Gibraltar School District

# OSCAR A. CARLSON HIGH SCHOOL

# Course Description Guide 2016-2017

#### GIBRALTAR PUBLIC SCHOOLS



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#### MISSION STATEMENT

The mission of the Gibraltar Schools—in partnership with students, parents, and the community—is to develop each student's skills, competencies, and understanding necessary to think independently and make sound decisions, to realize self-worth, to adapt to the challenges of the future, and to foster the process of lifelong learning. Each student will develop and possess the skills necessary to be a functioning and contributing member of our society.

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#### TO PARENTS AND STUDENTS

Since our courses are designed to help students reach their ultimate professional goals, the selection of appropriate courses may have a profound influence on career choices. Please read the enclosed course requirements and descriptions carefully before selecting courses.

Students should consider their schoolwork as their job and strive to prevent anything from interfering with doing it well. Outside work responsibilities may be commendable and/or necessary, but infringement upon study time should be minimized.

#### **GRADUATION REQUIREMENTS**

For purposes of phasing-in the semester schedule, the following are the credit requirements for each graduating class:

Graduating Class of 2017: 26.5 out of 28.5 possible credits
Class of 2018: 25 out of 27 possible credits
Class of 2019: 23.5 out of 25.5 possible credits
Class of 2020: 23 out of 24 possible credits

The Class of 2016 and later must fulfill the requirements of the Michigan Merit Curriculum (MMC). The following are required courses for the MMC and should be taken into consideration each year when scheduling.

COLIDETE	CDEDIT
COURSES	CREDIT
	REQUIREMENTS
MATHEMATICS	4
Algebra 1	1
Geometry	1
Algebra II/Trigonometry	1
Math or Math Related Course	1
ENGLISH LANGUAGE ARTS	4
English 9	1
English 10	1
English 11	1
English 12	1
SCIENCE	3
Biology	1
Chemistry or Physics	1
Additional Science Credit	1
SOCIAL STUDIES	3
World History and Geography	1
U.S. History and Geography	1
Civics	0.5
Economics	0.5
PHYSICAL EDUCATION	1
Physical Education	0.5
Health	0.5
VISUAL/PERFORMING/APPLIED ART	1
ONLINE LEARNING EXPERIENCE	
FOREIGN LANGUAGE (class of 2016 and beyond)	2 years
	(or 1 year plus VPAA)

#### SELECTION OF COURSES

In making selections from the various courses of study, students will find that, while certain courses are required, there are several elective courses from which to choose. The choice of courses should be based on individual career goals, interests, abilities, aptitudes, and prior grades. Courses must be chosen from those listed for the grade in which the student is enrolled.

Each student must select at least 6 credits each year. Students who wish to receive credits through outside agencies such as night school, and/or summer school must have approval from their counselor *prior* to enrollment in these courses. Students who wish to receive credits through online course work must seek administrative approval *prior* to enrollment.

#### SCHEDULE CHANGES

Student schedule change requests must be initiated through the counseling office. Student schedules are built based upon student requests. The requests that students make are important and will be followed when building a student's schedule. Schedule change requests will be accommodated only if a student attends summer school, does not meet a prerequisite, to fulfill requirements for graduation, or as a result of a course having been cancelled. Changes will be honored within the realistic boundaries of class size, time periods and the student's overall program of study. Schedule changes will not be made to accommodate teacher preference. Students must be sure that all school requirements are met when considering their overall schedule. Additionally, when scheduling, students need to pay particular attention to prerequisites of courses.

#### **HOMEWORK**

It is recommended that each student have regular hours for homework and develop a plan of home study. Such a plan will not only assure better results in school work, but will also lead to regular, well-formed study habits. A student needs to spend as much time on homework as necessary to achieve satisfactory results in his/her school work. If a high quality of school work is to result, part-time employment and other time-consuming outside-of-school activities may have to be sacrificed. One of the greatest contributing factors to failure in high school is insufficient time spent on homework.

#### **ACADEMIC DIFFICULTIES**

At times, a student may find a course particularly challenging and need extra help. There is a process. The student should first approach his/her teacher and ask for additional explanation or before/after school help. If this is not satisfactory, the student should visit the guidance office to obtain tutoring information. Teacher led tutoring is available after school free of charge. Also available is the tutoring service of the National Honor Society. If tutoring from a National Honor Society member is desired, students and parents can make the arrangements.

#### NON-WEIGHTED GRADES

Non-weighted grades are assigned to standard curriculum. This grading scale is based on a 4.0 scale.

Letter Grade	Percentage	Weight	Letter Grade	Percentage	Weigh †
Α	93-100	4.00	С	73-76	2.00
A-	90-92	3.67	C-	70-72	1.67
B+	87-89	3.33	D+	67-69	1.33
В	83-86	3.00	D	63-66	1.00
B-	80-82	2.67	D-	60-62	0.67
C+	77-79	2.33	E	0-59	0

#### WEIGHTED GRADES

Weighted grades are assigned to Advanced Placement (AP) courses. Weighted grades will be used to determine class rank, valedictorian, and salutatorian. Calculation is based on a 5.0 scale.

Letter Grade	Percentage	Weight	Letter Grade	Percentage	Weigh
Α	93-100	5.00	С	73-76	3.00
A-	90-92	4.67	C-	70-72	2.67
B+	87-89	4.33	D+	67-69	2.33
В	83-86	4.00	D	63-66	2.00
B-	80-82	3.67	D-	60-62	1.67
C+	77-79	3.33	E	0-59	0

#### PREPARATION FOR COLLEGE ADMISSIONS

Applicants to colleges must qualify for admission by a combination of the following: scholastic records, standardized testing results, and high school certification. Most colleges now require the applicant to take the American College Test (ACT) (most colleges use this) or the Scholastic Aptitude Test (SAT). Students and parents should consult college websites for specific information concerning admission requirements. Plans should be made as early as possible in their high school career so everyone concerned will be aware of all necessary requirements for acceptance. Without discounting the importance of such factors as character, personality, and civic responsibility, colleges place great emphasis upon intellectual eagerness, initiative, academic competence, and maturity.

Since admission into many colleges is becoming increasingly competitive, students must expect to do intensive work throughout their high school preparation. It is important to remember that colleges require a copy of the student's academic record (transcript) from grades nine through twelve, and the courses taken each year are the foundation for success in succeeding years.

The State universities in Michigan have agreed that to be eligible for regular admission to a four-year degree program, a high school student must successfully complete the following course requirements:

- ENGLISH four credits required.
- MATHEMATICS three credits required, including intermediate algebra; four credits strongly recommended.
- BIOLOGICAL/PHYSICAL SCIENCES two credits required; three credits strongly recommended, including one credit of biological science and one credit of physical science. At least one credit of a laboratory course is also strongly recommended.
- HISTORY AND SOCIAL SCIENCES three credits required; one credit of American History and one credit of World History strongly recommended.

Prospective students are also encouraged to complete courses in the following areas:

- FOREIGN LANGUAGE three credits strongly recommended (same language). Some colleges are now requiring two credits.
- FINE AND PERFORMING ARTS two credits strongly recommended.
- COMPUTER LITERACY one credit of hand-on experience in using computers strongly recommended.
- \* Liberal Arts colleges prefer three or four credits of a foreign language.
- \*\* Engineering colleges require credits of mathematics, physics, and technical drawing (CAD). Technology education courses are recommended, because students will learn to use the tools and the processes that are used in the world of work.
- \*\*\* Fine Arts students interested in pursuing a career in the arts should enroll in advanced art courses.

#### **DUAL ENROLLMENT**

In 1996, the Michigan State Legislature passed Public Act 160 the Postsecondary Enrollment Options Act or "Dual Enrollment bill." The bill modifies and expands on provisions of the State School Aid Act providing for the participation of eligible high school students in dual enrollment or postsecondary enrollment options. The classes that students are eligible for must not be offered by the high school or academy and <u>must</u> lead towards accreditation, certification and/or trade licensing.

Students may be enrolled in one or two on-campus or online college classes during the school day. To be eligible for dual enrollment:

- 1. A student must be enrolled at Carlson High School.
- 2. The dual enrollment class must be part of his/her regular schedule (i.e. one dual enrollment class and four high school classes).
- 3. PLAN, PSAT, ACT, or the Michigan Merit Examination (MME) scores determine eligibility for dual enrollment. The list of scores that qualify students for dual enrollment are as follows:

Assessment	Test Section	Content Area	Minimum Dual Enrollment Qualifying Score
	Critical Reading	Reading	44
PSAT	Writing Skills	Writing	49
	Mathematics	Mathematics	45
PLAN	Mathematics	Mathematics	18
	Reading	Reading	17
	Science	Science	19
	English	English	21
ACT	Mathematics	Mathematics	18
	Reading	Reading	17
	Science	Science	19
	English	English	21

	Reading	Reading	1100
	Writing	Writing	1100
MME	Mathematics	Mathematics	1100
	Science	Science	1100
	Social Studies	Social Studies	1100

If the course is in math, proficiency must be exhibited in math, and so on in science, reading, and writing.

- 4. Students may take courses in subjects for which they are not tested, such as history, political science, or foreign language courses not offered by the school, fine arts programs, and career and vocational classes leading to a degree or certification (as permitted by the district) as long as they have taken the entire MME and have attained proficiency in at least one area.
  - a. Any courses in the subject areas of hobby/craft, recreation, physical education, theology, divinity, or religious education are not eligible for dual enrollment.
- 5. Not all college courses are accepted for credit by other institutions. It is the responsibility of the student to meet with a college representative and determine the transferability of a course.

#### ADVANCED PLACEMENT (AP) PROGRAM/COURSES

The Advanced Placement (AP) Program is a cooperative educational endeavor of secondary schools, colleges, and the College Board. High school students taking AP exams may earn college credit, ascertain appropriate placement, or both for satisfactory performance on AP exams, depending on which college or university the students will attend. AP courses are intended to be the equivalent of a college-level freshman course. It is expected that students taking an AP course understand that these courses are far more demanding and rigorous than a regular high school course and are taken for the entire school year. This means that students who enroll in an AP course should expect that it will be more difficult than other courses have been and that they will not be removed from the class.

#### **TESTING OUT**

Beginning with the class of 2011, as prescribed by the Michigan Merit Curriculum, students are eligible to test out of courses. Students requesting to test out are expected to demonstrate a C+ level of mastery based on the standards of learning prescribed for students enrolled in the same high school course. These demonstrations are determined by individual departments within the Gibraltar School District.

Credit earned by attaining a grade of not less than C+ in a final exam in the course will be credited toward graduation and counted toward the fulfillment of a requirement for a subject area and/or a course sequence. Credit earned in this manner will be indicated as a "credit" grade (CR) on the student's transcript and shall not be included in the computation of the student's grade point average. Credit earned in a course through testing out prohibits a student from receiving credit thereafter for a course lower in course sequence concerning the same subject area.

The testing out window is during the last week of summer vacation. The Testing Out Request form must be filled out and returned to the Counseling Office by the due date listed. The required paperwork for testing out can be obtained from the Counseling Department and the Counseling website.

#### PERSONAL CURRICULUM

A Personal Curriculum (PC) is an option initiated by the parent/guardian or an emancipated student that modifies certain requirements of the Michigan Merit Curriculum (MMC) and allows a district to award a regular high school diploma to students who successfully complete their PC. A personal curriculum must include as many of the content expectations of the MMC as practicable.

The legislative intent of the PC is to increase the rigor and relevance of the educational experience. While the PC option is available to any student, the legislative intent is that districts will make curriculum modifications only when it is clear that a modification is necessary for the student to achieve graduation requirements. For example, students in alternative education settings, at-risk students, and students with a qualifying disability under Section 504 of the Rehabilitation Act, may request and be granted a PC modification, only if there is documented evidence that the student may not meet the graduation requirements. For more information on PCs, visit the Michigan Department of Education web site and make an appointment with your student's counselor.

#### NCAA REQUIREMENTS

The NCAA, or National Collegiate Athletic Association, was established in 1906 and serves as the athletics governing body for more than 1,280 colleges, universities, conferences, and organizations. The NCAA is committed to the student-athlete and to governing competition in a fair, safe, inclusive, and sportsmanlike manner.

The NCAA Initial-Eligibility Clearinghouse is an organization that works with the NCAA to determine a student's eligibility for athletics participation in his or her first year of college enrollment. Students who want to participate in college sports during their first year of enrollment in college must register with the clearinghouse. The clearinghouse staff follows NCAA bylaws and regulations in analyzing and processing a student's high school academic records, ACT or SAT scores, and key information about amateurism participation, to determine the student's initial eligibility. To learn more about the clearinghouse, go to: <a href="https://www.ncaaclearinghouse.net">https://www.ncaaclearinghouse.net</a>.

If you have questions about NCAA eligibility, please call the NCAA Initial-Eligibility Clearinghouse toll-free at 877/262-1492. You may also call the NCAA at 317/917-6222.

#### MICHIGAN'S SIX CAREER PATHWAYS

Career Pathways have been established by the State of Michigan as a tool to guide students in appropriate course selections to prepare for specific occupations. The courses offered at Oscar A. Carlson High School have been placed in sample Pathways which target specific career clusters. They are suggestions to be used as a general guide, yet have flexibility with regard to individual preference.

#### ARTS AND COMMUNICATIONS (AC)

Careers related to the humanities and to the performing, visual, literary and media arts. These may include creative or technical writing, illustrating, graphic designing, publishing, theatre arts, journalism, languages, radio and television broadcasting, photography, advertising and public relations. Specific examples include artists, journalists, industrial designers, musicians, photographers, and theater technicians.

#### BUSINESS, MANAGEMENT, MARKETING, AND TECHNOLOGY (BT)

Careers related to all aspects of business including accounting, business administration, finance, information processing, and marketing. These may include entrepreneurship, sales, marketing, hospitality and tourism, computer/information systems, finance, accounting, office administration, personnel, economics, and management. Specific examples include architects, airplane pilots, engineers, carpenters, microcomputer specialists, equipment operators, technicians, and mechanics.

# ENGINEERING/MANUFACTURING AND INDUSTRIAL TECHNOLOGY (EMI)

Careers related to the technologies necessary to design, develop, install, or maintain physical systems. These may include occupations in designing, engineering and science, service technicians, manufacturing technology, transportation, and construction. Specific examples include architects, airplane pilots, engineers, carpenters, microcomputer specialists, equipment operators, technicians, and mechanics.

#### **HEALTH SERVICES (HES)**

Careers related to the promotion of health as well as the treatment of injuries, conditions, and disease. These may include medicine, dentistry, nursing, therapy and rehabilitation, nutrition, fitness and hygiene, public health, and veterinary science. Specific examples include physicians, nurses, pharmacists, health facility administrators, dental technologists, veterinarians, physical therapists, and medical technicians.

#### **HUMAN SERVICES (HUS)**

Careers in child care, civil service, education, hospitality, and the social services. These may include law and legal studies, law enforcement, public administration, child and family services, and social services. Specific examples include postal workers, police officers, lawyers, teachers, counselors, school administrators, fire fighters, clergy, and social workers.

#### NATURAL RESOURCES AND AGRISCIENCE (NRA)

Careers related to natural resources, agriculture, and the environment. These may include agriculture, earth science, environmental sciences, fisheries management, forestry, horticulture, wildlife management, and many agri-business/agri-industry occupations. Specific examples include environmentalists, turf grass managers, farmers, landscape architects, plant scientists, marine biologists, and agricultural equipment mechanics.

#### **EXTRACURRICULAR CLUBS**

#### BUSINESS PROFESSIONALS OF AMERICA (BPA)

BPA is a national career and technical student organization consisting of 36 state associations and more than 43,000 members throughout the U.S. With over sixty members, Gibraltar-Carlson has a very active chapter that has been in existence for approximately ten years. As a member of BPA students compete against other students in events such as word processing, accounting, interview skills, web page design, graphic design, computer programming, and presentation skills. Students prepare for these competitions in class and on their own time for a chance to compete at the regional, state and national levels. During our existence as a chapter, students have placed at regional, state and national levels.

To offset the cost of competitions BPA members participate in several fundraising activities throughout the school year, such activities include the BPA Pancake Breakfast and Carlson Idol. Participating in BPA is an excellent networking tool, looks great on a resume, offers students the opportunity for scholarship, and enhances confidence upon entering the business world and/or college.

#### DECA (DELTA EPSILON CHI ASSOCIATION)

DECA is a co-curricular, student-centered organization that provides activities that will help students learn marketing, management, and entrepreneurial concepts that will prepare them to become skilled, employable workers in the field of marketing. Our DECA Chapter helps develop leadership skills, professional attitudes, business competency, citizenship characteristics, and social growth. Members participate in both District and Statewide competitions as well as fundraising and civic consciousness projects.

#### DRAMA CLUB

The club works for approximately two months to prepare and present a production. The production runs for three nights in February. Roles available include acting positions, set design, lighting, sound, makeup, costumes, and promotions.

