

# ACADEMIC & CAREER PLANNING GUIDE

Programs of Study
Course Offerings
Career Clusters





# **SCHOOL DISTRICT OF JANESVILLE**

#### **Educational Services Center**

527 S. Franklin Street, Janesville, WI 53548 Phone: (608) 743-5000 Fax: (608) 743-7491



Craig High School 401 S. Randall Avenue Janesville, WI 53545 Phone: (608) 743-5200 Attendance: (608) 743-5230 Fax: (608) 743-5150



Parker High School 3125 Mineral Point Avenue Janesville, WI 53548 Phone: (608) 743-5600 Attendance: (608) 743-5630 Fax: (608) 743-5550

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Principal's Secretary Tricia Jone	Principal's Secretary Rita Kettleson
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Assistant Principal Shawn Kane	Assistant Principal Jolene Terrones
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(608) 743-5:	
	G–L Counselor Samantha Corrigan
(608) 743-5.	
	M–R Counselor Denise Kruser
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,	School Social Worker Ebony Dunkin
(608) 743-5	
School Psychologist Michelle Costello	
(608) 743-5	
School Social Worker Rebecca Boylar	
(608) 743-5	261

# **CHARTER SCHOOLS**

There are a number of charter school offerings within the School District of Janesville. If you and/or your child are interested in a charter school, please contact the following:



ARISE Virtual Academy, Principal Dr. David Parr – 743-6139 For inquiries and/or questions, please contact: Dr. David Parr – 743-6139

http://www.janesville.k12.wi.us/Default.aspx?alias=www.janesville.k12.wi.us/jva



TAGOS Leadership Academy, Principal Patty Hernandez – 743-5059 For inquiries and/or questions, please contact: Marianne Dries Mcguire and Kimberly Helgstad, Dean of Students – 290-0468

http://www.tagosleadershipacademy.org/



Rock River Charter School, Principal Dr. Lisa Peterson –752-8273 For inquiries and/or questions, please contact: Dr. Lisa Peterson – 752-8273

http://www.janesville.k12.wi.us/roc/index.php



Rock University, Principal Dr. Kolleen Onsrud – 743-5037 For inquiries and/or questions, please contact: Angela Kerr, Dean of Students – 743-7427

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# IMPORTANT PLANNING INFORMATION

As you begin course selection for the upcoming year, it is essential to remember that this is a portion of your long-range high school plan.

Future coursework, postsecondary education, and career goals are impacted by the choices that you make in course selection. If after reading this document you still have questions about the process, please contact the Student Services Office at your student's high school. Staff will assist you in answering questions. The Parker Student Services Office may be reached at 743-5651; the Craig Student Services Office may be reached at 743-5251.

#### **GRADUATION REQUIREMENTS**

Students must earn 26.5 credits. A course that meets five days per week for one semester is awarded 0.5 of a credit. Each student must earn credits in the following required courses:

Curricular Area	Credits Required
	Class of 2022 and beyond
English	4.0
Mathematics	3.0
Social Studies**	3.0
Science (See courses below)	<ul><li>1.0 Physical</li><li>1.0 Bio/Life</li><li>1.0 Additional Science Credit</li></ul>
Physical Education	1.5
Freshman Seminar	0.5
Health Applications	0.5
Personal Finance	0.5
Total Required Credits***	16.0
Total Elective Credits	10.5
Total Credits Required for Graduation*	26.5

<sup>\*\*1.0</sup> credit must be US History or AP American History

#### PHYSICAL SCIENCE

AP Chemistry TC Physics **AP Physics Physical Science** Chemistry TC Chemistry Honors Aerospace Engineering (ES) Principles of Engineering (ES)

#### **BIO/LIFE SCIENCE**

TC Anatomy & Physiology Forensic Science Anatomy & Physiology I & II Genetics Animal Science (ES) TC Microbiology AP Biology Plant Science (ES) AP Environmental Science Biology **Human Body Systems** Intro to Veterinary Principles of Biomedical Science

**Biomedical Innovations** 

Science (ES)

#### **ADDITIONAL CREDITS**

- Students may recover credits or earn credit through summer school. Contact your counselor for more information.
- B. If a student would like to take an off-campus, correspondence, or study/travel programs, all credits must be pre-approved with a maximum allowance of 3.0 credits. More than 3.0 credits may be pre-approved as part of the Early College Credit Program or Start College Now, which allows high school students to take college/technical school courses for credit. See your counselor or Student Services Specialist for further information about this program. Pre-Approval for Credits Over 8 Courses.docx
- C. Students taking courses over the summer through the Wisconsin Center for Academically Talented Youth (WCATY) or Northwestern's Center for Talent Development (CTD) or an online source must follow a Pre-Approval Process. The organization offering the course provides verification of credit earned. Pre-approval forms are available from the Student Services Office and must be considered along with your registration with WCATY, CTD, or any other organization. These courses will not be included in scholarship tie breakers. Questions can be referred to Chris Medenwaldt, 743-5140. Pre-Approval for Credits Over Summer.docx

<sup>\*\*\*</sup>Students must meet Civics Test requirements

#### **EARLY GRADUATION**

Students desiring early graduation from high school must complete all required courses and enough electives to equal or surpass the minimum number of credits required for graduation by the anticipated date of early graduation. Students must also have written approval of their parent or guardian and have completed a minimum of six semesters of high school work. Students must apply at least one semester before the planned date for early graduation. They must consult with their counselor or Student Services Specialist and principal prior to submitting an application. (Board Policy 6310.2)

#### **STUDY HALLS**

All students must be in study hall when not scheduled into a regular class. No credit is earned. Students may schedule a maximum of one study hall each semester.

#### **ADVANCED PLACEMENT (AP) AND HONORS (HR) COURSES**

Advanced Placement and Honors courses are available in all academic areas.

The School District of Janesville offers the Advanced Placement (AP) Program for students who want to be academically challenged. The AP Program is a cooperative educational endeavor between high schools and colleges which offers the potential to earn college credit for college-level courses taken while in high school when students receive a particular score on the AP exam.

#### **ADVANTAGES OF PURSUING AP AND HONORS COURSES**

- Provides rigorous academic experience
- Better prepares students for post-secondary course work
- Increases competitive edge in gaining entrance into selective colleges
- Potential to earn college credit or placement in advanced courses
- Enhances academic preparation for college entrance exams (ACT/SAT)
- Allows students to pursue academic/career interests in more depth



#### **ADVANCED PLACEMENT COURSES**

AP 2-D Design Portfolio	AP Drawing	AP Physics II
AP 3-D Design Portfolio	AP English Language and Composition	AP Psychology
AP Biology	AP English Literature and Composition	AP Spanish Language and Culture
AP Calculus AB	AP Environmental Science	AP Spanish Literature and Culture
AP Calculus BC	AP European History	AP Statistics
AP Chemistry	AP French	AP United States History
AP Chinese	AP Human Geography	AP US Government Politics
AP Computer Science A – JAVA	AP Music Theory	AP World History: Modern
AP Computer Science Principles	AP Physics I	

#### **HONORS COURSES**

Accelerated A Cappella – Honors	Chinese Language and Culture V – Honors	Geometry – Honors
Accelerated English 9-10 – Honors	English 9 – Honors	Algebra 2 – Honors
Accelerated Orchestra – Honors	English 10 – Honors	Pre-Calculus – Honors
Accelerated Wind Ensemble – Honors	English 11 – Honors	Spanish for Heritage Speakers I – Honors
Biology – Honors	French Language and Culture IV – Honors	Spanish for Heritage Speakers II – Honors
TC Chemistry – Honors	French Language and Culture V – Honors	Spanish Language and Culture IV – Honors
Chinese Language and Culture IV – Honors	Global Studies – Honors	Spanish Language and Culture V – Honors
	Algebra 1 – Honors	

#### **TRANSCRIPTED CREDIT (TC)**

Transcripted Credit agreements allow School District of Janesville (SDJ) students the opportunity to take BTC courses. Classes offered for Transcripted Credit are free of charge to the student and are taught by SDJ teachers who are certified by the Wisconsin Technical College System. These are college courses that will produce a permanent college transcript and grade point average for each student. If you believe that producing a permanent college transcript and grade point is not in your best interest academically, please consider requesting a non-transcripted credit (TC) course. If you need more information about Transcripted Credit, see your counselor before requesting courses. Students receive a permanent, official BTC transcript and college G.P.A. that is recognized by many technical colleges and universities in the state of Wisconsin. Please look for the BTC symbol, which identifies specific courses which may be granted Technical College Credit.

