUS 112 – Legal Environment of Business
CIS 100 – Introduction to Computers
PAR 101 – Introduction to Legal Technology
POS 150 – American Government, National
Students receive both high school and college credit. College-level reading and writing are required. COMPASS Reading Score of 80; COMPASS E-write score of 6 or higher. ECC Keyboarding Proficiency required or B or higher in high school articulated keyboarding class.

9294 ACCOUNTING TP†**Year Course** 4 Credits
Grade Level: 12 Prerequisite: See Page 7

A series of four courses taught at ECC:

ACC 100 – Introductory Accounting
BUS 120 – Business Mathematics
ACC 200 – Financial Accounting
BUS 101 – Business Communications
Students receive both high school and college credit.**9299 WELDING FABRICATION TECHNOLOGY TP†****Year Course** 4 Credits
Grade Level: 12 Prerequisite: See Page 7

A series of four courses taught at ECC:

WEL 101 – Welding 1
WEL 102 – Welding 2
WEL 208 – Welding 3
WEL 220 – MIG Welder Qualification
Students receive both high school and college credit.**9314 ENTREPRENEURSHIP TP†****Year Course** 4 Credits
Grade Level: 12 Prerequisite: See Page 7

A series of four courses taught at ECC:

ENT 101 – Entrepreneurship Seminar 1
ENT 111 – Small Business Management
MKT 103 – Marketing
ENT 220 – Business Plan Writing
Students receive both high school and college credit.**9319 CULINARY ARTS, PASTRY, RESTAURANT MANAGEMENT TP****Year Course** 4 Credits
Grade Level: 12 Prerequisite: See Page 7

A series of four courses taught at ECC:

HOS 100 – Kitchen Techniques
CUL 106 – ServSafe Certification
CUL 101/PAS 101 – Cooking Fundamentals I or Baking Fundamentals I
HOS 101 – Intro. to the Hospitality Industry
Students receive both high school and college credit. Courses are held in the evening. Required COMPASS Math placement score of 44.**9325 FIRE SCIENCE & SAFETY TP****Year Course** 4 Credits
Grade Level: 12 Prerequisite: See Page 7

A series of four courses taught at ECC:

FSS 101 – Introduction to Fire Science
FSS 102 – Fire Prevention Principles
FSS 103 – Fire Suppression
FSS 204 – Fire Protection Systems
Students receive both high school and college credit.**9330 CRIMINAL JUSTICE TP****Year Course** 4 Credits
Grade Level: 12 Prerequisite: See Page 7

A series of four courses taught at ECC:

CRJ 101 – Introduction to Criminal Justice
CRJ 199 – Community Based Policing
CRJ 110 – Introduction to Corrections
CRJ 180 – Crime Prevention
Students receive both high school and college credit.**9335 CLINICAL LABORATORY TECHNOLOGY TP†****Year Course** 4 Credits
Grade Level: 12 Prerequisite: See Page 7

A series of five courses taught at ECC:

BIO 110 – Principles of Biology
HPE 112 – Introduction to Healthcare Vocabulary
CLT 101 – Phlebotomy
CLT 105 – Clinical Lab Assistant Skills 1
CLT 106 – Clinical Lab Assistant Skills 2
Students receive both high school and college credit. REQUIRED: B average in high school biology & chemistry. College-level reading and writing are required. REQUIRED: COMPASS Reading Score of 80; COMPASS Algebra score of 38; English Essay 5-5 or higher. PSB Health Occupations Aptitude testing: 25th percentile or higher in all sections required.**9340 BASIC NURSE ASSISTANT TP†****Year Course** 4 Credits
Grade Level: 12 Prerequisite: See Page 7

A series of three courses taught at ECC:

NUR 105 – Basic Nurse Assistant Training Program
BIO 101 – Nutrition for Today
PSY 100 – Introduction to Psychology
Students receive both high school and college credit. Class involves October clinicals that meet during the evening at local hospitals and healthcare facilities. REQUIRED: COMPASS Reading Score of 80. COMPASS Math Pre-Algebra score 44; English Essay 5-5 or higher. PSB Health Occupations Aptitude testing: 12th percentile or higher in all areas required. Note: There is a required "boot camp" prior to the startup of the course. Also, failure to achieve 80% overall on the first 3 tests (with no test below a 75%) will result in the student being withdrawn from the course.**9345 HEALTH PROFESSIONS: PREPARATION FOR NURSING, PHYSICAL THERAPY ASSISTANT, SURGICAL TECHNOLOGY TP†****Year Course** 4 Credits
Grade Level: 12 Prerequisite: See Page 7

A series of three courses taught at ECC:

BIO 110 – Principles of Biology
HPE 112 – Introduction to Healthcare Vocabulary
BIO 245 – Human Anatomy and Physiology I
Students receive both high school and college credit. REQUIRED: B average in high school biology & chemistry. College-level reading and writing are required. REQUIRED: COMPASS Reading Score of 80; COMPASS Algebra score 38; English Essay 5-5 or higher.