#### FOREIGN LANGUAGE CLUB

The foreign language club is an organization that brings language and cultural awareness to the student body. Meetings are held on a monthly basis, offering students an opportunity to sample foreign foods, to make related crafts, and to learn interesting facts about different cultures.

#### INTERACT CLUB

The Interact Club is a student version of the Gibraltar Rotary Club. It is a group of students that are interested in giving back to their community. We perform community service projects and raise money for charities. Some activities in which our club participates in can include: adopting a family, bake sales, the lockout, meals on wheels, and a canned food drive.

#### MUSICAL THEATER PRODUCTION

This drama production, presented by the Music Department of Carlson, is another opportunity for Carlson students to explore the world of music and drama. Students participating in this show will be expected to sing, dance, and act. <u>Auditions are required</u>. There will also be opportunities, for students not involved with the on stage portion of the play, to be involved with scene building as well as back stage crew.

#### NATIONAL HONOR SOCIETY

Each spring, Carlson's National Honor Society distributes a letter to all students who, at the midpoint of their sophomore or junior year, are earning a 3.4 overall grade point average (GPA) notifying them of their eligibility for application to NHS. The application is due the following September. A committee of high school

staff determines those applicants who meet NHS guidelines and qualifications. Students are notified personally by NHS sponsors of their admittance or denial thereof. Students who are denied admittance during their junior year can reapply as seniors.

Carlson High School's chapter of National Honor Society (NHS), in conjunction with the Michigan Association of Secondary School Principals (MASSP), seeks to honor those students who demonstrate excellence in four areas: Character, Scholarship, Leadership, and Service.

#### PEP CLUB

The Pep Club is designed to be an active, supportive group for all activities at Carlson High School. Our main focus will be to support our athletes and to encourage school spirit into our school. The most important activities are attending school functions and sporting events. As a Pep Club member, students will also make signs for individual athletes, decorate the school, sell Marauder spirit merchandise, and help host events. As a member of Pep Club, students are asked to put in a valuable effort that is greatly appreciated.

#### **QUIZ BOWL**

Quiz Bowl is an academic competition team. Students compete with other schools in a test of knowledge on a variety of topics. The trivia-based competition is videotaped and broadcasted on local cable systems. The team can earn eligibility to compete at state and national levels of competition.

#### SADD

Students Against Destructive Decisions (SADD) uses the power of young people to help their peers make positive decisions and to avoid potentially fatal risks. Today's youth have incredible potential to make a positive difference in the lives of their friends. This club is designed to communicate to students the potential dangers in their lives. Reminders to buckle up, to not drink and drive, and to be aware of their power of friendship and communication to their peers are provided during the school year.

#### STUDENT COUNCIL

Student Council is a group consisting of eight representatives and four board members from each grade. Together, they coordinate activities and events that promote student involvement and leadership. Activities sponsored by this club include Homecoming, Winterfest, and dances throughout the year. Student Council also participates in community service activities, such as selling candy grams to raise money for the needy and putting on a blood drive each fall.

#### ART DEPARTMENT

INTRODUCTION TO 2D ART GRADE LEVEL: 9-12 PREREQUISITES: None 0.5 CREDIT 1 SEMESTER COURSE NUMBER: ART 102
PATHWAY: All

This is an introductory course designed to provide students with a working knowledge of two-dimensional visual art. The objectives of this class will focus on developing the students' techniques in drawing, painting, and various other art forms. Students will study the arts through production, art criticism, art history, aesthetics, and art careers. This class is required before any further two-dimensional art classes may be

scheduled.

INTRODUCTION TO 3D ART GRADE LEVEL: 9-12

PREREQUISITES: None

0.5 CREDIT 1 SEMESTER COURSE NUMBER: ART 103

PATHWAY: All

This is an introductory course designed to provide students with a working knowledge of three-dimensional visual art. This class will focus on developing the students' three dimensional thinking skills. Students will use a variety of art media and projects, which may include pottery, ceramic sculpture, paper mache sculpture, working with metal, and found objects. Students will explore various ideas and topics through his/her art. Students will study the arts through production, art history, art careers, aesthetics and art criticism. This class is required before any further three dimensional classes (Ceramics or Sculpture) may be taken.

DRAWING I0.5 CREDITCOURSE NUMBER: ART 611GRADE LEVEL: 9-121 SEMESTERPATHWAY: AC/EMI

**PREREQUISITES:** Introduction to 2D ART (ART102)

This course is structured for the emerging artist who has already taken Introduction to 2D Art. Students will be asked to develop their skills and begin more advanced drawings. A deeper exploration of artistic mediums and techniques will be presented to the students. This course will include drawing from observation will provide insight into the human figure as an artistic subject.

PRINTMAKING & PAINTING I GRADE LEVEL: 9-12 0.5 CREDIT 1 SEMESTER COURSE NUMBER: ART 612
PATHWAY: AC/EMI

PREREQUISITES: Introduction to 2D Art (ART 102)

This course is structured for the emerging artist what has already taken Introduction to 2D Art. Students will learn more advanced painting and printmaking techniques and use them to develop their own abilities. The history of these art forms will be examined to enrich the knowledge of the students.

SCULPTURE I 0.5 CREDIT
GRADE LEVEL: 9-12 1 SEMESTER

COURSE NUMBER: ART 613
PATHWAY: All

PREREQUISITES: Introduction to 3D Art (ART 103)

This course is structured for the emerging artist who has already taken Introduction to 3D Art. Students will be asked to develop their skills and begin on more challenging sculptures. Students will be expected to explore various sculptural media in more depth than in the Introduction to 3D Art course. Students will use paper mache and clay, and may also do projects such as Claymation, sculpture assemblage or wire sculptures.

CERAMICS I0.5 CREDITCOURSE NUMBER: ART 614GRADE LEVEL: 9-121 SEMESTERPATHWAY: All

**PREREQUISITES:** Introduction to 3D Art (ART 103) This course is structured for the emerging artist who has already taken Introduction to 3D Art. Students will be asked to develop their skills and begin on more challenging ceramics. Students will be expected to explore the ceramic medium in more depth than in the Introduction to 3D Art course. All projects will use clay. Students will make pottery, relief sculptures, and sculptures in the round.

DRAWING II GRADE LEVEL: 9-12 1 CREDIT 2 SEMESTERS COURSE NUMBER: ART 621-2
PATHWAY: AC/EMI

**PREREQUISITES:** Drawing I (ART 611)

This course is structured for the more advanced and goal oriented artist who has already taken Introduction to 2D Art and Drawing I. Students will be challenged to master advanced techniques, use multiple media, and work on a larger scale. Each student will be asked to push their ideas further and draw from personal experiences to construct artwork based on their own personal expression. Drawing II will provide time to explore selected media with intensity and focus. Additional hours outside of class may be required for successful completion of this course.

SCULPTURE II 1 CREDIT COURSE NUMBER: ART 641-2 GRADE LEVEL: 9-12 2 SEMESTERS PATHWAY: All

PREREQUISITES: Sculpture I (ART 613)

This course is structured for the more advanced and goal oriented artist who has already taken Introduction to 3D Art and Sculpture I. Students will be challenged to master advanced techniques, more complex projects and work larger. Each student will be asked to push their ideas and draw from personal experiences to construct a meaning for their own artistic expression. Sculpture II will provide the time to explore various media with intensity and focus. Media will include paper mache, clay, and soft sculpture. Other media may vary. Additional hours outside of class may be required for successful completion of this course.

CERAMICS II1 CREDITCOURSE NUMBER: ART 651-2GRADE LEVEL: 9-122 SEMESTERSPATHWAY: All

PREREQUISITES: Ceramics I (ART 614)

This course is structured for the more advanced and goal oriented artist who has already taken Introduction to 3D Art and Ceramics I. Students will be challenged to master advanced techniques, more complex projects and work larger. Each student will be asked to push their ideas further and draw from personal experiences to construct artwork based on their own personal expression. Ceramics II will provide the time to explore clay with intensity and focus. Students will create pottery, sculptures in the round, and relief sculptures. Additional hours outside of class may be required for successful completion of this course.

SENIOR PORTFOLIO1 CREDITCOURSE NUMBER: ART 661-2GRADE LEVEL: 122 SEMESTERSPATHWAY: AC/EMI

**PREREQUISITES:** Four art courses

This course is structured for future college art students. Students will be required to push their artist talents to the next level and create a unified body of work. Students will create a digital portfolio which can aid them in submitting their artwork to colleges. This class will not only have art production, but include the setting up a personal gallery space and helping to promote the annual art show.

#### **BUSINESS DEPARTMENT**

BUSINESS APP I- Intro to 0.5 CREDIT COURSE NUMBER: BUS 101 Computers PowerPoint and 1 QUARTER PATHWAY: All

Excel

GRADE LEVEL: 9-12
PREREQUISITES: None

Business Applications I covers essential computer concepts, Microsoft PowerPoint and Microsoft Excel. It is offered to all students and recommended that all students include Business in their academic course

choices to better prepare them for attending college or entering the workforce. The computer concepts covered will include file management, input/output devices, storage devices, computer software, networks and the Internet. Microsoft PowerPoint concepts to be covered include the Microsoft PowerPoint window, creating and editing a presentation, presentation formatting, and presentation skills. Microsoft Excel concepts to be covered include the Microsoft Excel window, creating worksheets and embedded charts, formulas, functions, and formatting, what if analysis, charting, and working with large worksheets. Business App I will be offered as a ONE QUARTER course grouped with Business App II.

BUSINESS APP II – Word and

0.5 CREDIT

COURSE NUMBER: BUS 102

Access

1 QUARTER

PATHWAY: All

**GRADE LEVEL**: 9-12

PREREQUISITES: Business App I (BUS 101)

(.5 Senior math credit when Business App 1 is taken first)

Business Applications II (Word and Access) covers Microsoft Word and Access, and it is offered to students that have successfully completed Business App I. Microsoft Word concepts to be covered include the Microsoft Word window, creating and editing documents, document formatting, creating tables and keying for speed and accuracy. Microsoft Access concepts to be covered include Microsoft Access window, creating and using a database, querying a database, maintaining a database, and sharing data among applications. Business App II will be offered as a ONE QUARTER course grouped with Business App I.

BUSINESS MANAGEMENT0.5 CREDITCOURSE NUMBER: BUS 103GRADE LEVEL: 11-121 SEMESTERPATHWAY: BT/EMI

**PREREQUISITES:** Business App I and Business App II

Business Management builds upon learned software skills (Microsoft Office 2013) and offers students a look at the importance of business management in the business world of today. Topics covered include the evolution of management, careers in management, and the management environment. Foundational skills such as problem solving, decision making, and written and verbal communication are also developed. Through the team concept, students will experience all aspects of business ownership through simulating the operation of a mock business venture, including developing an actual product for the company.

MARKETING A0.5 CREDITCOURSE NUMBER: BUS 201GRADE LEVEL: 10-121 SEMESTERPATHWAY: All

**PREREQUISITES:** None

Marketing is everywhere! And through this course students will discover how marketing relates to everyday life and learn techniques that enable them to be smarter consumers. Through various activities and projects students will learn about the fundamentals of marketing, selling process, promotional mix, careers in marketing, economics as it relates to marketing, international business, entrepreneurship, and elements of a marketing plan. Students will also have an opportunity to participate in field trips that relate concepts learned in class to the real world. Marketing A is recommended for all students that want to be more knowledgeable and aware of the environment in which they live and work.

MARKETING B0.5 CREDITCOURSE NUMBER: BUS 202GRADE LEVEL: 10-121 SEMESTERPATHWAY: All

**PREREQUISITES:** Marketing A (BUS 201)

Marketing B reinforces concepts learned in Marketing A, and focuses more closely on entrepreneurship and product service planning. Students will learn the steps involved with developing products, as well as branding, packaging, and labeling. Other areas of study include pricing strategies and planning, distribution, inventory control, and financial management. Some projects related to this course include designing a product, creating and testing product packaging through an egg drop, completing a distribution obstacle course, writing a business plan, and other fun activities. Students will also have an opportunity to participate in field trips that relate concepts learned in class to the real world.

VIRTUAL ENTERPRISES (VEI)1.0 CREDITCOURSE NUMBER: BUS401-2GRADE LEVEL: 11-122 SEMESTERSPATHWAY: BUS

**PREREQUISITES:** Business Course AND Instructor Approval

Do you have what it takes to run a business? Then step out of the traditional classroom and into Virtual Enterprises (VEI)! VEI is an in-school entrepreneurship program in which students start and operate a virtual business of their choice and conduct business with other virtual firms domestically and internationally. Students run the entire business from ground up, interviewing for jobs, writing the business plan, preparing for trade shows, and managing the day-to-day operations involved with running a business. From human resources and accounting to product development, production, distribution, marketing, and sales, you will learn it all! Students may also have an opportunity to attend trade shows in other states, participate in local field trips, and travel to New York!

SPORTS & ENTERTAINMENT

0.5 CREDIT

COURSE NUMBER: BUS 211

MARKETING A

1 SEMESTER

PATHWAY: All

**GRADE LEVEL**: 10-12 **PREREQUISITES:** None

Whether you are interested in becoming a sports agent, helping plan the Super Bowl someday, selling sponsorship at Tiger stadium, becoming a sports writer, or just learning about business through sports, Sports Marketing will cover it all. This course will teach marketing concepts and theories as they apply to sports as well as entertainment events, travel and tourism, and recreational activities. Topics of study for Sports Marketing A will include a general overview of the sports and entertainment industries, marketing strategies, branding and licensing, the marketing mix, distribution channels (amateur, college, and professional sports), and more. Students will also have an opportunity to participate in field trips that relate concepts learned in class to the real world.

SPORTS & ENTERTAINMENT

0.5 CREDIT

COURSE NUMBER: BUS 212

MARKETING B

1 SEMESTER

PATHWAY: All

**GRADE LEVEL**: 10-12

PREREQUISITES: Sport & Entertainment Marketing A (BUS 211)

Students will continue to explore the rapidly growing industries of sports and entertainment marketing, travel and tourism, and recreational activities. Topics of study for Sports Marketing B will include sports and entertainment distribution channels, economics of supply and demand, benefits of competition, pricing strategies, promoting sports and entertainment, sponsorship and endorsements, the sales process, legal issues, agents and handlers, business ownership, careers in sports and entertainment marketing, and the Super Bowl. Students will also have an opportunity to participate in field trips that relate concepts learned in class to the real world.

BUSINESS LAW/GENERAL

0.5 CREDIT

COURSE NUMBER: BUS 301

BUSINESS A

1 SEMESTER

PATHWAY: BT/EMI

**GRADE LEVEL**: 10-12 **PREREQUISITES:** None

This course will focus on law for both business and personal matters. Students will learn about types of laws, the Constitution, the court system, and criminal and civil proceedings.

BUSINESS LAW/GENERAL

0.5 CREDIT

COURSE NUMBER: BUS 302

BUSINESS B

1 SEMESTER

PATHWAY: BT/EMI

**GRADE LEVEL**: 10-12

#### **PREREOUISITES:** None

This course will focus on law for both business and personal matters. Students will learn about the fundamentals of contracts and property, consumer protection, marriage and divorce, renting realty, and wills.

ACCOUNTING A 0.5 CREDIT COURSE NUMBER: BUS 311 GRADE LEVEL: 11-12 1 SEMESTER PATHWAY: BT/EMI

PREREQUISITES: None

Financial activities of a sole proprietorship, partnership and corporation are the focus of this course. Theories and principles include analyzing and journalizing transactions, posting to a general ledger, cash control systems, work sheet for a service business, financial statements for a proprietorship and adjusting and closing entries. This course is web-based..

ACCOUNTING B 0.5 CREDIT COURSE NUMBER: BUS 312 GRADE LEVEL: 11-12 1 SEMESTER PATHWAY: BT/EMI

**PREREQUISITES:** Accounting A (BUS 311)

Financial activities of a sole proprietorship, partnership and corporation are the focus of this course. Theories and principles include journalizing purchases and cash payments, journalizing sales and cash receipts using special journals, posting to general and subsidiary ledgers, preparing payroll records, payroll accounting, taxes, and reports, distributing dividends and preparing a worksheet for a merchandising business, financial statements for a corporation, and recording adjusting and closing entries for a corporation. This course is web-based.

WEB DESIGN I0.5 CREDITCOURSE NUMBER: BUS 611GRADE LEVEL: 10-121 SEMESTERPATHWAY: BT/EMI

PREREQUISITES: Business App I (BUS 101)

This course will focus on Web Design using HTML5 language. The class will also focus on formatting web pages using CSS (Cascading Style Sheets). Images for the Web using the Photoshop CC program will also be visited. Students interested in careers as a Web Page Developer/Designer would benefit from this course.

WEB DESIGN II0.5 CREDITCOURSE NUMBER: BUS 613GRADE LEVEL: 11-121 SEMESTERPATHWAY: BT/EMI

PREREQUISITES: Business App I (BUS 101) & Web Design I (BUS 611)

This course will focus on continuing developing the skills that were developed in Web Design 1. Advanced formatting using HTML5 and CSS will be expanded upon and Javascript will also be incorporated into the class. In addition, the technology, services, and marketing of an E-commerce site will be covered. Students interested in careers as a Web Page Developer would benefit from this course.