The School District of Janesville may offer transcripted credit in the following courses based on certified staff employment.

#### **BLACKHAWK TECHNICAL COLLEGE TRANSCRIPTED COURSES**

TC Anatomy and Physiology – Year	TC English Comp I	TC Microbiology – Year	
TC Animal Science ES	TC Intermediate Algebra with Applications	TC Speech	
TC Aspiring Educators	TC Introductory Statistics	TC Psychology	
TC Chemistry- Honors	TC Marketing Education II – Management,	TC Physics	
TC Child Development	Market Research, Digital Marketing	TC Plant Science ES	
TC Micro-Economics	TC: ECE: Health, Safety, and Nutrition	TC Sociology	
	TC: ECE: Infant and Toddler Development	TC Welding	
		TC Welding Fabrication	

#### **ADVANCED STANDING (AS) CREDIT**

Advanced Standing courses are equivalent to a BTC course and are taught by high school teachers. Classes offered for Advanced Standing credit are free of charge to the student and are taught in the local high school. Students who receive a "B" or better are awarded technical college credit only when they enroll in a program at BTC. Advanced Standing classes vary by high school so check with your school counselor to find out what classes are offered to you at your school. Please look for the BTC symbol, which identifies specific courses which may be granted Technical College Credit.

#### **ADVANCED STANDING COURSES**

AS Accounting I	AS Automotive Processes	AS Culinary Arts III ProStart
AS Advanced Automotive	AS Culinary Arts I	AS Culinary Arts IV ProStart
	AS Culinary Arts II	AS Math 4 the Trades
		AS Medical Terminology

#### **EQUIVALENT COURSE CREDIT**

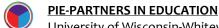
High School equivalent courses are those that have been determined to meet specific criteria through an approved equivalent graduation policy. An "equivalent graduation policy" is defined in Chapter PI 18.02(5) as "A board policy which meets the credit requirements specified for each subject area (§118.33 Wis. Stats.), but which permits selected equivalent courses as long as such courses contain the time allotment and substantially the same objectives to develop the knowledge, concepts, and skills of the course for which an equivalent is proposed." A student can earn up to one equivalent math (EM) credit towards the math requirement for graduation and up to one equivalent science (ES) credit toward the requirement for graduation.

All equivalent courses will have a specific designation. See the list below. This designation will be listed next to the course title on the student transcript. (ES) = equivalent for science (EM) = equivalent for mathematics. For example, a veterinary science course taught by an agriculture instructor for a science equivalent credit would be listed on the student's transcript as Veterinary Science (ES).

#### **EQUIVALENT COURSES**

Equivalent Science:	Equivalent Math:	
TC Animal Science (ES)	AP Computer Science Principles (EM)	Computer Programming, I (EM)
Intro to Veterinary Science (ES)	AP Computer Science A – JAVA (EM)	Digital Electronics (EM)
TC Plant Science (ES)	Computer Programming II (EM)	TC Advanced Computer Science AB - JAVA (EM)
Aerospace Engineering (ES)		
Principles of Engineering (FS)		

For more specific information regarding preparation entrance requirements for a specific program, contact your counselor or Student Services Specialist and/or Blackhawk Technical College.



University of Wisconsin-Whitewater Partners in Education (PIE) has partnered with the School District of Janesville as a way to deliver additional rigorous curriculum and dual high school/college credit options to students in a familiar high school environment. Students will be responsible for paying for the tuition, which is about one third of the cost as an

<u>undergraduate (approximately \$300)</u>. PIE courses are college courses, where earning a grade of 'C' or better enables a student to earn college credits that appear on an official UW-Whitewater transcript. Juniors and seniors must meet at least one of the following requirements can enroll in PIE:

- A GPA of at least 3.25 on a 4.0 scale.
- An ACT score of 24 and a class ranking in the top 50%.
- Students who qualify for PIE fill out the PIE online application form, and once they are accepted, can enroll as UW-Whitewater students for the PIE courses offered within this catalog.

#### **UW WHITEWATER TRANSCRIPTED COURSE**

TC Advanced Computer Science AB - JAVA

#### **SITE SPECIFIED OR DISTANCE LEARNING CLASSES**

The School District of Janesville sometimes offers a course as a site-specific course or via Telepresence technology. When enrollment does not reach the minimum Board of Education requirement to offer a class at each high school, consideration is given to offer the course at Craig or at Parker only, or via Telepresence technology. A Telepresence classroom uses technology to link to multiple sites and allows one teacher to conduct a class in multiple buildings simultaneously and minimizes student travel.

If a course is only offered as a site-specific course, they will be scheduled to allow students time to travel. Start times may be changed to accommodate transportation needs or special circumstances. Parents are responsible for providing transportation if a course is site specific. Counselors/Student Services Specialists will notify parents and students who are affected by the site-specific option after the Board of Education approves staffing. If the enrollment drops below Board of Education requirements after students and parents have been notified of the site-specific status, the course may be dropped.

The District **CANNOT** guarantee the availability of courses that are at the end of a sequence. Enrollment in end of sequence courses must meet district guidelines.

#### **EARLY COLLEGE CREDIT PROGRAM and START COLLEGE NOW**

The Wisconsin <u>Start College Now Program</u>, formerly Youth Options, allows public high school juniors and seniors who meet certain requirements to take post-secondary courses at Blackhawk Technical College. Approved courses count toward high school graduation and college credit. *Applications are due on October 1st for the spring semester and March 1st for the fall semester*.

The Wisconsin Early College Credit Program, formerly Course Options, allows public high school students who meet certain requirements to take post-secondary courses at a <u>Wisconsin public college</u> or a <u>Wisconsin private college</u>. Approved courses count toward high school graduation and college credit. Applications are due on October 1<sup>st</sup> for the spring semester, February 1<sup>st</sup> for summer courses and March 1<sup>st</sup> for the fall semester.

#### **SCHOLARSHIP TIES**

#### WISCONSIN ACADEMIC EXCELLENCE SCHOLARSHIP/TIE BREAKERS

The State of Wisconsin awards an <u>Academic Excellence Scholarship</u> to each high school's top students, if they attend a Wisconsin state public or private college, or a technical college. Craig and Parker High Schools determine the recipients of these scholarships based on cumulative grade point average (GPA) earned through the first semester of the senior year to comply with state statutes.

In the event of a GPA tie the following criteria will be used:

- 1. Total number of AP courses
- 2. Total number of honors courses
- 3. Composite ACT score
- 4. If a fourth tie breaker is needed a random selection process, established by the District Administrator/Designee will be considered.

#### THE WISCONSIN TECHNICAL EXCELLENCE SCHOLARSHIP (TES)

Technical Excellence Scholarships (TES) are to be awarded by the State of Wisconsin to Wisconsin high school seniors who have the highest demonstrated level of proficiency in technical education subjects. The scholarships are only for use at a school within the Wisconsin Technical College System (WTCS) located within the state. The value of the scholarship is up to \$2,250 per year, to be applied towards tuition. Students wishing to be considered for the TES need to meet eligibility criteria set by the Wisconsin Higher Educational Aids Board (HEAB) and will need to be nominated by their school.