9355 COMPUTER & INFORMATION SCIENCE TP†

Year Course **4 Credits**
Grade Level: 12 **Prerequisite: See Page 7**

A series of four courses taught at ECC:

CIS 110 – Introduction to Computers
 CIS 105 – Introduction to Programming
 CIS 230 – Computer Hardware
 CIS 221 – Computer Operating Systems/Microsoft
 Students receive both high school and college credit. **REQUIRED:**
 Algebra 2 in high school.

9365 MANAGEMENT TP†

Year Course **4 Credits**
Grade Level: 12 **Prerequisite: See Page 7**

A series of six courses taught at ECC:

BUS 100 – Introduction to Business
 BUS 101 – Business Communication
 CIS 143 – Spreadsheet Software – Excel
 MMT 101 – Principles of Management
 OAT 146 – Personal Information Management
 BUS 120 – Business Mathematics
 Students receive both high school and college credit.

9370 MARKETING TP†

Year Course **4 Credits**
Grade Level: 12 **Prerequisite: See Page 7**

A series of four courses taught at ECC:

BUS 120 – Business Mathematics
 MKT 105 – Sales
 MKT 103 – Marketing
 BUS 100 – Introduction to Business
 Students receive both high school and college credit.

**9375 INTEGRATED SYSTEMS TECHNOLOGY/
MAINTENANCE TECHNOLOGY TP†**

Year Course **4 Credits**
Grade Level: 12 **Prerequisite: See Page 7**

A series of four courses taught at ECC:

IST 140 – Programming Controllers 1
 IST 142 – Programming Controllers 2
 IST 245 – Advanced Programmable Controllers
 IST 130 – Basic Mechanical Drives
 Students receive both high school and college credit.

9385 INTERNET DESIGN TP†

Year Course **4 Credits**
Grade Level: 12 **Prerequisite: See Page 7**

A series of four courses taught at ECC:

CDN 107 – Introduction to Digital Design
 CDN 219 – Web Basics (HTML)
 CDN 105 – Color Theory
 CDN 221 – Web Site Design
 Students receive both high school and college credit.

9390 VIDEOGRAPHY AND MOTION GRAPHICS TP†

Year Course **4 Credits**
Grade Level: 12 **Prerequisite: See Page 7**

A series of four courses taught at ECC:

GRD 107 – Introduction to Digital Design
 GRD 230 – Introduction to Multimedia Design
 GRD 105 – Color Theory
 GRD 236 – Motion Graphics & Effects
 Students receive both high school and college credit.

9395 PUBLIC SAFETY COMMUNICATIONS TP

Year Course **4 Credits**
Grade Level: 12 **Prerequisite: See Page 7**

A series of three courses taught at ECC:

PSC 105 – Public Safety Telecommunicator
 CRJ 110 – Introduction to Corrections
 CRJ 199 – Community Based Policing
 Students receive both high school and college credit.

†Indicates additional prerequisites for this program. Please see Page 7 or your counselor for details.

NOTE: Specific program courses are subject to change at ECC's discretion.

Elgin Community College Middle College

COURSE OFFERINGS

9511 CALCULUS WITH ANALYTIC GEOMETRY II
Semester Course **2 Credits**
Grade Level: 12 **Prerequisite: AP Calculus AB or BC, ACT Reading score of 18 or COMPASS Reading 80, appropriate AP Calculus score.**

Second of three courses in the calculus sequence. Topics include the natural logarithmic function, exponential functions, inverse functions, inverse trigonometric functions, hyperbolic functions, applications of integration, integration techniques, indeterminate forms and L'Hopital's Rule, improper integrals, sequences and series, convergence tests, power series, Taylor polynomials and Taylor series. **Students receive both high school and college credit.**

9512 CALCULUS WITH ANALYTIC GEOMETRY III
Semester Course **2 Credits**
Grade Level: 12 **Prerequisite: Calculus with Analytic Geometry II**