PHOTOSHOP/IMAGE EDITING0.5 CREDITCOURSE NUMBER: BUS 612GRADE LEVEL: 11-121 SEMESTERPATHWAY: BT/EMI

PREREQUISITES: Business App I (BUS 101)

In Photoshop / Image Editing students will learn how to manipulate images, both existing and new. Photoshop CC will be used to allow creation, manipulation and enhancement of digital images and composites. Students interested in graphic design would benefit from this course.

PERSONAL FINANCE
0.5 CREDIT
COURSE NUMBER: BUS 614
GRADE LEVEL: 10-12
1 SEMESTER
PATHWAY: All
PREREOUISITES: None

**NOTE**: This course can count as 0.5 Credit of the economic-related graduation requirement in a student's sophomore year or 0.5 of the math-related graduation requirement in a student's senior year.

This course focuses on the students' roles as citizens, family members, and consumers. This semester-long course begins with the basics of financial literacy and the function of finance in society. Additionally students learn how to navigate the financial decisions they must face and to make informed decisions relating to career exploration, budgeting, banking, insurance, spending, financing postsecondary education, taxes, saving and investing, buying/leasing a vehicle, and living independently. Students will discover new ways to maximize earning potential, develop strategies for managing resources, explore skills for the wise use of credit, and gain insight into different ways of investing money.

FINANCIAL LITERACY 0.5 CREDIT **COURSE NUMBER:** GRADE LEVEL: 11-12 1 SEMESTER PATHWAY: All **PREREQUISITES:** Personal Finance or Accounting Pending Board Approval

NOTE: This course can count as 0.5 Credit of the math-related graduation requirement in a student's senior

year.

The class begins with an introduction to our local and state economy and an overview of how business and commerce effect that economy. Students learn about common methods by which businesses raise capital—IPOs, selling stocks and bonds, and short-term financing—and study key investment-related terms and concepts, including the time value of money. Specific topics of importance in today's world of finance, risk management, taxes, and ethics are examined. Students also learn insights and strategies for trading options, using a hands-on approach to learn the concept of an "option" through the use of free curriculum allowing students to compete and trade against other schools throughout the country.

#### ENGLISH DEPARTMENT

**ENGLISH LANGUAGE ARTS 9** 1 CREDIT **COURSE NUMBER:** ENG 101-2 **GRADE LEVEL**: 9 2 SEMESTERS PATHWAY: All

**PREREQUISITES:** Successful completion of 8<sup>th</sup> grade English

The goal for English Language Arts Grade 9 is to build a solid foundation of knowledge, skills, and strategies that will be refined, applied, and extended as students engage in more complex ideas, texts, and tasks. In English Language Arts Grade 9, students will be introduced to the various genre of classic and contemporary narrative and informational texts that will be read and analyzed throughout high school. Ninth graders will connect with and respond to texts by analyzing relationships within and across families, communities, societies, governments, and economies. Through the lens of Inter-Relationships and Self-Reliance, they will consider how they build relationships, how their relationships impact others, and their responsibility to society.

WRITING FOUNDATIONS 0.5 CREDIT **COURSE NUMBER:** ENG

**GRADE LEVEL:** 9 1 QUARTER PATHWAY: ALL

**PREREQUISITES:** By recommendation only Pending Board Approval

Freshmen Composition is designed to be an introductory writing course that focuses on the development of effective writing skills through the use of the writing process (prewriting, drafting, revising, editing, and publishing). The students will develop competencies in the four different modes of writing and utilize research and critical thinking skills in the process. Writing Foundations will be offered as a ONE QUARTER course grouped with Math Essentials.

**ENGLISH LANGUAGE ARTS 10** 1 CREDIT **COURSE NUMBER:** ENG 201-2 **GRADE LEVEL**: 10 2 SEMESTERS PATHWAY: All

PREREQUISITES: English 9 (ENG 101-102)

The goal for English Language Arts 10 is to continue to build a solid foundation of knowledge, skills, and strategies that will be refined, applied, and extended as students engage in more complex ideas, texts, and tasks. In English Language Arts 10, students will explore and analyze various genres of American Literature

to further develop their skills in analysis and evaluation. Through these means, English Language Arts 10 students will be able to make real world connections and look at the world with open minds.

ADVANCED LANGUAGE ARTS 10 1 CREDIT COURSE NUMBER: ENG 203-204
GRADE LEVEL: 10 2 SEMESTERS PATHWAY: All

PREREQUISITES: English 9 and Teacher approval\*

This course will follow the Michigan Merit Curriculum and CCRs that have already been adopted; students will engage in deeper discussion, analytical writing, and higher level activities. Teacher approval will be necessary for admission into this course.

ENGLISH LANGUAGE ARTS 11 1 CREDIT COURSE NUMBER: ENG 301-2 GRADE LEVEL: 11 2 SEMESTERS PATHWAY: All

PREREQUISITES: English 10 (ENG 201-202)

The goal for English Language Arts 11 is to continue to build a solid foundation of knowledge, skills, and strategies that will be refined, applied, and extended as students engage in more complex ideas, texts, and tasks. In English Language Arts 11, students will add to the list of various genres of classical and contemporary narrative and informational texts that will be read and analyzed throughout high school with a special focus on British and World literature and SAT success. Eleventh graders will connect with and respond to texts through transformational thinking. They will learn to use forward thinking to help make better decisions, to generate new ideas for solving problems, and to find wisdom. They will build a context for change in their lives and develop realistic plans for the future.

ADVANCED LANGUAGE ARTS 11 1 CREDIT COURSE NUMBER: ENG 303-304
GRADE LEVEL: 11 2 SEMESTERS PATHWAY: All

PREREQUISITES: English 10 and Teacher approval\*

This course will follow the Michigan Merit Curriculum and CCRs that have already been adopted; students will engage in deeper discussion, analytical writing, and higher level activities. Teacher approval will be necessary for admission into this course.

ENGLISH LANGUAGE ARTS 121 CREDITCOURSE NUMBER: ENG 401-2GRADE LEVEL: 122 SEMESTERSPATHWAY: All

PREREQUISITES: English 11 (ENG 301-302)

The goal for English Language Arts 12 is to refine, apply, and extend the solid foundation of knowledge, skills, and strategies developed in English Language Arts 9 through 11. Using the lens of leadership skills, English Language Arts 12 students will develop a world perspective by analyzing classic contemporary texts in a variety of genre, including Post-Colonial literature. Twelfth grade students will synthesize information, ideas, and themes to understand the past, the present, and to think innovatively about the future. They will identify and apply their own leadership skills and prepare for responsible actions as American citizens in the context of a global world.

ADVANCED LANGUAGE ARTS 12 1 CREDIT COURSE NUMBER: ENG 403-404 GRADE LEVEL: 12 2 SEMESTERS PATHWAY: All

PREREQUISITES: English 11 and Teacher approval\*

This course will follow the Michigan Merit Curriculum and CCRs that have already been adopted; students will engage in deeper discussion, analytical writing, and higher level activities. Teacher approval will be necessary for admission into this course.

ADVANCED PLACEMENT (AP)

1 CREDIT

COURSE NUMBER: ENG 501-2

COLLEGE ENGLISH

2 SEMESTERS

PATHWAY: All

**GRADE LEVEL**: 12

**PREREQUISITES:** Students should have an A or B average in previous English classes and be recommended by their eleventh grade English teacher.

Students will learn the underlying assumptions of writing and reading literature through speaking, listening, reading, but chiefly through the experience of their own writing. They will become aware of language devices such as connotation, metaphor, irony, syntax, and tone. Writing assignments focus on analysis of literature through exposition and argument. Students will be required to participate in the A.P. English Literature and Composition Test administered under the auspices of the College Board.

JOURNALISM/YEARBOOK1 CREDITCOURSE NUMBER: ENG 611-2GRADE LEVEL: 10-122 SEMESTERSPATHWAY: All

**PREREQUISITES:** Teacher Recommendation

The purpose of this class is to produce a creative, student produced high school yearbook. Students are responsible for photography, organizing the structure of the book, designing layouts, copy writing, editing, and creating designs on the computer. Students will also be responsible for selling ads and yearbooks, as well as distribution. This is an academic elective with academic expectations. Students are expected to complete their assigned activities and projects in a timely fashion and to the best of their ability. All assignments are relevant to learning the different aspects of the publishing process. Skills learned are vital to the creation of a contemporary, journalistically-sound yearbook. Basic Units of Study: Reporting and writing, graphic design, desktop publishing, business skills, and time management.

SPEECH 0.5 CREDIT COURSE NUMBER: ENG 621 GRADE LEVEL: 11-12 1 SEMESTER PATHWAY: All

PREREQUISITES: English 10 (ENG 201-202)

This course is designed to develop poise and confidence in public speaking. The speaker's presence will be closely analyzed, as well as the speaker's ability to formulate speeches for a number of different purposes. The student will also master the craft of speech outlining and the use of visual and media aids, both of which will assist them in improving their speech delivery.

DRAMA0.5 CREDITCOURSE NUMBER: ENG 631GRADE LEVEL: 10-121 SEMESTERPATHWAY: All

PREREQUISITES: English 9 (ENG 101-102)

The basic fundamentals of acting will be taught using proper terminology along with individual and group performances that demonstrate the student's knowledge of each topic covered. An emphasis will be put on audience focus, gestures, expressions, stage movement, stage presence, and creativity. The application of all of these skills will be used during a student created play production.

ADVANCED GRAMMAR

0.5 CREDIT

COURSE NUMBER: ENG 641

GRADE LEVEL: 11-12

1 SEMESTER

PATHWAY: All

PREREQUISITES: English 10 (ENG 201-202)

Advanced Grammar is designed to educate students on the basics of the language they use in written form. The philosophy of the class is derived from the concept that there are "rules" that one must follow in order to standardize the written language. This *standardization* is the basis for effective communication – understand and a universality of written concepts. In order for the written language to be understood by all of those who use it, the rules must be clearly stated and used. The class begins with the most basic elements of grammar – subject – verb – predicate – and continues through parts of speech, phrases, clauses, punctuation, and sentence types. The entering student is not expected to have any advanced knowledge of the language; however, they will gain a complete understanding of English Grammar. Advanced Grammar teaches the concepts of the English Language. These concepts are extremely valuable in taking the ACT and other standardized tests. Students will keep a notebook during the course that will account for the majority of their grade. Students will be evaluated through homework, quizzes, tests, and essays. Pre, Mid, and Post tests will allow each student to measure individual progress on real standardized tests. This class is excellent preparation for college writing.

YOUNG ADULT LITERATURE I
GRADE LEVEL: 10-12

0.5 CREDIT 1 SEMESTER COURSE NUMBER: ENG 650

PATHWAY: ALL

The Young Adult Literature course is designed specifically to enhance student knowledge in the genre of young adult literature as well as the themes. Students will be reading multiple novels that are written for and marketed toward young adults. Students will make critical evaluations, explore a broad range of young adult literature, investigate strategies for encouraging student reading, and consider how young adult literature can be used to promote both life-long reading and critical thinking. Throughout the course, students will engage in group readings/ discussions, partner reading/discussions and class discussions. Students will be reading six young adult novels as well as an individual novel. The final project will be a portfolio containing journals, notes, a reader's sketch, and book cards.

YOUNG ADULT LITERATURE II
GRADE LEVEL: 10-12

0.5 CREDIT 1 SEMESTER COURSE NUMBER: ENG
PATHWAY: ALL
Pending Board Approval

The Young Adult Literature II course is designed specifically to enhance student knowledge in the genre of young adult literature as well as the themes. Students will be reading multiple novels that are written for and marketed toward young adults. This course is not a continuation of Young Adult Literature I; the two courses may be taken independently. All novels will center around comparisons with a focus on carrying literature traits though multi-media outlets. Students will make critical evaluations, explore a broad range of young adult literature, investigate strategies for encouraging student reading, and consider how young adult literature can be used to promote both life-long reading and critical thinking. Throughout the course, students will engage in group readings/ discussions, partner reading/discussions and class discussions. Students will be reading five young adult novels as well as a companion adult novel. The final project will be a portfolio containing journals, notes, a reader's sketch, and book cards.

## COLLEGE AND CAREER WRITING AND RESEARCH 0.5 CREDIT COURSE NUMBER: ENG 654 GRADE LEVEL: 11-12 1 SEMESTER PATHWAY: All

College and Career Writing and Research is designed specifically to enhance student knowledge in the field of pre-college writing, technical writing, professional vocabulary, and knowledge about their individual college and career choices. By using the Language Arts tools including research, writing, technical writing, and critical thinking, students will learn the techniques for writing college entrance essays, statement of purpose essays, scholarship essays, investigate their career choices, write resumes, and short research papers (vitas'), and letters of application to their individual schools. Students will correspond with their schools and personnel in their job market in order to learn more about college expectations, job opportunities, and the actual working environment. In addition, students will also be required to complete a final portfolio comprised of coursework, essays, personal achievements, and career research.

CREATIVE WRITING0.5 CREDITCOURSE NUMBER: ENG 651GRADE LEVEL: 9-101 SEMESTERPATHWAY: All

**PREREQUISITES:** Successful completion of 8<sup>th</sup> grade English

Creative Writing provides all students with an opportunity for additional writing instruction beyond the standard English program. Experimentation with many forms of writing is encouraged, with an emphasis on poetry, short stories, plays, and all forms of descriptive writing. Students will also continue to expand and refine their ability to write through analyzing and evaluating their own writing and that of other students.

CREATIVE WRITING II0.5 CREDITCOURSE NUMBER: ENG 653GRADE LEVEL: 10-121 SEMESTERPATHWAY: ALL

**PREREQUISITES:** Successful completion of Creative Writing, Teacher Approval Creative Writing II is a continuation of Creative Writing I. This class allows students to revise and improve

their writing from Creative Writing I as well as explore more advanced writing techniques and challenging

writing genres. Students will also continue to expand and refine their ability to write through analyzing and evaluating their own writing and that of the other students.

LIBRARY/RESEARCH SKILLS1 CREDITCOURSE NUMBER: ENG 655-6GRADE LEVEL: 11-122 SEMESTERSPATHWAY: All

PREREQUISITES: Teacher/Media Specialist Approval

Students will be introduced to the research process by assisting with the daily operation of the Carlson High School Library/Media Center. Objectives are for students to learn the basic daily operational tasks associated with the Carlson High School Media Center, complete a book review and recommendation for addition to the library collection and complete an inventory of a library section. Students will also complete a major research project to demonstrate their ability to obtain research electronically and in print and present their findings. Students will also assist with the daily operation of the Scholastic Book Fair (up to twice a year) and assist with the creation of a monthly newsletter.

LEADERSHIP SKILLS
GRADE LEVEL: 10-12
1 SEMESTER
PATHWAY: All
PREREQUISITES: Teacher Approval/Membership in an official CHSI Club Pending Board Approval
This semester long course will be used to create learning opportunities and experiences that will provide students with the knowledge, attitudes, and skills necessary to assume leadership positions within the

school. It will also help prepare students for leadership positions in the workplace, community, and in post-secondary education settings. Emphasis will be two-fold: The creation and presentation of school programing and the development of service projects that have the potential to benefit the community at large. This class will help young adults gain a better understanding of leadership and its application to one's daily life as a student and citizen.

RESEARCH WRITING

0.5 CREDIT

COURSE NUMBER: ENG 643

GRADE LEVEL: 09-12

1 SEMESTER

PATHWAY: ALL

**PREREQUISITES:** successful completion of 8<sup>th</sup> grade English

The purpose of a research based writing class is to offer students an opportunity to enhance writing skills in regards to formal, technical writing. This class would be offered to grades 09-12 and would provide students the opportunity to not only sharpen their technical writing skills, but also to become familiar with the research and documentation process. The research paper is taught in both 10<sup>th</sup> and 11<sup>th</sup> grades, however, students will benefit from additional practice. The course will begin by addressing writing mechanics such as proofreading techniques, punctuation, capitalization, etc. We will then transition into writing as a process, MLA and APA formats, library skills, and researching.

#### FOREIGN LANGUAGE DEPARTMENT

SPANISH I CREDIT COURSE NUMBER: SPN 101-2
GRADE LEVEL: 9-12

2 SEMESTERS

PATHWAY: All

Spanish I is designed to introduce and familiarize students with the Spanish language and the culture of Spanish speaking nations. Students also practice comprehension, speaking, reading and writing while developing a thorough vocabulary.

FRENCH I1 CREDITCOURSE NUMBER: FRE 101-2GRADE LEVEL: 9-122 SEMESTERSPATHWAY: ALL

French I is an introduction to the study of the French. The course content will include the study of basic grammatical forms, as well as the typical language acquisitions such as: objects, numbers, family, time, days, months, weather etc. The goal is for the student to feel confident using French. The student will acquire listening, speaking, reading and writing skills through an integrated approach involving a wide variety of activities: group/pair work, video, audio recordings, and dialogs. The course also includes a strong focus on the life and culture of the French-speaking countries.