More information can be found on HEAB's website, at www.heab.wisconsin.gov

#### **GRADING SCALE**

<u>Grade</u> Range		Rank Points		
uraue	nalige	<u>per Credit</u>		
Α	92 – 100	4.00		
A-	90 – 91	3.67		
B+	88 – 89	3.33		
В	82 – 87	3.00		
B-	80 – 81	2.67		
C+	78 – 79	2.33		
C	72 – 77	2.00		
C-	70 – 71	1.67		
D+	68 – 69	1.33		
D	62 – 67	1.00		
D-	60 – 61	0.67		
F	50 – 59	0		

Janesville's Board of Education approved a laude system to recognize student achievement at graduation. The recognition is based on attainment of a predetermined GPA which is calculated at the end of the 7th semester:

***	Cumulative GPA	4.00-3.75	=	Summa Cum Laude (With high honor)
**	Cumulative GPA	3.74-3.50	=	Magna Cum Laude (With great honor)
*	Cumulative GPA	3.49-3.25	=	Cum Laude (With honor)

#### **SCHEDULE CHANGES**

Students and their parents are asked to carefully and thoughtfully plan the student's schedule each year. If students realistically consider their abilities, interests, and goals in choosing their courses, it should not be necessary to make schedule changes. Careful planning and good decision making will keep schedule changes to a minimum.

- Schedule changes will not be made because of job or athletics during either first or second semester.
- All students will be scheduled for periods one through eight.
- STUDENTS ARE REQUIRED TO KEEP ALL PERIODS AND TEACHERS AS ASSIGNED.

Reasons for a schedule change (during the first 2-weeks of a semester) include:

- 1. Teacher/counselor/administrator recommendation for a change based on ability of student
- 2. Ineligibility to take the course

#### **COURSE DROPS**

- 1. A student who drops a course in weeks 4 12 of a semester for a study hall will receive a "W", withdrawal, recorded for that course. A student who drops a course after week 12 of a semester will receive a semester grade of "F" for that course.
- 2. If the student is carrying 8.0 credits, they may drop one course for a study hall.

# UNIVERSITY OF WISCONSIN SYSTEM ENTRANCE REQUIREMENTS

All University of Wisconsin System institutions require a minimum of 17.0 high school credits. Thirteen of the seventeen credits are distributed as follows:

Core College Preparatory Credits 17.0 credits

English 4.0 Credits Social Science 3.0 Credits Electives 4.0 Credits

Mathematics 3.0 Credits Science 3.0 Credits

Some University of Wisconsin schools recommend exceeding the minimum core college preparatory courses for admissions.

#### II. Elective Credits

Elective credits may be chosen from the above core college preparatory areas, world language\*, fine arts, computer science and other academic areas. Some UW System institutions may also accept vocational courses for some of these 4.0 elective credits.

Each institution may specify additional credit requirements for the remaining 4.0 credits and may specify required content for all 17.0 credits. Please consult your high school counselor or consult the college's website.

The ACT or SAT college entrance exam must be taken in the spring of the junior year.

\*World Language Requirements - UW System institutions strongly recommend students take World Languages, although it is not required.

#### **WISCONSIN TECHNICAL COLLEGE ENTRANCE REQUIREMENTS**

Technical college preparation should include a comprehensive high school curriculum to ensure success. The following are recommended high school courses/credits for adequate preparation for a technical college program:

#### TECHNICAL COLLEGE RECOMMENDED PREPARATORY COURSEWORK

<u>Subject</u>	<u>Credits</u>
English	4.0
Math	3.0 - 4.0
Science	3.0 - 4.0
Social Studies	3.0 - 4.0
Technical Courses	3.0 - 4.0

#### ACCEPTABLE USE OF TECHNOLOGY (Administrative Regulation 6724.1)

The purpose of the School District of Janesville's technology resources is to support and enhance student learning and achievement in the District. Technology uses that might be acceptable on a personal account through another provider may not be acceptable in an educational environment.

#### **INTERNET SAFETY POLICY FOR STUDENTS** (Administrative Regulation 6724.2)

Internet access will be provided to students for the purpose of instruction, accessing information, conducting research, and communicating with others as part of a specific curriculum. Communication on the Internet is often very public in nature. Students are responsible for good behavior in the use of computers and the Internet, just as they are in a classroom or on school property. Parents/guardians may specifically request that their child(ren) not be provided access to the Internet by completing the "School District of Janesville Objection to Using the Internet" form.

High school students must be under <u>on-site supervision</u> when they are on the Internet in school. On-site supervision means the staff member responsible for the student(s) is physically present in the room in which the network is being accessed or utilized by the student(s). Students must have a specific information objective and search strategies in mind before they will be allowed to use Internet resources.

#### Non-Discrimination

It is the policy of the School District of Janesville that no person be denied admission to any public school in the District or be denied participation in, be denied the benefits of, or be discriminated against in any curricular, extracurricular, pupil service, recreational or other program or activity because of the person's sex, race, color, religion, national origin, ancestry, creed, pregnancy, marital or parental status, sexual orientation, gender identity or physical, mental, emotional or learning disability or handicap as required by state and federal laws.

Children of homeless individuals and unaccompanied homeless youth (youth not in the physical custody of a parent/guardian) residing in the District shall have equal access to the same free, appropriate public education, including comparable services, as provided to other children and youth who reside in the District. Homeless children and youth shall not be required to attend a separate school or program for homeless children and shall not be stigmatized by school personnel.

The District shall provide appropriate educational services or programs for students who have been identified as having a disability, regardless of the nature or severity of the disability. The District shall also provide for the reasonable accommodation of a student's sincerely held religious beliefs with regard to examinations and other academic requirements. Requests for religious accommodations shall be made in writing and approved by the building principal.

The District encourages informal resolution of complaints under this policy. A formal complaint resolution procedure is available, however, to address allegations of violations of the District's nondiscrimination policy.

Any complaint by a student or his/her parent or guardian regarding the interpretation or application of the provisions of Title VI, Title VI, Title IX, Section 504 of the Rehabilitation Act of 1973, or the district's non-discrimination policy shall be processed in accordance with the procedures set forth in Board Policy 5020 and Administrative Regulations 5020.1.

For further information, contact: Sonja Robinson, Coordinator of Student Services School District of Janesville
527 S. Franklin St. Janesville, WI 53548
608-743-5079

To see full policy, please visit: <a href="http://www.janesville.k12.wi.us/Board-of-Education/Policies-and-Administrative-Regulations">http://www.janesville.k12.wi.us/Board-of-Education/Policies-and-Administrative-Regulations</a> (Board Policy 5020)



# ADVANCED PLACEMENT

#### WHAT IS ADVANCED PLACEMENT?

The Advanced Placement Program (AP) is a cooperative educational endeavor between high schools, Blackhawk Technical College, colleges or universities. It allows students to enroll in college-level courses while in high school, and gives them the opportunity to show mastery by taking an AP exam.

#### **AP EXAM**

AP exams are given during the month of May. Every student takes the same exam at the same time. Each exam consists of two sections. The first section is made up of multiple-choice questions. The other section consists of free-response questions in various formats: essays, digitally recorded responses, analysis of historical documents, extended problem solving, etc.

#### **AP GRADES**

The AP grading scale is as follows:

- 5 Extremely well qualified
- 4 Well qualified
- 3 Qualified
- 2 Possibly qualified
- 1 No recommendation

Students will receive their grade report in July. Most technical colleges, colleges, and universities accept AP scores of 3 or above.

#### **BENEFITS OF AP**

Students may receive credit, advanced placement or both at most colleges and universities. The amount of credit received varies on the college, AP score, and the subject. Some colleges grant up to six college credits for a score of 5. Students are also able to move into a higher-level class at college as a freshman. This not only translates into time saved, but also a financial savings for each credit earned while in high school. It is possible for a student to take enough AP exams to enter college at a sophomore standing.