Third and final course in the calculus sequence. Topics include the following: vectors in 2 and 3 dimensions; planes and lines in space, surfaces and quadric surfaces, space curves; cylindrical and spherical coordinates; vector valued functions and their graphs; functions of two or more variables; partial derivatives, directional derivatives, gradients; double and triple integrals; applications involving functions of several variables; vector fields, line integrals and Green's Theorem; parametric surfaces, surface integrals, the Divergence Theorem and Stokes' Theorem. **Students receive both high school and college credit.**

9513 ELEMENTARY JAPANESE I
Semester Course **2 Credits**
Grade Level: 12 **Prerequisite: ACT Reading score of 18 or COMPASS Reading 80, ACT English score of 20 or English Essay 5-5.**

Elementary Japanese I is a course built on a framework established by National Standards' five goal areas: communication, cultures, connections, comparisons, and communities. The entire course is taught basically in Japanese except for occasional explanation in English. The classes consist of thematic units, and authentic supplemental materials including web-based contents designed for language and culture learnings. The course teaches students to

develop both communication and language learning strategies. The instructor plans and implements structured cooperative learning activities to support ongoing and frequent interpersonal interaction, and employs a range of instructional strategies to meet the diverse needs of students. The course provides students with frequent opportunities to conduct Web searches, word process, and e-mail in Japanese. **Students receive both high school and college credit.**

9514 ELEMENTARY JAPANESE II
Semester Course **2 Credits**
Grade Level: 12 **Prerequisite: Elementary Japanese I**

Elementary Japanese II is a course built on a framework established by National Standards' five goal areas: communication, cultures, connections, comparisons, and communities. The entire course is taught basically in Japanese except for occasional explanation in English. The classes consist of thematic units, and authentic supplemental materials including web-based contents designed for language and culture learnings. The course teaches students to develop both communication and language learning strategies. The instructor plans and implements structured cooperative learning activities to support ongoing and frequent interpersonal interaction, and employs a range of instructional strategies to meet the diverse needs of students. The course provides students with frequent opportunities to conduct Web searches, word process, and e-mail in Japanese. **Students receive both high school and college credit.**

9515 ENGLISH COMPOSITION I
Semester Course **2 Credits**
Grade Level: 12 **Prerequisite: Three years high school English, ACT English score of 20 or English Essay 5-5.**

First semester of one-year course normally required by all universities and colleges. Emphasis on improvement of communication through intensive work in composition, reading, and skills of discussion. Major objective of course is to develop proficiency in writing thoughtful, well-organized, effective essays. Various forms of prose are studied to help the student achieve a critical understanding of both form and content, and to serve as the basis of student essays. **Students receive both high school and college credit.**

9516 ENGLISH COMPOSITION II**Semester Course****2 Credits****Grade Level: 12****Prerequisite: English Composition I or appropriate AP English score.**

Second semester of one-year course normally required by all universities and colleges. Emphasis on achieving logic and precision in handling such extensive compositions as the research paper and persuasive and critical themes based on literature or other academic disciplines.

Students receive both high school and college credit.

9517 INTRODUCTION TO PSYCHOLOGY**Semester Course****2 Credits****Grade Level: 12****Prerequisite: Psychology, ACT Reading score of 18 or COMPASS Reading 80, ACT English score of 20 or English Essay 5-5.**

Introductory analysis of human behavior with emphasis on practical application of the basic principles of everyday situations. Areas covered include Introduction/Research, Methods/History of Psychology, Biology and Behavior, Learning, Memory, Motivation and Emotion, Personality Theory and Assessment, Psychological Disorders, Therapies, and Social Psychology.

Students receive both high school and college credit.

9518 INTRODUCTION TO WESTERN HUMANITIES**Semester Course****2 Credits****Grade Level: 12****Prerequisite: Global Studies or Honors World History, ACT Reading score of 18 or COMPASS Reading 80, ACT English score of 20 or English Essay 5-5.**

A survey of selected examples of musical, artistic and literary contributions European culture has made to world civilization from pre-history to the Renaissance. This multi-disciplined study is designed to assist students in the recognition and fundamental understanding of the continuity of elements of the European past with their own contemporary culture.

9519 PRINCIPLES OF SOCIOLOGY**Semester Course****2 Credits****Grade Level: 12****Prerequisite: Sociology, ACT Reading score of 18 or COMPASS Reading 80, ACT English score of 20 or English Essay 5-5.**

The major emphasis of the course is to examine the nature of society and the complex relationships between individuals, groups, and institutions. Special attention is given to different methods and theories useful in analyzing and understanding the changes going on in contemporary society.