FRENCH II1 CREDITCOURSE NUMBER: FRE201-2GRADE LEVEL: 10-122 SEMESTERSPATHWAY: ALL

French II is a course that further develops the four language skills through an in-depth analysis of grammar and oral communication at an academic level. Francophone cultures will be explored through various classroom activities. Students will be required to use French in their daily interactions in class with the teacher and other students. Vocabulary groups: individual sports and after-school activities, celebrations, food and food and cooking, school places and events, daily routine, childhood activities, nature and animals, health, movies and books, televisions shows and music, vacation. Grammar topics: Complete review of French I topics; study of all present tense verbs (regular, irregular, stem-changing, reflexive), study of the past tenses and their usage; commands, future and conditional tenses; usage of reflexive, direct object, indirect object pronoun, and all other object pronouns.

FRENCH III 1 CREDIT COURSE NUMBER: FRE301-2
GRADE LEVEL: 11-12 2 SEMESTERS PATHWAY: ALL

French III is a continuation of the beginning level courses that will help the student continue learning the French language. In this course, the student will learn listening, speaking, reading and writing skills through activities that are based on pedagogically proven methods of foreign language instruction. Throughout the given units students will learn to express themselves using an ever increasing vocabulary, present, past, future, and conditional-tense verbs, articles, adjectives and increasingly complex grammatical structures. Grammar is introduced and practiced in innovative and interesting ways with a variety of learning styles in mind. Culture is sprinkled throughout the course in an attempt to help the learner focus on the French speaking world and their culture, people, geographical locations and histories.

SPANISH II1 CREDITCOURSE NUMBER: SPN 201-2GRADE LEVEL: 9-122 SEMESTERSPATHWAY: All

PREREQUISITES: Spanish I

Spanish II is an intermediate study of the Spanish language and its culture. Spanish II is designed to improve upon the conversational skills and comprehension skills of the student. Simple literature is studied as well as grammar and writing necessary for fluency in the language.

SPANISH III1 CREDITCOURSE NUMBER: SPN 301-2GRADE LEVEL: 10-122 SEMESTERSPATHWAY: All

**PREREQUISITES:** Spanish II (SPN 201-202, C or better recommended)

Spanish III is an advanced in-depth exploration of the Spanish language. Students are introduced to the imperfect, future, and conditional tense, and explore more in depth the preterite tense. Students are required to make oral presentations, create written reports, and read authentic literature in the target language.

SPANISH IV

1 CREDIT

COURSE NUMBER: SPN 401-2

GRADE LEVEL: 11-12

2 SEMESTERS

PATHWAY: All

**PREREQUISITES:** Spanish III (SPN 301-302, C or better recommended)

Spanish IV is an in-depth exploration of the Spanish language and culture. Students will work with authentic texts, broaden their vocabulary, and improve their grammar in the target language.

#### **GENERAL STUDIES**

ACADEMIC COLLEGIATE 0.5 CREDIT COURSE NUMBER: GEN 311
TRANSITIONS 1 QUARTER PATHWAY: All

GRADE LEVEL: 10, 11

PREREQUISITES: Junior Status or Accelerated Geometry

This course will inform students of the different habits and skills needed for the successful completion of standardized testing in a student's junior or senior year and of the skills necessary for success in post-secondary education. Students will acquire knowledge that will be helpful in understanding the concepts of study, testing taking, and preparation for any class in high school. During this course, students will rotate between three teachers that are knowledgeable in language arts, mathematics, and science.

Academic Collegiate Transitions will be offered as a ONE QUARTER course grouped with SAT/Statistics.

THEATER PRODUCTION 0.5 CREDIT COURSE NUMBER: GEN305
GRADE LEVEL: 10-12 1 SEMESTER PATHWAY: AC

**PREREQUISITES:** Drama preferred but not required

This is a one semester course designed to give our students the hands on experience of producing live theater. From the designing of a set to the sale of tickets, students will develop a detailed understanding of the knowledge and dedication required to produce a live theatrical performance.

#### MATHEMATICS DEPARTMENT

ALGEBRA I GRADE LEVEL: 9 PREREQUISITES: None 1 CREDIT 2 SEMESTERS COURSE NUMBER: MTH 101-2
PATHWAY: All

Throughout the Algebra I course, students will take a look at the basic principles used in mathematics. Some of the topics that will be covered include: properties of multiplication, division, addition, subtraction, and exponents; solving systems of equations and inequalities; and graphing lines and curves. The class will include many examples of real-life situations in order to answer the question, "When will I ever use this?" Students use skills from Algebra I every day without realizing it. The goal is to encourage students to continue to use formulas in order to simplify real-life situations. The grade students will receive in this class will be comprised of daily homework assignments, quizzes, and test scores. Students should expect homework on a daily basis with quizzes over the material at least once a week. A calculator will prove to be very useful for students, but is not required. Some calculators will be available to students during class time, but they may need them to complete homework at home. After completion of the Algebra I course, students should be prepared to move on to Geometry and Algebra II. Students should also have mastered skills essential to receive a passing score on the MME exam.

ACCELERATED ALGEBRA I 1 CREDIT COURSE NUMBER: MTH104-5
GRADE LEVEL: 9 2 SEMESTERS PATHWAY: All
PREREQUISITES: None

This course will follow Michigan Merit Curriculum and CCSS that have already been adopted; Students will engage in deeper discussion and higher level math activities. Teacher approval will be necessary for admission into this course.

GEOMETRY

1 CREDIT

COURSE NUMBER: MTH201-2

GRADE LEVEL: 9-10

2 SEMESTERS

PATHWAY: All

PREREQUISITES: Algebra I (MTH 101-102)

The following topics will be covered in this class: patterns, points, lines, planes, segments, reasoning and proofs, perpendicular and parallel lines, congruent triangles, perimeter, properties of triangles, quadrilaterals, transformations, similarity, right triangles and trigonometry, circles, area of polygons and circles, surface area and volume, and more. The book used in this course closely follows the basic concepts of Euclidean Geometry and emphasizes using algebraic techniques. The aim of the course is to teach the Geometry concepts for use in following courses and real life applications. Assessments will be in the form of question/answer, quizzes, projects, and written evaluations.

ACCELERATED GEOMETRY

1 CREDIT

COURSE NUMBER: MTH203-4

2 SEMESTERS

PATHWAY: All

PREREQUISITES: Algebra I (MTH 101-102)/Accelerated Algebra 1)

This course will follow Michigan Merit Curriculum and CCSS that have already been adopted; Students will engage in deeper discussion and higher level math activities. Teacher approval will be necessary for admission into this course.

ALGEBRA II & TRIGONOMETRY COURSE NUMBER: MTH 301-2

1 CREDIT 2 SEMESTERS

#### PREREQUISITES: Geometry (MTH 201-202)

In Algebra II, students will pick up where they finished in Algebra I (MTH 101-2). Solving systems of linear equations and inequalities will be expanded upon. Other topics that will be covered include: quadratic equations, logarithms, and trigonometric equations. A graphing calculator will help to enhance the material covered throughout the course. While graphic skills are necessary for students, the ability to create and investigate trigonometric and quadratic functions is very useful. Although the calculator is not required, it is strongly recommended. By the end of Algebra II, students should have mastered logarithms and trigonometric values and functions so as to prepare them for Pre-Calculus. Students will also find that the exposure to these topics will be helpful when taking the MME exam. Upon successful completion of both terms, students will have fulfilled the Algebra II requirement as outlined in the Michigan Merit Curriculum.

ACCELERATED ALGEBRA II 8 1 CREDIT COURSE NUMBER: MTH 303-4

TRIGONOMETRY

GRADE LEVEL: 10-12 2 SEMESTERS

PREREQUISITES: Geometry (MTH 201-202) Accelerated Geometry

This course will follow Michigan Merit Curriculum and CCSS that have already been adopted; Students will engage in deeper discussion and higher level math activities. Teacher approval will be necessary for admission into this course.

PRE-CALCULUS1 CREDITCOURSE NUMBER: MTH 401-2GRADE LEVEL: 10-122 SEMESTERSPATHWAY: BT/EMI/NRA

PREREQUISITES: Algebra II/Trig (MTH 301-302)

This course strengthens the student's Algebra and Geometric skills before entering the course of Calculus. It is intended to give the student a wide exposure to fields that use mathematics. Most students that enroll in this course are expected to continue to further their education in mathematics (i.e. Calculus or first year college courses). This course will go into more depth in the areas of exponential, logarithmic, trigonometric functions and discrete mathematics. Through the use of application, problem solving, reasoning, communication, and technology the student will gain further insight into Pre-Calculus. Through the understanding of a variety of areas of mathematics the student learns in this course, they will be able to apply this knowledge to occupations that use mathematics. Students that are successful in this course should continue their mathematics whether at high school or college.

CALCULUS1 CREDITCOURSE NUMBER: MTH451-2GRADE LEVEL: 11-122 SEMESTERSPATHWAY: BT/EMI/NRA

**PREREQUISITES:** Pre-Calculus (MTH 401-402)

Pupils will learn the basic concepts of Calculus, namely differentiation and integration through a variety of functions. Using applications and theory, the student will gain further insight into the structure of calculus. The class will have opportunities to use technology in order to analyze real life applications and model data. The book used in this course closely follows the recommendations of the Committee on Mathematics of the Advanced Placement Program. The aim of the course is to teach the mathematics of calculus, give a head start to first year freshmen attending college, and to train readers to use calculus effectively in their later academic and professional work. Students in this class will NOT be required to take the AP Calculus exam.

AP CALCULUS

1 CREDIT

COURSE NUMBER: MTH 501-2

GRADE LEVEL: 11-12

2 SEMESTERS

PATHWAY: BT/EMI/NRA

PREREQUISITES: Pre-Calculus (MTH 401-402)

This class is intended for the most serious mathematics student. It is designed for those who have shown superior achievement in a college preparatory curriculum. Pupils will learn the basic concepts of Calculus, namely differentiation and integration through a variety of functions. Using applications and theory, the student will gain further insight into the structure of calculus. The class will have opportunities to use technology in order to analyze real life applications and model data. The book used in this course closely follows the recommendations of the Committee on Mathematics of the Advanced Placement Program. The aim of the course is to teach the mathematics of calculus, give a head start to first year freshmen attending college, and to train readers to use calculus effectively in their later academic and professional work. Students taking AP Calculus will be required to take the AP Exam

AP STATISTICS 1 CREDIT COURSE NUMBER: MTH

511--2

GRADE LEVEL: 11-12 2 SEMESTERS PATHWAY: All

PREREQUISITES: Algebra II/Trig (MTH 301-302)

AP Statistics is a college-level introductory statistics class taught in high school. This course will introduce students to the primary concepts and tools for collecting, analyzing, and drawing conclusions from data. Students will be exposed to four broad conceptual themes:

- 1. Exploring Data: Describing patterns and departures from patterns.
- 2. Sampling and Experimentation: Planning and conducting experiments.
- 3. Anticipating Patterns: Exploring random phenomena using probability and simulation.
- 4. Statistical Inference: Estimating population parameters and testing hypotheses.

  Students will complete activities and projects and use technology to enhance their understanding. Students will be required to take the AP Statistics exam. Students that pass the AP exam will be granted 1 semester of college credit at most universities.

#### Why should you take AP Statistics?

- Statistics is one of the most widely applied courses you will ever take. College majors that REQUIRE
  Statistics at most universities include: Psychology, Sociology, Biology, Civil Engineering, Mathematics,
  Mechanical Engineering, Aerospace Engineering, Nursing, Veterinary Science, Nutritional Science,
  Business Management, Accounting, Finance, Marketing, and Economics.
- It is a fresh start: You don't need to remember how to factor a polynomial, graph a sine curve, or prove that triangles are congruent. However, what you do learn you will need to remember all year!
- It is a great preparation for college. The class is taught over a full year (instead of a semester, as in college) so you have more time to learn the material. The material is still college level, providing a challenge for even the best math student.
- You will never ask: "When will we ever use this?" Statistics is applied mathematics, not abstract mathematics.
- It is a challenging class that will teach you how to think critically about claims made in the media. This is a critical skill in this age of information.

SAT/STATS

0.5 CREDIT

COURSE NUMBER: \*\*\*\*\*

GRADE LEVEL: 10-11

1 QUARTER

PATHWAY: All

PREREQUISITES: Junior Status or Accelerated Geometry

This is a one quarter course, 5 weeks of SAT prep/5 weeks of common core statistics in preparation for SAT. Students will learn the different categories of the SAT test and basic test taking strategies for mathematics. Students will also take multiple practice SAT tests. **SAT/Statistics will be offered as a ONE QUARTER course grouped with Academic Collegiate Transitions.** 

#### MUSIC DEPARTMENT

CONCERT CHOIR 1 CREDIT COURSE NUMBER: MUS 601-2 GRADE LEVEL: 9-12 2 SEMESTERS PATHWAY: All PREREQUISITES: None

Open to all Carlson students, this un-auditioned choir reviews the basics of music theory, vocal production, expression, style, harmony and group (choral) singing in three and four-part format. Skills required in homophonic as well as polyphonic music are introduced. Repertoire includes folk music from a variety of cultures, holiday music, pop and art music from many centuries, in English as well as other languages. Evening concerts at the end of each trimester are required. Evaluation of students is based on concert attendance, daily participation, and bi-weekly quizzes.

JAZZ BAND0.5 CREDITCOURSE NUMBER: MUS 611GRADE LEVEL: 10-121 SEMESTER - 2NDPATHWAY: All

PREREQUISITES: <u>Audition/Permission from Instructor</u>

Students in Jazz Band will be involved in the exploration of American Jazz Music. Students will learn the various aspects of Jazz music through listening, rehearsal and performance. There will also be a strong historical component to the course. This will give students a larger context to better understand their music. Grades will be based on a mixture of class participation, playing tests, performance evaluations, written projects and exams. This class includes some extracurricular performances that students will be required to attend including: MSBOA JAZZ FESTIVAL, ISLAND FEST, School Concerts, and other performances.

MARCHING BAND0.5 CREDITCOURSE NUMBER: MUS 621GRADE LEVEL: 9-121 SEMESTERPATHWAY: All

**PREREQUISITES:** Audition with Director or SMS music program completion

The Carlson High School Marching Marauder Band is a high energy, high achievement performance ensemble! The Marching Marauders serve as the flagship musical ensemble for Carlson High School and the Gibraltar School District. Students will gain skills in leadership, personal responsibility, physical fitness, musical ability, time management, communication both interpersonal and artistic; team dynamics, and sportsmanship.

Members are expected to perform at all home football games, various marching competitions and special performances throughout the fall trimester. Members are also expected to attend all extra-curricular rehearsals – (Tuesday and Thursdays 6-9PM) and including Saturdays during the fall trimester. A schedule will be put forth in early May, preceding the season. Participation in BAND CAMP is required by all participants.

\*Placement in the Drum-Line and/or Color Guard is by audition only in the late spring or early summer.

CONCERT BAND

0.5 CREDIT

COURSE NUMBER: MUS 622

GRADE LEVEL: 9-12

1 SEMESTER

PATHWAY: ALL

**PREREQUISITES:** Director Approval or SMS music program completion

The Carlson High School Concert Band is a 3 term course designed to improve student fluency on their instrument and in reading and performing music. Students will learn and perform quality band music as well

as the elements and vocabulary of music theory. Assessments will be both written and performance based. The Concert Band will hold several evening performances throughout the year including the MSBOA Band Festival and Solo/Ensemble Festival.

MUSIC APPRECIATION GRADE LEVEL: 9-12 PREREQUISITES: None 0.5 CREDIT 1 SEMESTER COURSE NUMBER: MUS 631
PATHWAY: AC

Students in this course will experience and learn to appreciate different varieties of music from classical to modern. Students will receive a brief overview of the development of western music, as well as early American music, Jazz, and the beginnings of Rock and Roll. Students will also learn basic concepts in note and rhythm reading. Grades will be based on written reports, presentations and class projects.

WIND ENSEMBLE 1 CREDIT
GRADE LEVEL 10-12 or Director Approval 1 SEMESTER - 2ND
PREREQUISITES: AUDITION ONLY!!

**COURSE NUMBER:** MUS

Pending Board Approval

PATHWAY: ALL

The CHS Wind Ensemble is an advanced instrumental music ensemble. Students will play upper level music while at the same time improving their instrumental performance skills on a very technical level. Students will also delve into more complex musical theory concepts such as chord function and voice leading. Enrollment will be limited to only a few members in a section.

Auditions will be held for enrollment during the 1st semester. No unauthorized students will be admitted.

#### PHYSICAL EDUCATION DEPARTMENT

9th GRADE BOYS PHYSICAL0.5 CREDITCOURSE NUMBER: HPE 101EDUCATION1 SEMESTERPATHWAY: All

GRADE LEVEL: 9
PREREOUISITES: None

During this trimester course, students will be exposed to three basic areas including: Team Sports, Individual Sports and Physical Fitness. Units will vary according to the time of year. Units include: Football, Soccer, Volleyball, Hockey, Basketball, Ping-Pong, Tennis, Softball, Bowling and Swimming.