#### **COST OF AP EXAMS**

Students do have to pay for each exam taken. The cost is approximately \$96 per exam. Students who are eligible to participate in the Federal Free or Reduced-Price Lunch Program will receive a waiver for the exam fee.



# PROJECT LEAD THE WAY

#### **INTRODUCTION TO ENGINEERING DESIGN (IED)**

This course is designed to introduce students to the design process and the tools used in product development. Students enrolled in Introduction to Engineering Design will learn through first–hand experience the activities that engineers engage in throughout the design cycle. Development of design briefs, sketching, 3D solid modeling and prototyping will provide the foundation for activities in Introduction to Engineering Design

#### **PRINCIPLES OF ENGINEERING (POE)**

Are you interested in applying your math and science skills through a mix of hands-on and academic activities? Principles of Engineering is designed to introduce students to the fundamental skill sets necessary to be a successful engineer. Utilizing technology to design experiments, students will fabricate products which meet specific industry requirements. Students may also participate in case studies and team projects.

#### **DIGITAL ELECTRONICS (DE)**

Digital Electronics introduces students to the fundamentals and applications of digital electronics, programmable logic controls, and the application of electronic circuits and devices. Students will design and test digital circuitry through a blend of hands-on and academic activities.

#### **AEROSPACE ENGINEERING (ASE)**

Take to the skies in Aerospace Engineering while learning about flight, space, navigation, unmanned aerial vehicles and aeronautics. Students will explore activity-based, project-based and problem-based learning through the world of Aerospace Engineering. Students should expect to learn about aviation with hands-on simulators and real-world problem solving. Students will employ engineering and scientific concepts in the solution of aerospace problems. Parker High School will offer this course every other year. Offered; 2022-2023, 2024-2025, 2026-2027, etc...

#### **CIVIL ENGINEERING AND ARCHITECTURE (CEA)**

The major focus of this course is completing long-term projects that involve the development of property sites. As students learn about various aspects of civil engineering and architecture, they apply what they learn to the design and development of a property. The course provides teachers and students freedom to develop the property as a simulation or to students to model the experiences that civil engineers and architects face.

#### **PRINCIPLES OF BIOMEDICAL SCIENCES (PBS)**

This course provides an introduction to the biomedical sciences through hands-on projects and problems. Students investigate concepts of biology and medicine using a case study approach. They will determine the factors that led to the death of a fictional woman as they sequentially piece together evidence found in her medical history and her autopsy report.

#### **HUMAN BODY SYSTEMS (HBS)**

This course allows students to examine the interactions of body systems as they explore identity, communication, power, movement, protection, and homeostasis. Students design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration. Exploring science in action, students build organs and tissues on a skeletal mannequin, work through interesting real-world cases, and often play the role of biomedical professionals to solve medical mysteries.

#### **MEDICAL INTERVENTIONS (MI)**

Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

#### **BIOMEDICAL INNOVATIONS**

Students build on the knowledge and skills gained from previous courses to design their own innovative solutions for the most pressing health challenges of the 21st century.

#### **COMPUTER INTEGRATED MANUFACTURING (CIM)**

Manufactured items are part of everyday life, yet most students have not been introduced to the high-tech, innovative nature of modern manufacturing. At the same time, it teaches students about the manufacturing process, product design, robotics, and automation. Students can earn a virtual manufacturing badge recognized by the National Manufacturing Badge System.

#### **ENGINEERING DESIGN AND DEVELOPMENT (EDD)**

The knowledge and skills students acquire throughout PLTW Engineering come together in EDD as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards, completing EDD ready to take on a post-secondary program or career.

### WORK-BASED LEARNING EXPERIENCES

## YOUTH APPRENTICESHIP

The Wisconsin Youth Apprenticeship (YA) program is a state-wide initiative for high school juniors and seniors that integrate school-based and work-based learning to instruct students in employability and occupational skills. In this program, students are enrolled in academic classes to fulfill high school graduation requirements in addition to 2-4 semesters of technical courses, which can be offered at the local high school, work site, or Blackhawk Technical College. The last component of the YA program is a paid, work experience in the student's chosen industry under the guidance of a skilled mentor.

A Certificate of Proficiency in the specific program area will be earned if the identified business/industry competencies are completed to the proficiency level identified by the Governor's Work-based Learning Board (GWBLB). Youth Apprenticeship programs available in Janesville are:

- Agriculture Food and Natural Resources
- Architectural Drafting and Design
- Arts, A/V Technology and Communication
- Health Science
- Hospitality, Lodging and Tourism

- Information Technology
- Marketing
- Science, Technology, Engineering and Math
- Transportation, Distribution and Logistics

### CO-OP

Co-Op is a skill certificate program for juniors and seniors to help them make the connections between school and the world of work. Students participating in Co-Op may choose to do a one or two-year program that combines academic and technical classroom instruction with paid work experience. The Co-Op Program is a joint program between local business and industry company representatives and the School District of Janesville. Upon completion of the Co-Op course, each student will earn a State of Wisconsin certificate. Co-Op programs are available for students in the following areas:

- Agriculture Cooperative Education (A.C.E.)
- Business COOP
- Marketing Education COOP
- Family and Consumer Science FACS COOP
- Industrial COOP Education (I.C.E.)

# **MENTORSHIP**

Students in a mentorship program earn credit by attending a class that is at a local place of business. Students will learn employability skills, habits, and attitudes conducive to employment success. Mentorship offers the students an opportunity to "try" a career. It assists students to choose a career wisely, prepare for employment suited to their abilities and interests, and learn to work with others in successful and rewarding ways. This course is designed to provide students with real-life work experience within the Janesville community. Prospective students must fill out a statement of interest and obtain teacher recommendations.

# JUNIOR/SENIOR INTERNSHIP

The Junior/Senior Internship is designed to provide a challenging opportunity for motivated, responsible students who are ready to direct their own learning. After an initial period of classroom instruction dealing with leadership, ethics, critical and creative thinking, students will gain experience through career exploration in a business, non-profit, government or academic setting. Students will be released during the class period as part of the 50-hour field experience with their professional mentor. Additional contact hours can be arranged as agreed upon by student, teacher and mentor. A detailed log, portfolio and final project are presented at the completion of the course. Prospective students must fill out a statement of interest and obtain teacher recommendations. See instructor for forms.

# **ELEVATE: GLOBAL BUSINESS (Craig HS Only)**

Elevate is an innovative education capstone, designed by Craig High School, to give students hands-on, real-world experiences immersed in a professional setting. Students engage in a rigorous curriculum while also learning valuable skills for high-demand careers. Industry partners provide real project work and opportunities for students to build portfolios and resumes. Students are mentored by professionals with each course integrating guest instructors who discuss course-related content. Students enter Elevate with a strong academic background and leave with skills and experience to lead the next generation workforce. The Global Business strand will be comprised of the following classes:

Elevate Global Business (1 Year-Long)
Elevate Business Communication (1 Year-Long)
Elevate Business Finance and Processes (1 Year-Long)

Successful completion of the program will earn students credits in the following departments: 1.0 English credit, .5 Social Studies or core requirement, 1.5 Elective credits. Juniors who participate in the program will also have their Personal Finance graduation requirement fulfilled.

Note: The Elevate: Global Business Program does NOT count for TC credit. If you are interested in getting both the Elevate Certificate and TC Credit, please see page 45 for more information.

For application information, please see Mr. Miles, Ms. Haberkorn or Mr. Elsen at Craig High School.