Students receive both high school and college credit.

Fox Valley Career Center Programs

COURSE OFFERINGS

9000 AUTOMOTIVE TECHNOLOGY 1

Year Course 3 Credits
Grade Level: 11-12 **Prerequisite:** Tech/Pre-Eng.

Introduces students to the wide field of auto repair. Areas of study include electrical systems, tune-ups, wheel alignment, lubrication, brakes, fuel systems, cooling systems, and basic computer troubleshooting. *Articulates with ECC AUT 151.*

9001 AUTOMOTIVE TECHNOLOGY 2

Year Course 3 Credits
Grade Level: 12 **Prerequisite:** Auto Tech 1

Advanced instruction in computer engine testing and diagnostics, cylinder head service, lower engine rebuilding procedure, and air conditioning service and repair. *Articulates with ECC AUT 152.*

9005 EARLY CHILDHOOD EDUCATION 1

Year Course 3 Credits
Grade Level: 11-12 **Prerequisite:** Child Growth

Provides students with the knowledge and practical experience needed to develop skills required to work effectively with young children. Students will work in Small World Learning Center. *Articulates with ECC ECE 102.*

9006 EARLY CHILDHOOD EDUCATION 2

Year Course 3 Credits
Grade Level: 12 **Prerequisite:** Early Childhood Ed. 1 & School-Age Child Development

Emphasis is placed on working with infants, children with special needs, and elementary school children. Opportunities to work as interns in the infant-toddler room or as interns in elementary schools in the community. *Articulates with ECC ECE 124.*

9025 ELECTRICIAN 1

Year Course 3 Credits
Grade Level: 11-12 **Prerequisite:** Tech/Pre-Eng.

Covers a variety of wiring practices involving the use of Romex cable and conduit to construct most of the lighting and receptacle outlet circuits found in modern homes. Includes basic electrical circuits, magnetic motor control circuits, and components.

9026 ELECTRICIAN 2

Year Course 3 Credits
Grade Level: 12 **Prerequisite:** Electrician 1

Heavy emphasis on conduit work, more complex circuits and components, and much emphasis on the National

Electrical Code rules. Also included is 200 amp service entrance meter box and circuit breaker panel wiring.

9035 GRAPHIC COMMUNICATIONS 1

Year Course 3 Credits
Grade Level: 11-12 **Prerequisite:** Multimedia Prod.

Emphasis is placed upon the theories and processes that make up production, printing. Instruction and practice in offset printing, digital workflow, and screen printing.

9036 GRAPHIC COMMUNICATIONS 2

Year Course 3 Credits
Grade Level: 12 **Prerequisite:** Graphic Communications 1

Extension of Graphic Communications 1 in the production-oriented environment. Course content includes further career education opportunities, planning for the future, job seeking skills, personal development.

9040 HEALTH OCCUPATIONS – CERTIFIED NURSING

ASSISTANT (CNA) ♦

Year Course 3 Credits
Grade Level: 11-12

Introduces students to various health concepts and trains them to work as a Certified Nursing Assistant (CNA). Upon completion of the program, the student is prepared to take the Nurse Aide Training Competency Exam, which allows for certification from the Illinois Department of Public Health. *Articulates with ECC NUR 105.*

9045 HEALTH OCCUPATIONS – EXPLORING

MEDICAL CAREERS (EMC) ♦

Year Course 3 Credits
Grade Level: 11-12

Designed for students who are interested in exploring health-related career opportunities. Students learn anatomy/physiology medical terminology, techniques, and procedures while visiting various health care facilities for a first-hand view of careers.

9055 HORTICULTURE 1

Year Course 3 Credits
Grade Level: 11-12 **Prerequisite:** Intro. to Agr. Science

Offers instruction in landscaping, greenhouse, indoor plant care, floral design, and biotechnology. Units of study include plant science, landscape maintenance and pruning, landscape design, greenhouse crops, care and handling of cut flowers, floral design, biotechnology, propagation, marketing, and sales.