9th GRADE GIRLS PHYSICAL0.5 CREDITCOURSE NUMBER: HPE 111EDUCATION1 SEMESTERPATHWAY: All

GRADE LEVEL: 9
PREREQUISITES: None

During this trimester course, students will be exposed to three basic areas including: Team Sports, Individual Sports and Physical Fitness. Units will vary according to the time of year. Units include: Football, Soccer, Volleyball, Hockey, Basketball, Ping-Pong, Tennis, Softball, Aerobic dance, Track, Gymnastics, Eclipse Ball and Swimming.

BOYS HEALTH0.5 CREDITCOURSE NUMBER: HPE 102GRADE LEVEL: 91 SEMESTERPATHWAY: All

PREREQUISITES: None

This class is required for male ninth grade students. Units covered include: Conflict Resolution, Violence Prevention, Drug use, Nutrition, and the Michigan Model for Healthy Relationships including HIV/AIDs and STD education. In accordance with the law, parents have the choice to opt their son/daughter out of any unit with sexual information. This class involves homework, projects, guizzes and tests.

GIRLS HEALTH

0.5 CREDIT

COURSE NUMBER: HPE 112

GRADE LEVEL: 9

1 SEMESTER

PATHWAY: All

PREREQUISITES: None

This class is required for female ninth grade students. Units covered include: Conflict Resolution, Violence Prevention, Drug use, Nutrition, and the Michigan Model for Healthy Relationships including HIV/AIDs and STD education. In accordance with the law, parents have the choice to opt their son/daughter out of any unit with sexual information. This class involves homework, projects, quizzes and tests.

ADVANCED BOYS PHYSICAL 0.5 CREDIT COURSE NUMBER: HPE 601 EDUCATION 1 SEMESTER PATHWAY: All

**GRADE LEVEL**: 10-12

**PREREQUISITES:** Ninth Grade Physical Education (HPE 101 or 111)

This class will allow students the opportunity to improve their skills, to maintain an appropriate level of fitness through daily aerobic activities, and to develop stress reduction techniques through the enjoyment and pleasure they receive in participating in the following sports: Tennis, soccer, football, volleyball, basketball, badminton, archery, bowling, and hockey.

GIRLS FITNESS

0.5 CREDIT

COURSE NUMBER: HPE 602

GRADE LEVEL: 10-12

1 SEMESTER

PATHWAY: All

**PREREQUISITES:** Ninth Grade Physical Education (HPE 101 or 111)

This class is designed for students who want to build and improve physical fitness through various fitness activities such as cardio kick boxing, weight/resistance training, step aerobics, circuit training, jogging and

stress reduction. Students will learn the five components of physical education including strength and muscular endurance, flexibility, cardiovascular fitness and body composition.

BOYS TEAM SPORTS

0.5 CREDIT

COURSE NUMBER: HPE 611

GRADE LEVEL: 9

1 SEMESTER

PATHWAY: All

**PREREQUISITES:** 9<sup>th</sup> Grade Boys Physical Education

This class is designed for 9<sup>th</sup> grade boys who would like to maintain their current level of Physical Fitness, with a special emphasis on stress reduction and lifetime sports. Students will also learn the benefits of working together in various team sports.

ADVANCED HEALTH 0.5 CREDIT COURSE NUMBER: HPE 621 GRADE LEVEL: 10-11 1 SEMESTER PATHWAY: All

**PREREQUISITES:** Ninth Grade Health

This class is designed for both female and male students who want to learn CPR, AED, and First Aid. Students will have the opportunity to receive their certification card (good for two years) upon completion of this course. The second part of this course will cover sections of health that were not covered in general health. Topics include: Cardiovascular and Respiratory Health, Chronic Diseases, Preventing Injuries, and Infectious Diseases.

CONDITIONING0.5 CREDITCOURSE NUMBER: HPE 603GRADE LEVEL: 10-121 SEMESTERPATHWAY: All

The overall purpose for the Conditioning Class is for all athletes to have an opportunity to improve themselves in respect to their specific sport and their overall health. Our goal is for students to become stronger, faster, and more flexible athletes. Throughout the course, students will gain an understanding of proper and safe training techniques and develop an appreciation in fulfilling their own personal goals and maximize their athletic potential.

#### SCIENCE DEPARTMENT

PHYSICAL SCIENCE 1 CREDIT COURSE NUMBER: SCI 101-2 GRADE LEVEL: 9 2 SEMESTERS PATHWAY: All

PREREQUISITES: Grade 8 Science

Pending Board Approval

Physical Science A (SCI 101) covers principles of Earth Science, while Physical Science B (SCI 102) covers principles of Physics. Units of study in Physical Science A (SCI 101) include: the Solar System, the Universe, History of the Earth, Earth Systems, the Atmosphere, Weather and Climate, Ecosystems, Natural Resources and Human Sustainability. Basic units of study in Physical Science B (SCI 102) include: Motion, Forces, Work and Energy, Heat and Temperature, Waves, Sound and Light, and Electricity.

BIOLOGY 1 CREDIT COURSE NUMBER: SCI 201-2
GRADE LEVEL: 10 2 SEMESTERS PATHWAY: All

PREREQUISITES: Physical Science (SCI 101-102)

Biology 201 topics include an introduction to chemistry, biochemistry, cell structure and function, homeostasis and transport, photosynthesis, cellular respiration, cell reproduction, and an introduction to genetics. Biology 202 topics include DNA replication, gene expression, human genetics, DNA technology, evolution, and ecology.

CHEMISTRY1 CREDITCOURSE NUMBER: SCI 301-2GRADE LEVEL: 10-122 SEMESTERSPATHWAY: All

PREREQUISITES: Algebra I (MTH 101-102) and Biology (SCI 201-202)

Chemistry is the study of matter and the components of matter. Chemistry 301 starts with a brief overview of the metric system that is used throughout the class. The class then studies the components of the atom, electron arrangement, Periodic Law, chemical bonding, naming chemical compounds, writing chemical formulas, and studying chemical reactions. Chemistry 302 focuses on stoichiometry, gas laws, states of matter, concentrations of solutions, acids and bases, thermochemistry, oxidation reduction reaction, and an introduction to organic chemistry. Students who take this class should have a good mathematical background and an interest in a science related career.

CHEMISTRY IN THE 1 CREDIT COURSE NUMBER: SCI 311-2

COMMUNITY

**GRADE LEVEL**: 10-12 **2 SEMESTERS PATHWAY**: AC/BT/HUS/NRA

PREREQUISITES: Algebra I (MTH 101-102) and Biology (SCI 201-202)

Chemistry is the study of matter and the changes of matter undergoes. ChemCom 311 will focus on the study of classification of matter, physical and chemical changes, the metric system, atomic theory and electron arrangement. ChemCom 312 will involve the study of Periodic Law, chemical bonding, chemical reactions, stoichiometry and gas laws. Students who take ChemCom will be given additional support in the mathematics required for a chemistry course.

FOOD SCIENCE .5 CREDIT COURSE NUMBER: SCI 304
1 SEMESTER PATHWAY: HES

**PREREQUISITES:** Completion of Biology and Chemistry (or Chem Com) with a C+ or better Food Science will provide students with a vocabulary of nutrition and food science that will enable them to understand, discuss, and evaluate food topics. Students will learn about food allergies, food borne diseases, and identify food bacteria through lab. Students will expand their understanding of organic chemistry and how it relates to food.

FORENSIC SCIENCE .5 CREDIT COURSE NUMBER: SCI 305
1 SEMESTER PATHWAY: HES/HUS/AC

PREREQUISITES: Physical Science A/B, Biology A/B, Chemistry A/B

Forensic Science is the science of crime. Evidence is collected at a crime scene in order to prove or disprove that a person is the perpetrator of a crime. Aspects of Physics, Chemistry, and Biology are used to provide proof that the perpetrator was present at a crime scene. Topics include: DNA electrophoresis, Blood Typing and Genetics, Visible and Latent Fingerprinting with Chemical Procedures such as Ninhydrin, Handwriting Analysis and Forgery Detection, Chromatography Analysis of Chemicals left at a crime scene such as lipstick on a cup left at a crime scene, Drug Analysis using Colorimetric Methods and Spectrophotometric Methods, Ballistics, Crime Scene Evidence Impressions, Scale Drawings of a virtual crime scene utilizing math skills with CAD Design renderings with collaborative help from our CAD design teacher, creative writing interpretation utilizing evidence from a virtual crime scene.

PHYSICS1 CREDITCOURSE NUMBER: SCI 401-2GRADE LEVEL: 11-122 SEMESTERSPATHWAY: HES/EMI

PREREQUISITES: Algebra II (MTH 301-302)

Physics is the science that studies the nature of matter, energy, and their relationships. Physics is the study of the mathematical models of how the world works and is the basis for all science and engineering. A Physics student should have a satisfactory knowledge of trigonometry and the use of a calculator. This is a college preparatory science class. The following topics will be covered: mathematics for physics, motion of objects, forces and motion, forms of energy, energy transformations, electric charges, electromagnetism, waves, sound and light, electrical energy and circuits, heat and temperature, and nuclear energy.

ADVANCED PLACEMENT (AP)

1 CREDIT

COURSE NUMBER: SCI 501-2

2 SEMESTERS

PATHWAY: HES/NRA

**GRADE LEVEL**: 11-12

PREREQUISITES: Chemistry (SCI 301-302)

This course is designed to be the equivalent of a college introductory biology course taken by biology majors during their first year of college. This course will differ significantly from high school courses with respect to the kind of textbook used, the range and depth of topics covered the type of laboratory work done by students, and the time and effort required of students. The book used in this class will be a college-level text in terms of topics and reading level. The kinds of labs done by AP Biology students will be equivalent to those done by college students. Students that take this class will be required to take the AP Biology Exam.

The two main goals of AP Biology are to help students develop a conceptual framework for modern biology and to gain an appreciation of science as a process. The primary emphasis will be on developing an understanding of concepts rather than on memorizing terms and technical details. This emphasis includes using scientific inquiry, integration of biological themes, the application of biological knowledge, and critical thinking to environmental and social concerns.

The course will have three general areas of study: Molecules and Cells (25%), Heredity and Evolution (25%), and Organisms and Populations (50%) It is recommended that students taking this course have already completed Botany and Zoology.

ANATOMY AND PHYSIOLOGY 1 CREDIT COURSE NUMBER: SCI 601-2 GRADE LEVEL: 10-12 2 SEMESTERS PATHWAY: HES

PREREQUISITES: Biology (SCI 201-202)

Anatomy and Physiology is the study of all of the human systems and how they function independently and interrelated. The class entails lecture and laboratory work with microscope labs and dissections. The students will be required to know the skeletal and muscular structures of the human body; understand anatomical terminology; and dissection and classification of specific organs, such as eye, brain, spinal cord, heart and kidney. The class is offered as an introduction for students who may want to enter health care fields.

**ECOLOGY** 0.5 CREDIT **COURSE NUMBER:** SCI 611 **GRADE LEVEL**: 10-12 1 QUARTER **PATHWAY:** HES/HUS/NRA

PREREQUISITES: Biology (SCI 201-202)

Pending Board Approval Ecology reviews basic principles of ecology with topics focusing on the relation of organisms to their environment, the composition, structure, function and distribution of populations, communities, and ecosystems, environmental science, energy flow, and biogeochemical cycles. Students will explore topics

with STEMgineering.

**BOTANY** 0.5 CREDIT **COURSE NUMBER:** SCI 612 **GRADE LEVEL**: 10-12 1 QUARTER PATHWAY: HES/HUS/NRA PREREQUISITES: Biology (SCI 201-202) Pending Board Approval

through field study and laboratory assignment. Ecology will be offered as a ONE QUARTER course grouped

This course provides an introduction to the classification, evolution, relationships, structure, and function of plants. Topics include reproduction and development of seed and non-seed plants, levels of organization, form and function of systems and plant responses to stimuli. The laboratory exercises are coordinated with lecture topics and may include field exercises. Botany will be offered as a ONE QUARTER course grouped with Wetlands Study.

ZOOLOGY 0.5 CREDIT **COURSE NUMBER:** SCI 613 **GRADE LEVEL**: 10-12 1 SEMESTER PATHWAY: HES/HUS/NRA

PREREQUISITES: Biology (SCI 201-202)

Zoology is a dissection-based course in which the students study the history of animals. This course surveys the Animal Kingdom and animal-like protozoans from an evolutionary perspective. The taxonomy, diversity and ecology of all animals phyla will be studies with an emphasis on the anatomical structures and behaviors of each phylum including: animal-like protozoan, sponges, cnidarians, roundworms, flatworms, annelids, mollusks, arthropods, echinoderms, and all chordates. Major lines of evolution will be traced as characteristics of each animal are compared and contrasted. Lab work will involve dissection of selected, representative specimens, as well as work with some living specimens.

WETLANDS STUDY 0.5 CREDIT **COURSE NUMBER:** SCI 614 **PATHWAY:** NRA/HES GRADE LEVEL: 10-12 1 QUARTER Pendina Board Approval PREREQUISITES: Biology (SCI 201-202) C+ or better Wetlands is a course designed to acquaint the students with the basic principles of Ecology initially, and

then focus on concepts specifically pertaining to the wetlands. The course will include field study of plant and animal populations, water analysis, soil study, and mapping. Wetlands will be offered as a ONE QUARTER course grouped with Botany.

**STEMGINEERING** 0.5 CREDIT COURSE NUMBER:

**GRADE LEVEL: 9-12** 1 QUARTER PATHWAY:

PREREQUISITES: 8th Grade Science

Stemgineering is a course that integrates science, technology, engineering, and mathematics into a blended learning approach based on real-world applications. STEM encompasses the process of critical thinking, analysis, and collaboration in which students integrate the processes and concepts in real world contexts. Students will experiment with the following systems: computer programming, product engineering, the engineering design process, applied chemistry, and content area reading and writing by completing open ended projects. STEMgineering will be offered as a ONE QUARTER course grouped with Ecology.

## SOCIAL STUDIES DEPARTMENT

U.S. HISTORY & GEOGRAPHY GRADE LEVEL: 9 PREREQUISITES: 1 CREDIT 2 SEMESTERS COURSE NUMBER: SOC 201-2
PATHWAY: All

According to the Michigan High School Social Studies Course Expectations, the "disciplined study of history and geography is vital and essential for citizens in a democratic society such as the United States." As such, student in U.S. History and Geography "will learn about the American experience over time and space. They will encounter powerful and sometimes conflicting ideas while learning about people and events in different places and times. They will investigate our diverse and common traditions, and work to understand the complex interactions among various environmental, human, and social forces that have influenced and continues to influence America and Americans. Studying United States History and Geography connects us to people and events across time and space, illuminating the range and depth of human experience on grand as well as local scales. It involves an analytical study of the nation's political ideals, or times and places where people or events challenged, violated, or expanded those ideas." U.S. History and Geography begins with an overview of the foundational issues learned by students in middle school, then explores four major eras leading to the present day: The Development of an Industrial, Urban and Global United States, 1870-1930, The Great Depression and World War II, 1920-1945, Postwar United States, 1945-1989, and America in a New Global Age, 1989 to the present. Assessment will be based on class discussions, activities, homework assignments, tests, and quizzes.

WORLD HISTORY 8 1 CREDIT COURSE NUMBER: SOC 101-2

GEOGRAPHY

GRADE LEVEL: 11 2 SEMESTERS PATHWAY: All

**PREREQUISITES:** None

According to the Social Studies High School Course Expectations, Michigan's World History and Geography takes a global and comparative approach to studying the world and its past to develop greater understanding of the development of worldwide events, processes, and interactions among the world's people, cultures, societies, and environment. The content expectations build upon the very best and most highly regarded standards, benchmarks, and courses in history and geography. The expectations are organized using both time and space to engage students in cross-temporal and cross-regional studies. Integrating geography and history, the content expectations are organized within historical eras and different geographic scales. That is, within each era students work at three interconnected spatial scales: the global, interregional and regional. The course will cover early civilizations beginning with the Agricultural Revolution and the like. From here, the growth and development of world's religions will be an area of focus followed by a more specific approach of the world's regions. The first semester will cover the years ranging from 300 to nearly 1800 C.E. /A.D. The second semester will cover 1800-Present. Students will use the Prentice Hall version of *World History* and will be assessed through tests, homework, quizzes and papers.

CIVICS

0.5 CREDIT

COURSE NUMBER: SOC 301

GRADE LEVEL: 10

1 SEMESTER

PATHWAY: All

PREREQUISITES:

Civics is a semester long course required for graduation that focuses on the fundamental aspects of the United States Government. Students will learn the roles and responsibilities of United States citizens and those who represent them in the governmental process. Students will learn how history has impacted our current system of government and how this system is continually progressing to meet the ever-changing needs of the American people. Assessment will be based on class discussions, activities, homework assignments, tests, and quizzes.