# **ELEVATE: EDUCATE (Craig HS Only)**

Elevate is an innovative education capstone, designed by Craig High School, to give students hands-on, real-world experiences immersed in a professional setting. Students engage in a rigorous curriculum while also learning valuable skills for high-demand careers. Industry partners provide real project work and opportunities for students to build portfolios and resumes. Students are mentored by professionals with each course integrating guest instructors who discuss course-related content. Students enter Elevate with a strong academic background and leave with skills and experience to lead the next generation workforce. The Educate strand will consist of the following classes.

Educate Practicum (1 semester) Child Development (1 semester) Social Justice (2 semesters) TC Aspiring Educators (1 semester)

For application information, please see Dr. Bjoin at Craig High School.

# Parker Art Academy (Parker HS Only)

PARKER

Parker High School Fine Arts Academy For inquiries and/or questions, please contact: Jan Knutson



#### **Janesville International Education Program**

#### GLOBAL SCHOLAR CERTIFICATE

#### Requirements, Process, & Application

Craig High School • Parker High School • ARISE Virtual Academy • Rock River Charter School

• Rock University High School • TAGOS Leadership Academy

The Global Scholar Certificate is a distinction School District of Janesville students have the opportunity to earn through coursework, experiences and reflections to develop cultural literacy, participation in global activities, and contributions through global service projects. To be considered, students must document those activities and reflections as evidence of meeting the Global Scholar criteria for review by the Global Scholar committee. Names of students whom the committee verifies to have successfully met the Global Scholar criteria will be submitted to the Wisconsin Department of Public Instruction (DPI) for award. Students will receive a Global Scholar Certificate from DPI, will have the Global Scholar designation recorded on their transcripts at the time of graduation, and will receive a Global Scholar pin and cord to wear with their cap and gown.

#### Requirements

- 1. Coursework
  - a. Four credits in one world language or evidence of language proficiency at or above Intermediate High on the ACTFL scale.
  - b. Four credits in courses with global content. One credit may be one year of a second world language.
- 2. Eight Reflections demonstrating cultural literacy development.
  - a. Minimum of four reflections on books
  - b. Minimum of one reflection on film
- 3. Verification of active participation/leadership in four, or more school-based extracurricular and special events with a global focus.
- 4. A minimum of twenty hours work on a service learning project related to a global issue.

#### <u>Application Process</u>

Students choosing to work towards the Global Scholars Certificate are responsible for all activities and documentation. Students should contact Social Studies and World Language Teachers or Guidance Counselors with questions or concerns. Qualifying seniors must submit documentation of all requirements including the attached documentation "trackers" and eight reflections via Google folder shared with globalscholars@janesville.k12.wi.us. Google folders must be named with "First Name and Last Name, GS Application, Graduation Year." Each document within the folder must also be identified with the student's name. The folder and documents must be shared with full editing rights, so that they can be shared digitally with the committee to review prior to the meeting. Complete folders must be shared by the last day of 3<sup>rd</sup> quarter prior to graduation.

# **Global Scholar Application**

# **Student Information**

This row generates the naming protocol you need to use to name your Google folder.	First Name	Last Name	Graduation Year
Phone number(s)to contact you about your application, if needed			
Preferred email to receive questions and/or notifications about your application.			
Please list all School District of Janesville schools you have attended in Grades 9- 12. Underline the one	Grade 9 school(s):	Grade 10 school(s):	
you will be graduating from, if there is more than one for Grade 12.	Grade 11 school(s):	Grade 12 school(s):	
If there has been a staff member/teacher assisting you with your application, please provide their name.			

# **GLOBAL COURSEWORK PLANNER/TRACKER**

Note to students: new courses are added each year. If you would like to count a course that is not listed, please consult the Global Scholars advisor at your school. Courses may be counted from multiple schools attended in Grades 9-12.

World Language Coursework—Require or above Intermediate High on the ACTFL scale	ed 4.0 credits in one language OR evidence of lands.	nguage proficiency at
Native Language:	Language of Coursework:	
Approved World Language courses include:		
	nch V Honors, AP French, Spanish I, Spanish II, Spanis n Literature, Spanish for Heritage Speakers I, Spanish , Chinese V Honors, AP Chinese.	
For students wishing to demonstrate language pro Advisor by January 31 of their senior year, so that	oficiency in lieu of the credits, students must notify a assessment arrangements can be made.	ı Global Scholars
1.		
2.		
3.		
4.		
Additional Coursework—Required 4.0	O credits	
Approved courses include: Social Studies: World Civilizations (1.0), AP World His AP Human Geography (1.0), Multicultural American & Business: International Business (.5), ELEVATE: Global Fine & Culinary Arts: History Through Art I (.5, PHS O Science: AP Environmental Science (1.0), Earth Science English: English 10/English 10 Honors (1.0), Accelerate Language (.5), Social Justice: The Power of Choice an Other: International Seminar (.5 or 1.0), Introduction with selection of a global topic) Add more rows if needed to accommodate .5 credit	History (.5), Humanities A(.5) & B(.5) (Craig Only); Ecol Business (1.0, CHS Only) Only), History Through Art II (.5, PHS Only), Global Foote I (.5) and II (.5) ed English 9/10 (.5), Diverse Contemporary Lit (.5), All Voice (1.0) to Music Theory/Music History (.5), AP Research (.5)	onomics ods (.5) P Literature (.5), AP
Courses		Credits Earned
1.		
2.		

3.	
4.	

# **GLOBAL LEARNING CO- and EXTRA-CURRICULAR ACTIVITIES PLANNER/TRACKER**

In addition to documenting four or more activities, <u>students must submit one reflection</u> documenting what they have learned collectively through these experiences and how they will use that learning to make an impact.

Approved Activities (not all activities are offered at all schools): Interact Club, French Club, French Honor Society, Spanish Club, Spanish Honor Society, Russian Club, Sierra Club, American Sign Language (ASL) Club, Human Relations, Japanese Club, International Buddies, Chinese Club, Chinese National Honor Society, LULAC, World Language Fair, Anime Club, Origami Club, Culture Club/Human Relations Club, the Wisconsin Global Youth Summit, BRO/SIS, international travel (school sponsored; other trips may be approved with an additional reflectionsee your Global Scholars Advisor), hosting an international guest, and serving as global ambassador for an international guest.	Advisor Signature
Activities Which May Be Approved Based on Evidence of Global Content: Honor Society, Science Honor Society, Quill & Scroll, Debate, Teen Book Club, Leo Club, Cougar News, the Alliance/GSA	
1.	
2.	
3.	
4.	

Add additional rows as needed.

# **GLOBAL SERVICE LEARNING PROJECT PLANNER/TRACKER**

In addition to documenting activities, students must submit one reflection documenting what they have learned about the global issue and how they made an impact. Think global, act local!

Global Iss	Global Issue Topic of Focus:			
(Examples	(Examples: <u>UN Sustainable Development Goals</u> )			
Global Se	Global Service Hours—Minimum of 20 Hours Required			
Date	Service Activity	Related Organization*	Hours	Adult Signature
		(if applicable)		

Add additional rows as needed.

### **REFLECTIONS PLANNER**

Reflections on Books, Art, Music, and/or Film—8 Required including at least 4 Books and 1 Film		
Title of Work	Type of Work (book, art, music, film)	Reflection Method (written, presentation, other)
1.		
2.		
3.		
4.		
5.		
6.		

7.	
8.	

# ACADEMIC AND CAREER PLANNING: OVERVIEW

A Wisconsin law passed in 2013 says that every school district must provide Academic and Career Planning (ACP) services to students in grades 6-12 beginning in the 2017-18 school year.

ACP is critical because it helps students create and cultivate their own visions for post-secondary success, obtained through self-exploration, career exploration, and the development of career management and planning skills. Teachers, parents, and various partners assist students in this process by helping them deepen their knowledge of themselves, improve their understanding of postsecondary options, better connect their goals to educational coursework and career interests, and take part in long-term planning for life after high school.