9056 HORTICULTURE 2

Year Course **3 Credits**
Grade Level: 12 **Prerequisite: Horticulture 1**

Focuses on the landscape, nursery, and turf segments of the horticulture industry. Units of study include identifying landscape plants, designing landscape plans using computer design programs, and hardscape construction techniques. ♦**Fox Valley satellite location course. Students must provide their own transportation. For Healthcare, applies only to clinicals. Classroom portion is at Fox Valley Career Center.**

9060 POWERSPORTS & EQUIPMENT TECHN. 1

Year Course **3 Credits**
Grade Level: 11-12 **Prerequisite: Tech/Pre-Eng.**

Emphasis is placed on the parts and operation of both two and four cycle engines, ranging from lawn mowers to high performance dirt bikes, snowmobiles, jet skis, and ATV's. *Articulates with ECC AUT 100.*

9061 POWERSPORTS & EQUIPMENT TECHN. 2

Year Course **3 Credits**
Grade Level: 12 **Prerequisite: Powersports 1**

Emphasis is placed on further developing skills learned in Powersports 1. Students have more time for projects as well as live jobs from customers. Students are also required to diagnose mechanical and electrical problems and make proper repairs in a minimum amount of time.

9080 WELDING 1

Year Course **3 Credits**
Grade Level: 11-12 **Prerequisite: Tech/Pre-Eng.**

This introductory course is designed to help students master skills in the following areas: shielded arc welding, gas metal arc welding, tungsten metal arc welding, oxyacetylene welding, bronzing, flame cutting and the fundamentals of weld shop fabrication. Students must supply their own safety glasses, heavy gloves, work shirt, and necessary tools/materials. *Articulates with ECC WEL 101.*

9081 WELDING 2

Year Course **3 Credits**
Grade Level: 12 **Prerequisite: Welding 1**

This course will utilize the concepts practiced in Welding 1 with more in-depth specialization. A higher level of competency is expected. Course material will be developed around problem solving fabrication equipment, operational procedures, production layout, technical function, and necessary tools/materials. *Articulates with ECC WEL 102.*

9085 FIRE SCIENCE 1

Year Course **3 Credits**
Grade Level: 11-12

Designed to prepare students for entry-level firefighter positions. Students will learn the essentials of fire suppression, including: understanding fire chemistry, wearing personal protective clothing, identifying ropes, tying knots, using fire extinguishers, performing forcible entry, carrying and raising ladders, operating self-contained breathing apparatus, employing search and rescue techniques, working with ventilation tools, and practicing hose evolutions on an operating fire engine. *Articulates with ECC FSS 101, 103, and 202.*

9090 FIRE SCIENCE 2

Year Course **3 Credits**
Grade Level: 12 **Prerequisite: Fire Science 1**

Second-year students follow OSFM curriculum to be certified in Illinois Firefighter III, Fire Apparatus Engineer, and Hazardous Materials Operations. *Articulates with ECC FSS 202.*

9095 EMERGENCY MEDICAL TECHNICIAN (EMT)

Year Course **3 Credits**
Grade Level: 12

Prepares students to become competent, entry-level EMT Basics in order to serve in volunteer and/or professional career positions in the State of Illinois and area communities. Upon completion of EMT Basic, the student is prepared to take the EMT Basic Competency Exam which allows for certification from the IDPH. *Articulates with ECC FSS 215.*

9100 COMPUTER TECHNOLOGY – GAME PROGRAMMING & TECHNOLOGIES

Year Course **3 Credits**
Grade Level: 12 **Prerequisite: PC Maint., Repair & Networking or Web Develop. or equiv. high school course or prof. test.**

Students will study various game genres, purposes, and platforms. Students will have an opportunity to experience the many careers associated with game development including most aspects of game design and development. *Articulates with ECC CIS 147.*

9410 COSMETOLOGY 1 ♦

Year Course **4 Credits**
Grade Level: 11-12

Divided into several units of study that includes hair shaping, hair styling, draping, shampooing, blow dry styling, manicuring, facials, waving, and sanitation. Chemistry and professional ethics will be taught in conjunction with the above units. Students required to provide their own transportation to the training schools, buy uniforms, shoes, cosmetology kit, and pay the required registration and lab fees.

9415 COSMETOLOGY 2 ♦

Year Course

4 Credits

Grade Level: 12

Prerequisite: Cosmetology 1

Students continue work to obtain the required 1500 hours and meet state requirements for licensing testing. After

completing course, students may take the Cosmetology Licensing Exam and become a licensed cosmetologist.

♦ Fox Valley satellite location course. Students must provide their own transportation. For Healthcare, applies only to clinicals. Classroom portion is at Fox Valley Career Center.