ECONOMICS
GRADE LEVEL: 10
PREREQUISITES:

0.5 CREDIT 1 SEMESTER COURSE NUMBER: SOC 302
PATHWAY: All

Economics is a course that will focus on the fundamental themes of Microeconomics as well as introducing the interdependence of the global economy through Macroeconomic studies. Students will be exposed to the basic economic concepts of Microeconomics including: scarcity and opportunity costs, the types of economic systems, supply and demand, market structures, and money and banking. In addition, the students will also be exposed to various Macroeconomic concepts such as: the measurement of an economics performance, monetary and fiscal policies, and the global economy. Many of these topics will be covered in a hands-on interactive approach, as well as through class discussions, notes, homework, a major project, quizzes, and tests.

1 CREDIT 2 SEMESTERS COURSE NUMBER: SOC 501-2
PATHWAY: All

ADVANCED PLACEMENT (AP)
U.S. HISTORY (APUSH)
GRADE LEVEL: 11-12

PREREQUISITES: U.S. History (SOC 201-202), minimum 3.0 in SS & Language Arts, Teacher Approval APUSH will be taught as an introductory-level college survey of U.S. History from the pre-Columbian civilizations to the present day. The material will be approached thematically with the intent of giving students a strong understanding of major events, trends, individuals, and groups in U.S. History. The course will center on a core textbook, the AP course outline, and many additional supplemental readings, including primary and secondary source documents. Additional mediums such as film, music, etc. will be employed. Students will be engaged in much interpretive analysis and critical thinking, discussion, and writing. Other emphases will be on the interrelationships of ESPI (Economic-Social-Political-Intellectual) developments in history, cause-and-effect relationships, and drawing parallels between past and current events. Assessments will be designed to test students' understanding of the material, their ability to defend their interpretation of the facts, and will mimic and therefore help prepare students for the AP Exam. Students will write many short essays in practice for the writing portion (particularly the Document-Based Question) of the AP Exam. Students will be required to take the AP Exam.

ADVANCED PLACEMENT (AP) PSYCHOLOGY 1 CREDIT 2 SEMESTERS COURSE NUMBER: SOC 511-2
PATHWAY: All

GRADE LEVEL: 10-12

PREREQUISITES: Introduction to Psychology; Teacher Approval/3.0 in SS & Science
This course will look at the scientific study of behavior and the underlying causes of human behavior.
Throughout the course, we will look at the biological and cognitive process associated with behavior along with the professional study of these processes. Additionally, the course will explore the theories and collected knowledge associated with human behavior. In the first semester, the course will focus on the history of psychology, methods of research and the ethics, the biological study of the brain, sensation and perception, consciousness, learning and memory. The second semester will look at motivation and emotion, cognitive development, personality, intelligence and psychological testing, stress and health, abnormal psychology and the treatment of psychological disorders and social behavior. Students will be assessed through homework, tests, quizzes, papers and participation in discussions. This course includes an on-line component, Blackboard, which requires students to have a basic understanding of computers and discussion forums.

This is a college-prep elective and will challenge students to understand abstract concepts and ideas. This class will require active participation by students and will benefit those who hope to continue their education beyond high school in every field of study. College credit for the course can be earned by students through the A.P.\* Psychology Exam administered in May. *Students are required to take this exam.* 

WORLD WARS 0.5 CREDIT COURSE NUMBER: SOC 603

PREREQUISITES: World History & Geography (SOC 101-102) and American History (SOC 201-2) This course focuses on the defining events of the 20<sup>th</sup> century – World War I and World War II. Beyond the horrific death and destruction that resulted from these conflicts, the events of the era drastically changed the course of world history and largely gave rise to the postwar world order that still exists today. This course begins at approximately 1900 with an examination of the factors that led to the First World War and concludes in the late 1940s with the beginnings of the arms race and the Cold War. The course will employ a holistic approach: political, economic, military, social, and other factors will be examined. This class will be taught to give students a greater understanding and appreciation of the World Wars and to touch upon aspects of the period that are not expanded upon in American and world history courses. This course will not only focus on the military conflict, but also explore the effects these events had on both civilian existence and the role of government in various nations. Assessment will be based on class discussions, activities, homework assignments, tests, and quizzes.

**COURSE NUMBER:** SOC604 AMERICAN CIVIL WAR 0.5 CREDIT **GRADE LEVEL**: 10-12 1 SEMESTER PATHWAY: All

PREREQUISITES: U.S. History & Geography (SOC 201-202)

The Civil War was the defining event of 19th century America. Beyond eliminating slavery, the Civil War had a massive effect on the course of American history, a direct impact on the growth of Federalism, changes in the Constitution, the American economy and interstate relationships. The course will look beyond the battles in the war and explore the impact the war had on the lives of the average person. Additionally, the class will look at the significant figures of the war and their contributions. This class will be taught to give students a greater understanding of the Civil War that is not expanded upon in American History courses. Students have great interest in the Civil War and this course is created to meet that interest.

HISTORY OF MYTH, LORE, and LEGEND **COURSE NUMBER: SOC607** 0.5 CREDIT **I SEMESTER GRADE LEVEL:** 10-12 PATHWAY: ALL

History of Myth, Lore, and Legend (MLL)- This course focuses on the social, cultural, ideological and historical aspects of world myths, lore and legends. This course teaches students how to inspect, think about, discuss and explain the possible functions of myth in society. History of Myth, Lore, and Legend will teach students to examine the common archetypal characters of world myth and how world myths follow a common pattern (monomyth). The course will examine and interpret myths from various time periods and geographical regions and how those myths are reflective of their cultures. The course will even analyze modern American mythology (including urban legends and superheroes) and how and why they reflect on our society. Various world mythologies that will be examined will include: Mesopotamian, Egyptian, Greek, Roman, Asian, Native American, Medieval European, and Modern American mythology.

HISTORY OF SOCIETY & CULTURE 0.5 CREDIT **COURSE NUMBER:** SOC 681 1 SEMESTER **PATHWAY:** ALL

Ancient World to European Renaissance

**GRADE LEVEL:** 10-12

**PREREQUISITES:** World History or US History

History of Society and Culture 1 Ancient World to European Renaissance (HSC\_1) This course looks at the political and social growth of significant eras of world history from a historical and cultural perspective. The cultural aspect include: art, architecture, mythology and literature. This course will inspect the diffusion and amalgamation of the political and social structure of the Western world. Students will be exposed to various visual art styles including paintings and sculptures; and closely examine the works for their form and content. We will analyze and compare stories form the first myths and epic stories to the modern novel and major motion pictures. The course will explore important man-made structures for the Egyptian Pyramids, European Gothic Cathedrals to modern architectural marvels found throughout the modern world. This class will give students a greater empathy and appreciation of the diverse cultures and civilizations both past and present; as well as expand on many topics covered in World History and Geography.

1 SEMESTER PATHWAY: All

**GRADE LEVEL**: 10-12

PREREQUISITES: Biology B (SCI202)

This course will look at the foundations of modern psychology. Introduction to Psychology will focus on the scientific methods used in psychology with regards to research and the ethical issues that face psychologists. The class will look at the biological components of psychology including the brain and nervous system. Other topics covered in the course include sensation, perception, motivation and emotion. The psychology of stress and the role it has on health will also be examined. Students will be assessed through homework, tests, quizzes, papers and participation in discussions. This course includes an on-line component, Google Classroom, which requires students to have a basic understanding of computers and discussion forums. This course is the foundation of psychology and is required for any student who wishes to enroll in either Developmental Psychology or Cognitive Psychology.

**DEVELOPMENTAL** 0.5 CREDIT COURSE NUMBER: SOC 652

PSYCHOLOGY

GRADE LEVEL: 10-12 1 SEMESTER PATHWAY: All

**PREREQUISITES:** Introduction to Psychology (SOC 651)

This course will look at lifespan psychology and the significant periods of development including infancy, childhood, adolescence and adulthood. The course will also look at personality development and psychological testing and the importance of each within the realm of psychology. This course will conclude with a look at psychological disorders and methods of treatment. Students will be assessed through homework, tests, quizzes, papers and participation in discussions. This course includes an on-line component, Google Classroom, which requires students to have a basic understanding of computers and discussion forums. Students will be required to have completed Introduction to Psychology prior to enrolling in this class.

COGNITIVE PSYCHOLOGY 0.5 CREDIT COURSE NUMBER: SOC 653

GRADE LEVEL: 10-12 1 SEMESTER PATHWAY: All

**PREREQUISITES:** Introduction to Psychology (SOC 651)

This course will look at cognitive aspects of psychology. Students will study learning, memory, intelligence, thinking and language. The course will also look at consciousness and altered states of consciousness including dreaming, hypnosis and drugs. The class will conclude with a look at social psychology including social cognition and social interactions. Students will be assessed through homework, tests, quizzes, papers and participation in discussions. This course includes an on-line component, Google Classroom, which requires students to have a basic understanding of computers and discussion forums. Students will be required to have completed Introduction to Psychology prior to enrolling in this class.

INTRODUCTION TO PHILOSOPHY A

**0.5 CREDIT COURSE NUMBER:** SOC 679

GRADE LEVEL: 11-12 1 SEMESTER PATHWAY: ALL

**PREREQUISITES:** NONE

Philosophy looks at the development of human thought and beliefs. The class looks at how our system of beliefs and ethics has emerged over time and how many modern ideas were developed. Introduction to Philosophy A will look at the historical basis of philosophy and how it relates to today's modern world. The class will look at Greek, Roman, and Eastern philosophies along with the ideas of the Renaissance and Enlightenment. The course will show how early philosophies relate to modern pop cultures, looking at television and movies and how many demonstrate the ideas of early philosophers. Students will be assessed through quizzes, homework, class discussions and journal writings.

INTRODUCTION TO PHILOSOPHY B

0.5 CREDIT

**COURSE NUMBER:** 

SOC680

**GRADE LEVEL:** 11-12

1 SEMESTER

PATHWAY: ALL

PREREQUISITES: NONE

Philosophy looks at the development of human thought and beliefs. The class looks at how our system of beliefs and ethics has emerged over time and how many modern ideas were developed. Introduction to Philosophy B will look at the concepts of being, logic, and ethics with each student developing their own philosophical viewpoint on life. Students will be exposed to a variety of ideas within philosophy and will learn how to apply their learning to their lives. Students will be assessed through quizzes, homework, class discussions and journal writings.

HISTORY ON FILM

0.5 CREDIT

**COURSE NUMBER:** SOC605

PATHWAY: ALL

**GRADE LEVEL:** 10-12 **PREREQUISITES**: NONE

History on Film looks at United States history through film. Students will examine ways of viewing film in its cultural, social, and historical context to better understand how life throughout the decades is portrayed on film. In this first section, the course will look at the early history of film through the films of the 1950s. Students will analyze films to determine historical elements of the films and the role that movies play in understanding the cultural history of a time.

# SPECIAL EDUCATION DEPARTMENT

ENGLISH LANGUAGE ARTS 9
GRADE LEVEL: 9 or approval
PREREQUISITES: Active IEPT

1 CREDIT 2 SEMESTERS COURSE NUMBER: ENG 011-2 PATHWAY: All

The focus of English Language Arts 9 is a fundamental and thematic approach to literature from around the globe by integrating communication processes such as reading, writing, listening, speaking and viewing. Reading comprehension and critical analysis of literary texts will extend into written and oral assessment formats for exposition, exploration and reflective purposes. Students will be exposed to structures of writing such as the short story, the novel, poetry, and various expository pieces. Students will need to show mastery of appropriate literary terms, the sentence, the expository paragraph and other grammatical formats.

ENGLISH LANGUAGE ARTS 10 GRADE LEVEL: 10 or approval

1 CREDIT 2 SEMESTERS COURSE NUMBER: ENG 021-2
PATHWAY: All

**PREREQUISITES:** Active IEPT & English 9 (ENG 011-012)

The focus of English Language Arts 10 is a fundamental and thematic approach to literature from around the globe by integrating communication processes such as reading, writing, listening, speaking, and viewing. Reading comprehension and critical analysis of literary texts will extend into written and oral assessment formats for exposition, exploration and reflective purposes. Students will be exposed to structures of writing such as the Argumentative Essay, Compare/Contrast Essay, Short Story and Poetry to show mastery of appropriate literary terms and grammatical formats.

ENGLISH LANGUAGE ARTS 11

1 CREDIT

COURSE NUMBER: ENG 031-2

GRADE LEVEL: 11 or approval

2 SEMESTERS

PATHWAY: All

PREREQUISITES: Active IEPT & English 10 (ENG 021-022)

The focus of English Language Arts 11 is a fundamental and historical approach to American literature by integrating communication processes such as reading, writing, listening, speaking, and viewing as well as literary analysis. This course includes a series of special projects, both written and oral.

ENGLISH LANGUAGE ARTS 12

GRADE LEVEL: 12 or approval

PREREQUISITES: Active IEPT & English 11 (ENG 031-032)

COURSE NUMBER: ENG 041-2

PATHWAY: All

The focus of English Language Arts 12 is to finalize basic communications skills in comprehending writing, speaking and understanding for both those students who intend to continue their education after high school and those who will have completed their education at the end of their high school career. This course includes a series of special projects, both written and oral. This course will concentrate on a basic survey of English and world literature, a grammar review, a comprehensive study of vocabulary pertinent to the everyday world, a chance to practice public speaking and a review of various types of writing. Several thematic units will be covered each semester. Additional readings and activities will be added at the teacher's discretion as time follows.

ALGEBRA I 1 CREDIT COURSE NUMBER: MTH 011-2 GRADE LEVEL: 9 2 SEMESTERS PATHWAY: All

PREREQUISITES: Active IEPT

The focus of Algebra I is to create a knowledge and awareness of the basic principles used in mathematics. The topics that will be covered include properties of multiplication, division, addition, subtraction, and exponents; solving systems of equations, inequalities; and graphing lines and curves. The class will include many examples of real-life situations in order to answer the question, "When will I ever use this? Students use skills from Algebra I in everyday without realizing it. The goal is to encourage students to continue to use formulas in order to simplify real-life situations. Units of study include writing equations, properties of equations, solving equations, graphing linear equations, solving and graphing linear inequalities, polynomials, simplifying square roots, properties of square roots.

GEOMETRY1 CREDITCOURSE NUMBER: MTH 021-2GRADE LEVEL: 9-122 SEMESTERSPATHWAY: All

**PREREQUISITES:** Active IEPT & Algebra I (MTH 011-012)

The focus of Geometry is to create a knowledge and awareness of patterns, points, lines, planes, segments, reasoning and proofs, perpendicular and parallel lines, congruent triangles, perimeter, properties of triangles, quadrilaterals, transformations, similarity, right triangles and trigonometry, circles, area of polygons and circles, surface area and volume, and more. The class deals in the basic Euclidean Geometry and emphasizes using algebraic techniques. The aim of the course is to teach the Geometric concepts to students for use in the higher level math courses and real life applications.

INTEGRATED ALGEBRA II 2 CREDITS COURSE NUMBER: MTH 0311-4
GRADE LEVEL: 11-12 4 SEMESTERS PATHWAY: All

PREREQUISITES: Active IEPT, Algebra and Geometry

Integrated Algebra II, students will pick up where they finished in Algebra I (MTH 101-2). Solving systems of linear equations and inequalities will be expanded upon. Other topics that will be covered include: quadratic equations, logarithms, and trigonometric equations. A graphing calculator will help to enhance the material covered throughout the course. While graphic skills are necessary for students, the ability to create and investigate trigonometric and quadratic functions is very useful. Although the calculator is not required, it is strongly recommended. By the end of Algebra II, students should have mastered logarithms and trigonometric values and functions so as to prepare them for Pre-Calculus. Students will also find that the exposure to these topics will be helpful when taking the MME exam. MTH 311-2 is intended for junior students, while MTH 313-4 is intended for senior students. Upon successful completion of all four terms, students will have fulfilled the Algebra II requirement as outlined in the Michigan Merit Curriculum.

WORLD HISTORY 8 1 CREDIT COURSE NUMBER: SOC 011-2

**GEOGRAPHY** 

GRADE LEVEL: 11 2 SEMESTERS PATHWAY: All

**PREREQUISITES:** Active IEPT. Offered at the discretion of the special education department.

The focus of World History and Geography is to study the human community-how people lived on a daily basis, how they shared ideas, how they ruled and were ruled, and the settlement of human conflicts. Also included in the general study are the subjects of economics, politics, social changes, personal creativity, philosophy, and religious inspiration. An integration of geography will be incorporated throughout the course. Geographical aspects such as landforms, waterways, climate, and natural resources will be observed, while taking into consideration how they impacted people throughout history and the world.

U.S. HISTORY & GEOGRAPHY

1 CREDIT

COURSE NUMBER: SOC 021-2

GRADE LEVEL: 9

2 SEMESTERS

PATHWAY: All

PREREQUISITES: Active IEPT & Teacher Approval. Offered at the discretion of the special education

department.