To support students in their Academic and Career planning, we have aligned our subject selection handbook using the national Career Cluster framework to assist in our efforts, and created a more comprehensive Academic and Career Planning Guide.

Career Cluster Framework: The career cluster framework provides a sequential path for students to take a career interest and develop it into job potential. The 16 broad career clusters are broken down into 79 specific pathways. Students will be able to learn about multiple careers within each pathway and choose one program of study available in their school, which will be developed through the process laid out in this manual. That POS will be tied to community needs, specific partnerships, and a sequence of courses which will provide a channel for students to move seamlessly from high school to a post-secondary institution. The POS becomes a foundation for each students' Academic and Career Plan, which is a portfolio of student accomplishment in preparation for post-secondary education or the workforce.

Career Clusters are broad occupational groupings based on a set of common knowledge and skills required for a broad group of careers. Wisconsin has adopted the National 16 Career Clusters that also serve as a tool for organizing curriculum and instruction. Career clusters provide opportunities for all students regardless of their career goals and interests. They are a tool for a seamless educational system that blends rigorous academic/technical preparation, provides career development, offers options for students to experience all aspects of a business or industry, and facilitates/assists students and educators with ongoing transitions.

Career Pathways are a sub-grouping of careers used as an organizing tool for curriculum design and instruction. Similar to career clusters, career pathways are grouped based on their requirements for a set of core and similar knowledge and skills for career success. Each pathway highlights a specific part of each cluster. An easy example of this can be seen in the Agriculture, Food and Natural Resources cluster. Seven different pathways, from Animal to Plant Systems highlight the variety of interests that each cluster holds for students. Career Pathways are critical to 21st Century schools and learners. Each pathway is grounded in a set of four guiding principles:

- 1. Career Pathways prepare students for post-secondary education and careers. A Pathway is always about both objectives; it is never a choice between one or the other.
- 2. Career Pathways connect academics to real-world applications. Each Pathway integrates challenging academics with a demanding career and technical educational curriculum. Pathways alter how core academic subjects are taught; they do not lower expectations about what is taught.

- 3. Career Pathways lead to the full range of post-secondary opportunities. Pathways prepare students for all the avenues they might pursue following high school graduation—two- and four-year college, certification programs, apprenticeships, formal job training, and military service. Each Pathway represents a broad industry theme that can appeal to and engage a student regardless of prior academic achievement and post-secondary aspirations.
- 4. Career Pathways improve student achievement. Pathways and Programs of Study are based on accountability. They are designed to produce higher levels of achievement in a number of measurable arenas, including academic and technical scores, high school completion, post-secondary transitions to career and education, and attainment of a formal post-secondary credential.

A Program of Study is a specific career pathway, defined by a local school/district partnership, which is a sequence of instruction based on recommended standards and knowledge and skills, consisting of coursework, co-curricular activities, worksite learning, service learning and other learning experiences including Career and Technical Student Organizations (CTSO). The sequence of instruction provides preparation for a career.

Academic and Career Plan (ACP) includes a program of study and learning that represents a fluid, living, breathing, mapped academic plan reflecting a student's unique set of interests, needs, learning goals, and graduation requirements. It goes beyond the "four-year plan" by recording the student's connections to the larger community including examples of community service and volunteerism; membership in community organizations; participation in leadership activities outside of school; involvement in job shadowing, mentorships, and/or apprenticeships; and the pursuit of skill development through hobbies, athletics, and fine arts.

The Wisconsin Department of Public Instruction has created a resource to help leadership teams get started with ACP planning and implementation. This link can be found at: <u>ACP Implementation Guide</u>

#### **POST-SECONDARY PLANNING**

Students can utilize Wisconsin's Early College Credit Program or Start College Now, courses that provide Transcripted Credit/Advanced Standing, and Advanced Placement coursework, as well as Career Experience and Service Learning credit, to begin some of their post-secondary education while still in High School



# THE 16 CAREER CLUSTERS

CareerClusters  PATHWAYS TO COLLEGE & CAREER READINESS  Agriculture, Food & Natural Resources	The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.
CareerClusters™ PATHWAYS TO COLLEGE & CAREER READINESS  Architecture & Construction	Careers in designing, planning, managing, building, and maintaining the built environment.
CareerClusters™ PATHWAYS TO COLLEGE & CAREER READINESS  Arts, A/V Technology & Communications	Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.
CareerClusters* PATHWAYS TO COLLEGE & CAREER READINESS  Business Management & Administration	Careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations.
CareerClusters™ PATHWAYS TO COLLEGE & CAREER READINESS  Education & Training	Planning, managing and providing education and training services, and related learning support services such as administration, teaching/training, administrative support, and professional support services.
CareerClusters* PATHWAYS TO COLLEGE & CAREER READINESS  Finance	Planning and related services for financial and investment planning, banking, insurance, and business financial management.
CareerClusters* PATHWAYS TO COLLEGE & CAREER READINESS  Government & Public Administration	Planning and executing government functions at the local, state and federal levels, including governance, national security, foreign service, planning, revenue and taxation, and regulations.
Career Clusters* PATHWAYS TO COLLEGE & CAREER READINESS Health Science	Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

CareerClusters* PATHWAYS TO COLLEGE & CAREER READINESS  Hospitality & Tourism	Preparing individuals for employment in career pathways that relate to families and human needs such as restaurant and food/beverage services, lodging, travel and tourism, recreation, amusement and attractions.
CareerClusters® PATHWAYS TO COLLEGE & CAREER READINESS Human Services	Preparing individuals for employment in career pathways that relate to families and human needs such as counseling and mental health services, family and community services, personal care, and consumer services.
CareerClusters® PATHWAYS TO COLLEGE & CAREER READINESS Information Technology	Building linkages in IT occupations for entry level, technical, and professional careers related to the design, development, support and management of hardware, software, multimedia and systems integration services.
Career Clusters* PATHWAYS TO COLLEGE & CAREER READINESS  Law, Public Safety, Corrections & Security	Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.
CareerClusters® PATHWAYS TO COLLEGE & CAREER READINESS  Manufacturing	Planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.
CareerClusters* PATHWAYS TO COLLEGE & CAREER READINESS  Marketing	Planning, managing, and performing marketing activities to reach organizational objectives such as brand management, professional sales, merchandising, marketing communications and market research.
Career Clusters  PATHWAYS TO COLLEGE & CAREER READINESS  Science, Technology, Engineering & Mathematics	Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.
Career Clusters  PATHWAYS TO COLLEGE & CAREER READINESS  Transportation, Distribution & Logistics	The planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.
My top three Career Clusters of interest are:	
1. 2.	3.



The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.

#### Do you have an interest in?

#### **Animals**

- Working with sick or injured animals
- Working with companion animals like dogs and cats
- □ Working with unique species such as fish for food
- A medical field
- Marine biology

#### **Natural Resources**

- Native fish and their aquatic habits
- □ Forest ecosystems
- Preservation of endangered species
- Wolves and whitetails in Wisconsin

#### **Foods**

- ☐ What makes bread rise and pop fizz?
- □ Being a food scientist
- Designing new food and flavors
- □ How science is used to process your food
- Chemistry and its application to food

#### **Plants**

- Caring for plants in your home or yard
- Designing landscapes for homes or businesses
- Developing new plants or modifying existing ones
- □ What plants need to grow successfully

#### **PATHWAYS IN THIS CLUSTER**

- Food Products and Processing Systems
- Power, Structural & Technical Systems
- Environmental Service Systems

- Plant Systems
- Natural Resource Systems
- Animal Systems
- Agribusiness Systems

#### CAREER OPTIONS FROM HIGH SCHOOL

On-the-job training and/or minimal experience

- Bee Keeper
- Fisherman

- Nursery Worker
- Stable Worker

- Crop Sprayer
- Landscape

- Pet Groomer
- Vet Hospital Worker

- Farm Worker
- Logger

Pet Shop Worker

#### **CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE**

Community college, technical college, apprenticeship, experience

Arborist

- Crop and/or Animal Farmer
- Genetic Technologist
- Quality Food Control Specialist

- Animal Control Officer
- Environmental Technician
- Golf Course Manager

- Animal Nutritionist
- Farrier

- Greenhouse Manager
- Veterinary Technician

Turf Manager

- Biotech Lab Technician
- Fish and Game Officer
- Horticulturist
- Wastewater Technician

- Cheese Maker
- Forestry Technician
- Landscape Designer

#### **BACHELORS, PRE-PROFESSIONAL OR HIGHER DEGREE**

Colleges/Universities

- Agricultural Commodities Broker
- Animal Scientist
- Geneticist
- Soil Scientist

Agricultural Economist

- Biochemist
- Greenhouse Operator
- Toxicologist

- Agricultural Educator
- Agricultural Engineer
- Agricultural Sales & Communications
- Agriculture Banker
- Animal Psychologist

- Botanist
- Entomologist
  - Marine Biologist

Landscape Architect

 USDA Inspector Veterinarian

- - Plant Pathologist
- Wildlife Biologist

- Forester
- Food Scientist
  - Soil Geologist
- Zoologist

• Game Warden

For recommended School District of Janesville courses please see page 42



Careers in designing, planning, managing, building, and maintaining the built environment.

#### **INTERESTS & ABILITIES**

#### Activities that describe what I like to do:

- Read and follow blueprints and/or instructions
- Picture in my mind what a finished product looks like

#### Personal qualities that describe me:

- Curious
- Good at following directions
- Pay attention to detail
- Good at visualizing possibilities Patient and persistent

#### Work with my hands.

- Perform work that requires precise results
- Solve technical problems
- Visit and learn from beautiful, historic, or interesting buildings
- Follow logical, step-by-step procedures

#### School subjects that I like:

- Math
- Drafting
- Physical Sciences
- Construction Trades
- Electrical Trades/Heat, Air Conditioning and Refrigeration/Technical Education

#### PATHWAYS IN THIS CLUSTER

- Design/Pre-Construction
- Construction
- Maintenance/Operations

#### CAREER OPTIONS FROM HIGH SCHOOL

On-the-job training and/or minimal experience

- Construction Laborer
- Highway Maintenance Worker
- Grading & Leveling Machine Operator

- Construction Worker Helper
- Roofer

Heavy Equipment Operator

• Fence Builder

• Tile Setter

• Groundskeeper and Gardener

#### CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE

Community college, technical college, apprenticeship, experience

- HVAC Technician
- Carpenter

- Electrician
- Plasterer

- Architectural Drafter
- Cement Mason
- Glazier
- Plumber

- Bricklayer
- Drywall Installer
- Pipefitter
- Tile Setter

• Civil Engineering Technician

• Electrical Engineering Technician

#### **BACHELORS, PRE-PROFESSIONAL OR HIGHER DEGREE**

Colleges/Universities

Architect

Civil Engineer

• Grounds Supervisor

• Building Contractor

Cost Estimator

• Interior Design

• C.A.D. Designer

• Electrical Engineer

• Landscape Architect

#### For recommended School District of Janesville courses please see page 42.



Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

#### **INTERESTS & ABILITIES**

#### Activities that describe what I like to do:

- Use my imagination to communicate new information 
   to others
- Perform in front of others
- Read and write
- □ Play a musical instrument
- □ Perform creative, artistic activities
- □ Use video and recording technology
- Design brochures and posters

#### Personal qualities that describe me:

- Creative and imaginative
- Good communicator/good vocabulary
- Curious about new technology
- □ Relate well to feelings and thoughts of others
- □ Determined/tenacious

#### School subjects that I like:

- □ Art/Graphic Design
- □ Music
- Speech and Drama
- □ Journalism/Literature
- Audiovisual Technologies

#### **PATHWAYS IN THIS CLUSTER**

- Audio and Video Technology and Film
- Performing Arts

- Printing Technology
- Journalism and Broadcasting
- Visual Arts
- Telecommunications

#### **CAREER OPTIONS FROM HIGH SCHOOL**

On-the-job training and/or minimal experience

• Floral Designer

Proofreader

• Mural Painter

Food Stylist

- Sign Designer/Painter
- Photographer

Musician

Stained Glass

Pre-Press

#### CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE

Community college, technical college, apprenticeship, experience

- Animator
- Craft Artist
- Taxidermist
- Potter

- Bookbinder
- Prepress Technician
- Public Relations Manager
- Graphic Designer

- Broadcast Technician
- Printing Press Operator
- Sign Painter
- Music Repair Technician

- Caption Writer
- Recording Technician
- Communications Line Maintainer

#### **BACHELORS, PRE-PROFESSIONAL OR HIGHER DEGREE**

Colleges/Universities

- Animator
- Photographer
- Interior Decorator
- Musician

• Art Teacher/Professor Artist Potter Music Teacher Cinematographer • Set Designers Reporter • Art Therapist • Music Therapist Composer Illustrator • Graphic Designer • Music Repair Copy Editor Jeweler Videographer

Journalist

For recommended School District of Janesville courses please see page 43.

Architect



Careers in planning, organizing, directing and evaluating business functions essential to efficient and productive business operations.

• Recording Engineer

#### **INTERESTS & ABILITIES**

Dancer

#### Activities that describe what I like to do:

- Perform routine, organized activities, but can be flexible
- Work with numbers and detailed information
- Be the leader in a group
- Make business contact with people
- Work with computer programs
- Create reports and communicate ideas
- Plan my work and follow instructions without close supervision

#### Personal qualities that describe me:

- Organized
- Practical and logical
- Be the leader in a group
- **Patient**
- Tactful
- Responsible

#### School subjects that I like:

- Computer Applications/Business and Information Technology
- Accounting
- Math
- **English**
- **Economics**

#### PATHWAYS IN THIS CLUSTER

- Administrative Support
- Human Resources Management
- Business Information Management
- Operations Management

• General Management

#### **CAREER OPTIONS FROM HIGH SCHOOL**

On-the-job training and/or minimal experience

- Bank Teller Receptionist

Billing, Cost and Rate Clerk

Caterer

- Telephone Operator
- Hospital Admitting Clerk

• File Clerk

Typist

Data Entry Clerk

Mail Clerk

- Human Resource Clerk
- Hotel Clerk

• Meter Reader

#### CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE

Community college, technical college, apprenticeship, experience

- Accountant
- Court Reporter
- Tax Preparer
- Word Processor

- Administrative Assistant
   Kennel Owner
- Funeral Director
- Retail Sales Supervisor

- Computer Operator
- Small Business Owner
- Management Trainee
- Industrial Clerk

- Court Reporter
- Stenographer

#### **BACHELORS, PRE-PROFESSIONAL OR HIGHER DEGREE**

#### Colleges/Universities

• Accountant - CPA

- Healthcare Administrator
- Theater Manager

- Advertising Manager
- Human Resource Manager
- Travel Agency Manager

Art Director

- Instrument Sales/Manufacturing
- Musician's Agent

- Business and Industry Consultant
- Marketing Manager
- Event Planner

- Marketing Music Jingle Writer
- Sales Representative

For recommended School District of Janesville courses please see page 43.



Planning, managing, and providing education and training services, and related learning support services such as administration, teaching/training, administrative, support, and professional support services.