U.S. History and Geography is a yearlong class that is designed to follow the regular education class with the exception of the pace of the class. The textbook used is the same as the regular education class. Expectations are similar with the exception that all students will be required to read aloud at least three times per week. Students will be expected to write reflectively on given topics, research aspects of history, and demonstrate understanding of history through projects, quizzes and tests. Basic Units of Study: Immigration, Native American Issues, Western, expansion, second Industrial Revolution, World War I, World War II, modern America and the cultural revolution of the 1960s.

CIVICS

0.5 CREDIT

COURSE NUMBER: SOC 031

GRADE LEVEL: 10

1 SEMESTERS

PATHWAY: All

PREREQUISITES: Active IEPT, World History (SOC 011-012), and U.S. History (SOC 021-022). Offered at the

discretion of the special education department.

The focus Civics is to create knowledge and awareness for the student of the development of early government to present day and show its significance at a societal and personal level. The objective is to allow students to have enough knowledge about the workings of government so that they may be active voters, aware of current events and law abiding citizens who are aware of occurrences around them and how they affect their lives. Basic Units of Study: Early government formation, types of governments, the United States Constitution, branches of government, rights of individuals, responsibilities of citizens, and political parties—importance and formation.

PSYCHOLOGY0.5 CREDITCOURSE NUMBER: SOC 061GRADE LEVEL: 11-12 or1 SEMESTERSPATHWAY: All

approval

**PREREQUISITES:** Active IEPT & Teacher Approval. Offered at the discretion of the special education department.

The focus of Psychology is to create knowledge and awareness of Psychology as it relates to the way individuals interact in positive or negative ways in society. The course will explore body and mind, sensation and perception, learning and cognition, memory, thinking and language development, personality, health and adjustment, and social psychology. Students will learn how psychological development, cognition, social development and certain psychological disorders affect the development of a society.

## TECHNOLOGY DEPARTMENT

MECHANICAL DRAFTING **GRADE LEVEL**: 9-12

0.5 CREDIT 1 SEMESTER **COURSE NUMBER: TEC 201** PATHWAY: BT/EMI

PREREQUISITES: None

This course is designed for those students who have an interest in the field of industry and engineering and for those who want a basic understanding of drafting. Drafting will be presented and practiced through a variety of drawings. This is an excellent, hands-on class, offering the students some practical applications of mathematics, problem-solving, and technical skills.

BEGINNING COMPUTER-AIDED DRAFTING

0.5 CREDIT 1 SEMESTER **COURSE NUMBER:** TEC 202 PATHWAY: BT/EMI

**GRADE LEVEL**: 9-12

**PREREQUISITES:** Mechanical Drafting (TEC 201)

This course is designed for those students who have successfully passed mechanical drawing and have an interest in the field of industry and engineering. A basic understanding of computer-aided drafting will be presented and practiced through a variety of drawings. This is an excellent hands-on class, offering the students some practical applications of math, problem-solving, and technical skills.

ADVANCED COMPUTER-AIDED DRAFTING

1 CREDIT 2 SEMESTERS **COURSE NUMBER:** TEC 301-2

PATHWAY: BT/EMI

PATHWAY: BT/EMI

**GRADE LEVEL**: 10-12

**PREREQUISITES:** Beginning Computer-Aided Drafting (TEC 202)

This course is designed to give students a strong background in the field of mechanical drafting and computer-aided drafting (CAD). A basic background of solid modeling using AutoDesk Inventor are covered in this course. This is an ideal course for students interested in engineering, design, and CAD. Some basic units of study include: solid models, sectional views, auxiliary views, and assembly drawing (CAD).

ARCHITECTURE **GRADE LEVEL: 10-12**  0.5 CREDIT 1 SEMESTER **COURSE NUMBER:** TEC400 PATHWAY: BT/EMI

**PREREQUISITES:** Mechanical Drawing/ Beginning CAD (TEC 201/202)

The students taking this course will enhance their previous knowledge learned in the prerequisites classes by applying it to the architectural concepts. This course will cover the basic fundamental skills and concepts of architectural planning, design and drawing. Students in this course will create drawings that develop skills in architecture design, room/space planning, architectural drawings/plans, systems and building codes. Architectural modeling will also be covered.

**GTEK** 

0.5 CREDIT **COURSE NUMBER: TEC 601** 1 SEMESTER

**GRADE LEVEL**: 9-12

**PREREQUISITES:** Application through Office of Technology

Advanced Computer Technology is an internship program in which the student works for the Gibraltar School District's Technology Department. Students will have hands-on computer work and will learn about the design and structure of a large Information Systems department. This course "bridges the gap" between the academic environment and a future work environment. This course allows students to have an "experience" in the Information Technology field, so they may understand, appreciate, and make informed decisions about pursuing higher education or employment in the field. Many employers prefer students who have previous work experience, and this internship course provides the valuable learning experiences that develop both technical and professional skills in an authentic environment.

SPORTS TELEVISION

0.5 CREDIT

**COURSE NUMBER: TEC204** 

GRADE LEVEL: 10-12 1 SEMESTER PATHWAY: All

Learn how to produce a three camera sports production including directing, hand held camera, and game camera. Students will be expected to cover at least one Carlson sporting event a week including evening or weekend times. Class time will be used for critiquing and sports highlight packages for the news.

VIDEO JOURNALISM0.5 CREDITCOURSE NUMBER: TEC203GRADE LEVEL: 10-121 SEMESTERPATHWAY: All

This class will expose students to news writing for television, along with producing news packages on a daily basis. Students will be able to get on-camera experience, as a news reporter and possibly anchor. Students will research stories on the internet and edit them to be included in the Carlson news cast. Students will learn how to gather multimedia elements for producing a wide range of news stories.

## **VOCATIONAL COURSES**

HEATING 8 COOLING I GRADE LEVEL: 11-12 PREREQUISITES: None

4 SEMESTERS

COURSE NUMBER: 350GB01-2
PATHWAY: BT/EMI

This program is a job-entry preparation certificate in Heating, Ventilation, and Cooling for residential service. The course provides theory and hands-on exposure to basics of electricity, air conditioning, heating, and refrigeration technology.

HEATING & COOLING II

GRADE LEVEL: 12

4 SEMESTERS

COURSE NUMBER: 352GB01-2
PATHWAY: BT/EMI

PREREQUISITES: Heating and Cooling I (350GB)

This program is intended for the student who would like to take the next stop into the advanced residential and light commercial heating and cooling industry. Entry level theory and hands-on experience are provided, as well as advanced courses in domestic heating systems and the duct and sheet metal fabrication. Energy management, local codes, and system design will be covered.

### DIGITAL MEDIA/WEB DESIGN

PREREQUISITES: None

2 SEMESTERS

COURSE NUMBER: GB01-2
PATHWAY: BT

This course begins with an introduction to html5 and other web design languages. Students will create and design web sites through the use of cascading style sheets, as well as JavaScript and Dynamic html. In addition, web site creation through available software programs will be taught along with the necessary technology, services, and marketing of an E-commerce site. Graphic Design through the use of Photoshop CC will allow the creation, manipulation and enhancement of digital images and the creation of effective graphics in both business and personal situations from scratch or existing components. Finally, all three components will be combined in a final project where students create an actual web site. Web Design Certification is available to all students who complete the full year. Students interested in careers as a Web Page Developer and/or Graphic Design would benefit from this course.

MARKETING I COURSE NUMBER: 750GB01-2
GRADE LEVEL: 11-12
4 SEMESTERS
PATHWAY: All

**PREREQUISITES:** Marketing A, Application and interview

The ultimate goal in marketing is to satisfy consumers through the attainment of organizational goals. In this course, students will study the four main areas of marketing and research careers in retailing. Much of the work for this class is project oriented and performed in teams. Students will run the day to day operations of Carlson's school store. Students will study how to research the market, develop a plan and make it operation, running the school store, accounting for profits, promoting the business, securing the store, having a customer focus, being an effective manager, and achieving personal success. Student daily school store tasks will include store management, cashiering, security, food processing/handling, and inventory. Students will be required to be a member of DECA.

MARKETING II COURSE NUMBER: 752GB01-2
GRADE LEVEL: 12 4 SEMESTERS PATHWAY: All

PREREQUISITES: Marketing A and B (BUS 201 & 202) or Vocational Marketing I (750GB)

Application and interview

Students in Marketing II will be responsible for managing the day-to-day operations of Carlson's school store, the *Marauders' Galley*. Responsibilities will include: ordering products, setting prices, stocking

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merchandise, creating displays, maintaining financial records, developing promotional strategies, practicing management techniques, and selling merchandise. Students will also study entrepreneurship and discover how to create a business from its initial start-up and manage the responsibilities and risks involved. Students will be required to be a member of DECA.

DIGITAL MEDIA & FILM I

GRADE LEVEL: 11-12

4 SEMESTERS

COURSE NUMBER: 950GB01-2

PATHWAY: BT/AC

PREREQUISITES: None

This course is a study of techniques and styles in Television Production with an emphasis on digital cameras and digital editing. Students will do projects such as a mini movie as a group and individually. DVD creation and Adobe Photoshop will be touched on. Quizzes and tests will be given throughout the course. Students should be able to shoot and edit video at an intermediate level by the end of class. A certificate of completion will be awarded at the end of this course. The objectives of the class are to learn I-Movie and Final Cut Pro software and professional video shooting techniques. Assessment is based on projects, tests, and quizzes. Students should have an entry-level understanding of computers. Student will be required to have interaction on camera and behind the camera and will need to purchase media for class purposes.

DIGITAL MEDIA & FILM II

GRADE LEVEL: 12

4 SEMESTERS

COURSE NUMBER: 952GB01-2
PATHWAY: BT/AC

PREREQUISITES: Video Productions I (950GB)

This course is a study of advanced techniques and styles in Television Production with an emphasis on digital cameras and digital editing. Students will do projects in a small group and individually. DVD creation and Adobe Photoshop will be taught. Quizzes and tests will be given throughout the course. Student should be able to shoot and edit video at an advanced level by the end of class. Students will be required to show strong editing and shooting skills. A certificate of completion will be awarded at the end of this course. The objectives of the class are to master Final Cut Pro software and professional video shooting techniques. Assessment is based on projects, tests, and quizzes. Students should already have a good understanding of computers. Students will be required to have a number of interactions on camera and behind the camera, and they will need to purchase media for class purposes.

CONSTRUCTION TRADES I

GRADE LEVEL: 11-12

4 SEMESTERS

PATHWAY: BT/EMI

PREREQUISITES: None

This is a course that is designed to prepare students for a career in the extremely diverse Construction Trades field. Not only will this course prepare students for job openings for entry level positions in the fields of Carpentry, Electrical, Plumbing, Masonry, Concrete Placement, and HVAC; it will also be of great benefit to those who wish to pursue careers in the professions of Architecture, Civil Engineering, Surveying,

Construction Supervision and Management, Estimating, and careers as Licensed Builders and Renovators. The instructor uses many different methods of instruction that are aimed at achieving topical knowledge, mathematical precision, and physical skills, all in a way that today's students will find rewarding and fun.

CONSTRUCTION TRADES II

GRADE LEVEL: 12

4 SEMESTERS

COURSE NUMBER: 712GB01-2
PATHWAY: BT/EMI

**PREREQUISITES:** Construction Trades I and Vocational Application Form

This advanced level course deals directly with the application of the skills and knowledge needed in Construction by putting the skills and knowledge to use in real residential and commercial building projects. Even though this course is truly "hands-on" in nature, it still delivers academic level knowledge through deeper real life applications. If students complete both Construction Trades I & II, they are awarded a senior year Mathematics credit and a Visual and Performing Arts credit. This program offers articulated credit with several colleges.

# **OFF-SITE VOCATIONAL COURSES**

## DOWNRIVER CAREER TECHNICAL EDUCATION

The objective of a career technical class is to provide a very sophisticated training experience for the student while one is still in high school, so upon graduation one might directly enter the labor market or continue on for advanced training in the chosen career area. Toward this end, the career technical programs have adopted the curriculum developed by the State of Michigan, which provides for training that has been identified by being necessary for each specific occupational area.

**LOCATION:** Airport

**LOCATION:** Airport

**LOCATION:** Airport

AGRISCIENCE 1 /ZOOLOGY (120AT)

(YEAR LONG CLASS)

Prerequisite: 10th – 12th grade

This class includes a study of domesticated and wild animals. Areas of study include; breed and species origins, systems, nutrition, genetics, disease, use, and current animal issues such as animal rights and welfare. Students will have animal labs (including dissection) and activities to help them understand the animals' body and behaviors. This course will make students aware of career opportunities in the areas of animal science and production.

FFA participation is mandatory and the course has been designed for those students who want a true agriscience experience. FFA participation will develop leadership, cooperation, career, and personal skills which are vital in today's world.

AGRISCIENCE 2 /BOTONY (122AT)

(YEAR LONG CLASS)

Prerequisite: 10th – 12th grade

This course will focus on plant parts, function, use, classification and specific forms of plant production. Practical applications in forestry, landscaping, greenhouse production, pesticides, conservation and crop production will illustrate the need and use for plants in our society and environment. Major Natural Resource topics of study include: wildlife, forestry, soil, air, water, minerals and energy sources. This course will make students aware of career opportunities in the areas of plant science and production, natural resources and conservation. Agricultural Business and marketing will also be explored.

FFA participation is mandatory and course has been designed for those students who want a true Agriscience experience. FFA participation will develop leadership, cooperation, career, and personal skills which are vital in today's world

ARCHITECTURAL DRAFTING I

AND II

**GRADE LEVEL**: 11-12

Architectural Drafting I & II covers architecture and the important fundamentals that deal with basic architectural symbols used in residential construction and provides an understanding of the arrangement of the various detail sections. Students will have the opportunity to be introduced to and utilize AutoCAD and become familiar with basic to advanced computer CAD techniques. Students will complete a set of house plans. Model construction may be a possibility.

AUTO BODY/COLLISION LOCATION: Huron

REPAIR I

**GRADE LEVEL**: 11-12

**PREREQUISITES:** Vocational Application Form

The collision repair course is designed for the student interested in auto collision as a career choice. The courses utilize the I-Car Live curriculum, which will emphasize skills for entry level jobs, including: safety, basic repair techniques, paint safety, topcoat systems, HVLP spray-gun technology, estimating and detailing. The instructor and the program are ASE/NATEF certified.

AUTO BODY II LOCATION: Huron

**GRADE LEVEL**: 12

PREREQUISITES: Auto Body I and Vocational Application Form

This course is an advanced section of the Auto Body Program. Auto Body 1 students who show an active interest in the Auto Body occupations are recommended by the instructor for Auto Body 2. The Auto Body 2 course is designed for students to actually receive hands-on instruction in the repair and refinishing of the automotive body. The students will use the skills they have learned in Auto Body 1 and will repair automobiles with the use of estimates and repair orders. The students will develop skills to enter the auto body industry as apprentices upon completion of Auto Body Technology.

AUTO I COURSE NUMBER: 220GB01-2
GRADE LEVEL: 11-12 PATHWAY: BT/EMI

**PREREQUISITES:** None

This course is designed to develop student knowledge and skills in basic automotive service and prepare students for Vocational Auto II for advanced study of automotive technology. Students will achieve proficiency in the basic knowledge and performance of automotive service assessed in accordance with NATEF standards (National Automotive Technician Education Federation). Basic units of study include: Automotive electricity and electrical systems, including electronics, brakes and braking systems, steering, suspension and engine performance.

AUTO II COURSE NUMBER: 222GB01-2
GRADE LEVEL: 12 PATHWAY: BT/EMI

PREREQUISITES: Auto I (220GB)

Advanced study of automotive service technology designed to further develop students' knowledge and skills. Students learning objectives for this course are to achieve proficiency in the advanced knowledge skills that are necessary to service modern automotives—assessed in accordance with NATEF standards. Basic units of study include: Automotive electricity and electronics—brakes and braking systems; suspension, steering, and engine performance.

AVIATION I LOCATION: MIAT

**GRADE LEVEL**: 11-12

**PREREQUISITES:** Counselor Approval, ability to provide own transportation to MIAT, Michigan Institute of Aviation Application, completion of Algebra with a C+ or better, acceptable school attendance, and limited after-school activity. This course includes both hands-on as well as classroom instruction. Through the close coordination of framework and power plant curriculum, the student is prepared to enter aviation and non-aviation industry at an entry level.

AVIATION II LOCATION: MIAT

**GRADE LEVEL**: 12

PREREQUISITES: Aviation I, ability to provide transportation to MIAT

This course is a continuation of Aviation Technician I. It includes both hands-on as well as classroom instruction. Through the close coordination of framework and power plant curriculum, the student is prepared to enter aviation and non-aviation industry at an entry level. Upon completion of Aviation Technician I and Aviation Technician II, the student is prepared and eligible to apply for licensing by the FAA as either an Airframe or Power Plant Technician Program.

CABINET AND FURNITURE LOCATION: Trenton

MAKING 18 II

**GRADE LEVEL**: 11-12

This course provides entry-level and upgrade training in kitchen cabinet/furniture construction and provides students with a broad-based set of skills that is required by the wood products manufacturing industry and is directly transferable to the manufacturing sector in general. Students are introduced to the valuable skills necessary for entry-level employment or enter post-secondary wood programs. The program also includes state-of-the-art cabinet-making equipment where students will learn how to operate machines to perform the necessary tasks safely, efficiently, and with a high degree of quality. This course stresses safety as the number one requirement to proper machine operation. Safe operating conditions will be described. The student is provided with entry-level and upgrade training in cabinet and furniture construction skills for making traditional face frame and European (32 mm) cabinet systems. Study includes cabinet analysis and design with the development of process route sheets, estimating, and bill of materials commonly used in modern industry. Special emphasis is placed on specifications of state of the art woodworking machinery, theory and lab machine safety.

CONSTRUCTION TRADES I

**GRADE LEVEL:** 11-12 **PREREQUISITES:** None

This is a course that is designed to prepare students for a career in the extremely diverse Construction Trades field. Not only will this course prepare students for job openings for entry level positions in the fields of Carpentry, Electrical, Plumbing, Masonry, Concrete Placement, and HVAC; it will also be of great benefit to those who wish to pursue careers in the professions of Architecture, Civil Engineering, Surveying, Construction Supervision and Management, Estimating, and careers as Licensed Builders and Renovators. The instructor uses many different methods of instruction that are aimed at achieving topical knowledge, mathematical precision, and physical skills, all in a way that today's students will find rewarding and fun.

**LOCATION:** Southgate

**LOCATION:** Southgate

CONSTRUCTION TRADES II

**GRADE LEVEL**: 12

PREREQUISITES: Construction Trades I

This advanced level course deals directly with the application of the skills and knowledge needed in Construction by putting the skills and knowledge to use in real residential and commercial building projects. Even though this course is truly "hands-on" in nature, it still delivers academic level knowledge through deeper real life applications. If students complete both Construction Trades I & II, they are awarded a senior year Mathematics credit and a Visual and Performing Arts credit. This program offers articulated credit with several colleges.

COSMETOLOGY I 8 II LOCATION: MI College of Beauty

**GRADE LEVEL**: 11-12

Students must attend an orientation with a parent or guardian. Class is held Tuesday through Friday from 12:45 p.m. to 4:30 p.m. and on Saturday from 8:00 a.m. to 4:00 p.m. Students are required to attend class every Saturday. Students will get 750 hours of instruction. After 350 hours, students are allowed to work on clients. Students will acquire a thorough knowledge of: hairstyling, haircutting and shaping, permanent waving, shampoo, hair coloring, manicuring, and facial/scalp treatments. After completing 750 hours of instruction, students are eligible to take the state test to become a licensed cosmetologist.

DENTAL OCCUPATIONS I LOCATION: Woodhaven

**GRADE LEVEL**: 11-12

This course is a combination of subject matter and experience designed to prepare the student to assist the dentist at chair side, to perform reception and clerical functions, and to carry out selected dental laboratory work. Objectives are: (1) to prepare high school students for full-time employment in the dental office occupational area upon completion of the program or to encourage continuing education or training, (2) to provide each student with broad entry skills in a cluster of related jobs. Entry skills include job-finding skills, general work habits, and social attitudes.

DENTAL OCCUPATIONS II LOCATION: Woodhaven

**GRADE LEVEL**: 12

PREREQUISITES: Dental Occupations I

This course will be a continuation of Dental Occupations 1. It will offer further training in dental assisting techniques including such procedures as radiographic techniques, denture repairs, making temporaries and dental office emergencies. It will also offer a chance for a student to obtain some work-related experience.

DIGITAL MEDIA & FILM I LOCATION: Carlson

GRADE LEVEL: 11-12
PREREQUISITES: None

This course is a study of techniques and styles in Television Production with an emphasis on digital cameras and digital editing. Students will do projects such as a mini movie as a group and individually. DVD creation and Adobe Photoshop will be touched on. Quizzes and tests will be given throughout the course. Students should be able to shoot and edit video at an intermediate level by the end of class. A certificate of completion will be awarded at the end of this course. The objectives of the class are to learn I-Movie and Final Cut Pro software and professional video shooting techniques. Assessment is based on projects, tests, and quizzes. Students should have an entry-level understanding of computers. Student will be required to have interaction on camera and behind the camera and will need to purchase media for class purposes.

**LOCATION:** Carlson

DIGITAL MEDIA 8 FILM II

**GRADE LEVEL**: 12

PREREQUISITES: Digital Media & Film I

This course is a study of advanced techniques and styles in Television Production with an emphasis on digital cameras and digital editing. Students will do projects in a small group and individually. DVD creation and Adobe Photoshop will be taught. Quizzes and tests will be given throughout the course. Student should be able to shoot and edit video at an advanced level by the end of class. Students will be required to show strong editing and shooting skills. A certificate of completion will be awarded at the end of this course. The objectives of the class are to master Final Cut Pro software and professional video shooting techniques. Assessment is based on projects, tests, and quizzes. Students should already have a good understanding of computers. Students will be required to have a number of interactions on camera and behind the camera, and they will need to purchase media for class purposes.

EMT/CRIMINAL JUSTICE I

**LOCATION:** Trenton

**GRADE LEVEL**: 11-12

**PREREQUISITES:** EMT Application

This course is combined with the Criminal Justice course making it a two-hour block class. This is an introductory course to the Emergency Medical Services. This course covers the minimal knowledge and skills necessary to provide lifesaving emergency care to the sick and injured. This includes a certification in CPR for the Healthcare Provider. The Criminal Justice course overviews the criminal justice system in the United States. Topics surveyed are the history of law enforcement, the political, sociological and philosophical background of police functions, and the criminal courts. Constitutional problems as they relate to the police function are surveyed and the use of recent technology in criminal justice is discussed. Students meeting Henry Ford Community College requirements will earn college credit as well as high school credit. These credits can be applied toward an associate degree in Paramedic, Risk Management, Fire Science or Criminal Justice.

**EMT/CRIMINAL JUSTICE II** 

**LOCATION:** Trenton

**GRADE LEVEL**: 12

PREREQUISITES: EMT/Criminal Justice I

This course is combined with the Criminal Justice course making it a two-hour block class. The Criminal Justice course offered is a continuance of the program from Henry Ford Community College. The EMT course contains a laboratory component, which provides the technical knowledge and skills necessary for certification as a Basic Emergency Medical Technician (EMT-Basic). Students will complete ambulance and

hospital emergency department rotations at the end of this course (all students must be 18 before attending the clinical experience).

### **ENGINEERING DRAFTING I & II**

GRADE LEVEL: 11 - 12

Engineering Drafting (using CAD) is a course designed as an introduction to computer graphics using the AutoCAD software. Students will learn to use the computer components, terms and commands associated with the AutoCAD system. Students will work with multiview, detail/assembly, exploded and pictorial assembly drawings. This class will involve becoming familiar with the materials and processes of the machine trades. All students will develop a complete set of prints (detail/assembly and pictorial assembly) for a jig or fixture and have them printed and plotted

GRAPHIC ARTS I LOCATION: Southgate

&Woodhaven

**LOCATION:** Flat Rock

**GRADE LEVEL**: 11-12

In the printing industry there are occupations which deal with all aspects in the development of printed material from an initial idea to the actual production. During this first year, the students will spend one semester in a design and layout lab. Their studies will include line drawing, design drawing, layout, paste-up, typesetting and photography. They will also spend one semester in the production lab where they will be involved in binding, silk screen printing, offset printing, press operations, block printing and plate making.

GRAPHIC ARTS II LOCATION: Southgate

&Woodhaven

**LOCATION:** Flat Rock

**LOCATION:** Grosse lle

LOCATION: Grosse Ile, Flat Rock & HFWH

**GRADE LEVEL**: 12

PREREQUISITES: Graphic Arts I

Students will spend an entire year in the production lab involved in press operation, contact printing, dark room activities, layout, design work, plate making, multiple color operations, digital photography, photo editing, web page design, and digital video.

### **HEALTH OCCUPATIONS I**

**GRADE LEVEL:** 11-12

**PREREQUISITES**: 'C' or better in Algebra I, 'C' or better in Biology or Chemistry, orientation requirements fulfilled, physical exam, TB test, and immunization record

This course will provide students with the basic theory and clinical experience for entry level positions in a physician's office, hospital or outpatient clinic. Students will participate in classroom learning consisting of both theory and hands-on demonstrations and practice, as well as have the opportunity to participate in internships/job shadow experiences with local health care professionals. The curriculum provided allows students to explore their interest in many fields within the medical profession, including but not limited to: nursing, medicine, advanced practice nursing, physician's assistant, laboratory science, emergency medical technology, radiology, surgical technology, and nuclear medicine.

HEALTH OCCUPATIONS II (Pharmacy Tech)

**GRADE LEVEL:** 12

PREREQUISITES: Health Occupations I, Health Occupations II Application and approval of the instructor. This course will be a continuation of Health Occupations I with a focus on Pharmacy Technician training. Students will participate in classroom learning that will focus on pharmacy operations and the core responsibilities of a pharmacy technician. Topics such as medication review, dosage forms, drug interactions, pharmacy calculations, federal laws and maintain patient records. Students will have an opportunity to participate in internships/job shadow experience with local pharmacy professionals.

#### **HEALTH OCCUPATIONS II (CNA)**

**GRADE LEVEL**: 12

PREREQUISITES: Health Occupation II Application

The course focuses on information and skills applicable to a person pursuing any health career. Information includes: exploring the many careers in the health field, basic anatomy and physiology, first aid,

communication skills, medical terminology, employability skills, and understanding human behavior. Through a classroom laboratory experience and a clinical experience giving patient care in a local health care facility, the student is able to learn the basic skills necessary to be employed in the health occupation field.

#### HEALTH OCCUPATIONS II

**LOCATION:** Wyandotte

Hospital

**GRADE LEVEL**: 12

PREREQUISITES: Health Occupations I and Health Occupations II Application

This course operates entirely at Henry Ford-Wyandotte Hospital on a semester basis. Each student who takes part in the course will work weekdays for one semester. After proper instruction, each student will be expected to perform the tasks usually assigned to a nurse's assistant. The students must report to work in the proper attire, i.e. white uniform and white shoes. Upon completion of this course the student should be prepared for nursing assistant work.

HOSPITALITY I LOCATION: Riverview

**GRADE LEVEL**: 11-12

The Hospitality and Food Services is a two-year program that offers the opportunity to acquire skills to prepare the student for a successful career entry or continuing education in the field of Food Service, Travel/Tourism, and Lodging occupations. The course will emphasize computational skills and knowledge; problem solving, reasoning, and decision-making skills; leadership skills; and social and employability skills. Students will gain practical experience working in the preparation and service of the student-operated school cafeteria, The Pirates' Den. Various areas of restaurant work such as management, food management and handling, waiter/waitressing, baking, and other duties are exposed throughout the year in a hands-on environment. It is recommended that this course be taken as a yearlong course, in that the skills learned in the first semester will be built upon for the second semester.

HOSPITALITY II LOCATION: Riverview

**GRADE LEVEL**: 12

PREREQUISITES: Hospitality I

This course builds and develops upon the skills learned in the first year. The course will reinforce computational skills and knowledge; problem solving, reasoning, and decision-making skills; leadership skills; and social and employability skills. Students will gain practical experience working in the preparation and service of the student-operated school cafeteria, The Pirates' Den. This course raises the level of expectation for culinary skills, and incorporates the basic methods and techniques of cooking into the class. Skills such as production of soups, stocks, and sauces, and methods of cooking such as sauté', broil, grill, deep-fry, and poach. Second year students are expected to set a tone, and exemplify professionalism in the kitchen. Some students may be eligible for an internship school-to-work program where, where students work at an outside facility instead of coming to class in order to obtain insight and exposure to the industry. Those who finish the two-year program will receive a certificate of completion for their portfolio enhancement.

HEATING & COOLING I LOCATION: Carlson

GRADE LEVEL: 11-12
PREREQUISITES: None

This program is a job-entry preparation certificate in Heating, Ventilation, and Cooling for residential service. The course provides theory and hands-on exposure to basics of electricity, air conditioning, heating, and refrigeration technology.

HEATING & COOLING II LOCATION: Carlson

**GRADE LEVEL**: 12

PREREQUISITES: Heating and Cooling I (350GB)

This program is intended for the student who would like to take the next stop into the advanced residential and light commercial heating and cooling industry. Entry level theory and hands-on experience are provided, as well as advanced courses in domestic heating systems and the duct and sheet metal fabrication. Energy management, local codes, and system design will be covered.

Information Technology:

**LOCATION:** Airport

Computer Information System

Administrator

**GRADE LEVEL**: 11-12

**PREREQUISITES:** Junior status and on course to graduate. (\*Seniors may be admitted on a space available basis.),GPA of 2.0 or higher in core classes, attendance history meets the standard of the sending school district

IT: Computer Information System Administration is a two-year DCTC program. By the completion of the two-year program, students will have a Computer Information Systems Introductory Certificate and 28 credits towards an Associate's Degree at Schoolcraft College. This program prepares the student for entry level positions supporting users of microcomputer components of the operating system. The Computer Information Systems Introductory Certificate introduces students to the operating system and concepts surrounding programming logic. It is predicted that Information Technology jobs will be in high demand in Southeast Michigan. This program will be located at Airport High School.

INTRODUCTION TO LOCATION: Grosse lie

**EDUCATION I** 

GRADE LEVEL: 11-12

**PREREQUISITES:** Attend Orientation Meeting with student and parent, immunization records, TB test and physical

The first year course introduces the unique characteristics of the child, develops respect for children, and guidance skills that help them grow and develop. The student will gain knowledge that enables him/her to decide whether working in the field of education is a suitable, personal career goal; develop and show responsibility in work performance; learn how to study the growth and development of children; recognize the physical, social, emotional, and intellectual abilities and needs of children; understand how children learn and the importance of play in their development; learn how parents and teachers influence the growth and development of the child. The student will gain this knowledge through classroom work and field placement experiences in a preschool and elementary setting.

INTRODUCTION TO EDUCATION II

**GRADE LEVEL:** 12

PREREQUISITES: Introduction to Education I and approval of the instructor

The second year course will introduce the unique characteristics of the teaching field through lesson planning, classroom management, technology and field placement experiences. The student will continue to learn about the field of education through observation and field experience.

MARKETING I

**LOCATION:** Carlson

LOCATION: Grosse Ile

**GRADE LEVEL**: 11-12

PREREQUISITES: Marketing A, Application and interview

The ultimate goal in marketing is to satisfy consumers through the attainment of organizational goals. In this course, students will study the four main areas of marketing and research careers in retailing. Much of the work for this class is project oriented and performed in teams. Students will run the day to day operations of Carlson's school store. Students will study how to research the market, develop a plan and make it operation, running the school store, accounting for profits, promoting the business, securing the store, having a customer focus, being an effective manager, and achieving personal success. Student daily

school store tasks will include store management, cashiering, security, food processing/handling, and inventory. Students will be required to be a member of DECA.

MARKETING II LOCATION: Carlson

**GRADE LEVEL**: 12

PREREQUISITES: Marketing A and B (BUS 201 & 202) or Vocational Marketing I (750GB)

Application and interview

Students in Marketing II will be responsible for managing the day-to-day operations of Carlson's school store, the *Marauders' Galley*. Responsibilities will include: ordering products, setting prices, stocking merchandise, creating displays, maintaining financial records, developing promotional strategies, practicing management techniques, and selling merchandise. Students will also study entrepreneurship and discover how to create a business from its initial start-up and manage the responsibilities and risks involved. Students will be required to be a member of DECA.

Mechatronics LOCATION: FRAP

**GRADE LEVEL: 11** 

PREREQUISITES: Junior status and on course to graduate. (\*Seniors may be admitted on a space available basis.),GPA of 2.0 or higher in core classes,

Attendance history meets the standard of the sending school district & additional prerequisites may be required by Henry Ford College.

Mechatronics is a two year program that combines both principles and skills from several areas vital to modern day manufacturing. Electrical, Mechanical, Fluid (Hydraulics and Pneumatics), Computer Control and Automation/Robotics systems are included in Mechatronics. Through a combination of classroom and intense laboratory exposures, students are prepared for entry into a range of career opportunities throughout the manufacturing, healthcare, architecture and other sectors of the economy.

In cooperation with Henry Ford College, the successful Mechatronics student will finish high school having completed 29 hours of undergraduate credit. Should a student choose to, they can complete an Associate's Degree at HFC within one year of high school graduation. Pathways to apprenticeships will also be available to those who qualify.

WELDING I LOCATION: Flat Rock &

Woodhaven

GRADE LEVEL: 11-12

This course specializes in lab work and shop experience concerned with all types of metal welding, brazing, and flame cutting.

WELDING II LOCATION: Flat Rock &

Woodhaven

**GRADE LEVEL**: 12

This course covers advanced arc and oxyacetylene procedures with as much practical experience as possible. Instruction emphasizes properties of metals, blueprint reading and welding symbols.