#### **INTERESTS & ABILITIES**

#### Activities that describe what I like to do:

- Communicate with different types of people
- Help others with their homework or to learn new things
- Go to school
- Direct and plan activities for others
- Handle several responsibilities at once
- Acquire new information
- Help people overcome their challenges

#### Personal qualities that describe me:

- Friendly
- Decision maker П
- Helpful
- Innovative/Inquisitive
- Good listener

#### School subjects that I like:

- Language Arts
- Social Studies
- Math П
- Science П
- Psychology

#### **PATHWAYS IN THIS CLUSTER**

- Administration and Administrative Support
- Professional Support Services
- Teaching/Training

#### CAREER OPTIONS FROM HIGH SCHOOL

On-the-job training and/or minimal experience

Aerobics Instructor

• Dance Teacher

Self-Enrichment Teacher

- Child Care Assistant
- Library Assistant

#### **CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE**

Community college, technical college, apprenticeship, experience

Preschool Teacher

• Library Technician

• Sign Language Interpreter

• Teacher Assistant

• Computer Installation and Demonstration

#### BACHELORS, PRE-PROFESSIONAL OR HIGHER DEGREE

Colleges/Universities

- Apprenticeship Consultant
- School Psychologist
- School Counselor

Bilingual Educator

- Secondary School Teacher
- University Professor

- Educational Administrator
- Teacher of the Blind
- Training Program Manager

- Instructional Coordinator
- Vocational Education Teacher
- Elementary School Teacher

- Kindergarten Teacher
- Librarian

• Special Education Teacher

Music Teacher

- Speech-Language Pathologist
- Adult Literacy Teacher

• Music Therapist

For recommended School District of Janesville courses please see page 43.



Planning, and related services for financial and investment planning, banking, insurance, and business financial management.

#### **INTERESTS & ABILITIES**

#### Activities that describe what I like to do:

- □ Work with numbers
- Work to meet a deadline
- Make predictions based on existing facts
- □ Have a framework of rules by which to operate
- □ Analyze financial information and interpret it to others □
- □ Handle money with accuracy and reliability
- □ Take pride in the way I dress and look

#### Personal qualities that describe me:

- Trustworthy
- Orderly
- Self-confident
- □ Logical
  - Methodical or efficient

#### School subjects that I like:

- Accounting
- □ Math
- Economics
- Banking/Financial Services
- Business Law

#### **PATHWAYS IN THIS CLUSTER**

Accounting

Banking Services

• Business Finance

Insurance

Securities and Investments

#### **CAREER OPTIONS FROM HIGH SCHOOL**

On-the-job training and/or minimal experience

- Bill and Account Collector
- Brokerage Clerk

Cashier

#### **CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE**

Community college, technical college, apprenticeship, experience

Accountant

• Financial Institution Manager

• Loan Officer

• Brokerage Clerk

• Insurance Agent

Personal Property Appraiser

Claims Adjuster

• Investigator and Adjustor

#### **BACHELORS, PRE-PROFESSIONAL OR HIGHER DEGREE**

Colleges/Universities

• Accountant - CPA

Credit Analyst

• Economist

Actuary

• Credit Card Operations Manager

Financial Advisor

Auditor

• Insurance Underwriter

Stockbroker

• Brokerage Clerk

• Investment Advisor

Real Estate Appraiser

• Business and Industry Consultant

• Music Store Accountant

Controller

• School District Business Manager

#### For recommended School District of Janesville courses please see page 43.



Planning and executing government functions at the local, state and federal levels, including governance, national security, foreign service, planning, revenue and taxation, and regulations.

#### **INTERESTS & ABILITIES**

#### Activities that describe what I like to do:

- □ Be involved in politics
- □ Negotiate, defend, and debate ideas and topics
- □ Plan activities and work cooperatively with others
- Work with details
- Perform a variety of duties that may change often
- Analyze information and interpret it to others
- □ Travel and see things that are new to me

#### Personal qualities that describe me:

- Good communicator
- Competitive
- Service minded
- Well organized
- Problem solver

#### School subjects that I like:

- □ Government
- Language Arts
- □ History
- □ Math
- Foreign Language

#### **PATHWAYS IN THIS CLUSTER**

GovernancePlanning

- National Security
- Revenue and Taxation
- Regulation

• Foreign Service

Public Management and Administration

#### **CAREER OPTIONS FROM HIGH SCHOOL**

On-the-job training and/or minimal experience

- Mail Carrier Postal Clerk
  - rk Driver License Examiner
- Mail Handling Machine Operator
- License Clerk

Infantry Forces

#### CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE

Community college, technical college, apprenticeship, experience

Coroner

• Title Examiner

Postmaster

City Planning Aid

Accountant

Transportation Inspector

Building Inspector

Association Executive

Infantry Forces

Special Forces

#### **BACHELORS, PRE-PROFESSIONAL OR HIGHER DEGREE**

Colleges/Universities

Accountant

• Apprenticeship Consultant

Aviation Security Specialist

City Manager

• Dean of Students

Occupational Health & Safety Specialist
 Social Services Administrator

Emergency Management Specialist
 Legislator

• Equal Opportunity Specialist

Infantry Officer

Lawyer

• Special Operations Officer

Music Administrator

Political Scientist

Urban Planner

• Peace Corps Volunteer

Translator and Interpreter

For recommended School District of Janesville courses please see page 44.



Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

#### **INTERESTS & ABILITIES**

#### Activities that describe what I like to do:

- Work under pressure
- Help sick people and animals
- Make decisions based on logic and information П
- Participate in health and science classes
- Respond quickly and calmly in emergencies
- Work as a member of a team
- Follow guidelines precisely and meet strict standards of accuracy

#### Personal qualities that describe me:

- Compassionate and caring
- Good at following directions
- Conscientious and careful П
- **Patient**
- Good listener

#### School subjects that I like:

- **Biological Sciences**
- Chemistry
- Math
- Occupational Health classes
- Language Arts

#### PATHWAYS IN THIS CLUSTER

- Therapeutic Services
- Support Services

Diagnostic Services

- Health Informatics
- Biotechnology Research and Development

#### CAREER OPTIONS FROM HIGH SCHOOL

#### On-the-job training and/or minimal experience

- Certified Nursing Assistant
- Clerk

Food Service Worker

• Hospital Admitting

#### CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE

Community college, technical college, apprenticeship, experience

- Emergency Medical Technician
- Surgical Technician

Dental Assistant

• Home Health Aide

- Translator and Interpreter
- Dental Hygienist

• Massage Therapist

- Ultrasound Technician
- Dialysis Technician

- Physical Therapy Aide
- Medical Assistant

• Occupational Therapy Assistant

- Radiology Technologist
- Registered Nurse

#### **BACHELORS, PRE-PROFESSIONAL OR HIGHER DEGREE**

#### Colleges/Universities

• Athletic Trainer

Chiropractor

- Attrietic Trainer
- Dentist
- Dietician
- Occupational Therapist
- Music Therapist

- Pharmacist
- Primary Care Physician
- Psychiatrist
- Surgeon
- Geneticist
- Statistician

- Podiatrist
- Oral Surgeon
- Registered Nurse
- Nurse Practitioner
- Anesthesiologist
- Hemotherapist

For recommended School District of Janesville courses please see page 44.



Preparing individuals for employment in career pathways that relate to families and human needs such as restaurant and food/beverage services, lodging, travel and tourism, recreation, amusement and attractions.

#### **INTERESTS & ABILITIES**

#### Activities that describe what I like to do:

- Investigate new places and activities
- Work with all ages and types of people
- Organize activities in which other people enjoy themselves
- □ Have a flexible schedule
- □ Help people make up their minds
- □ Communicate easily, tactfully, and courteously
- Learn about other cultures

#### Personal qualities that describe me:

- □ Tactful
- □ Self-motivated
- Works well with others
- Outgoing
- Slow to anger

#### School subjects that I like:

- Language Arts/Speech
- Foreign Language
- Social Sciences
- □ Marketing
- □ Food Services

#### **PATHWAYS IN THIS CLUSTER**

- Restaurants and Food/Beverage Services
- Recreation, Amusements and Attractions

#### Lodging

• Travel and Tourism

Hotel Clerk

#### **CAREER OPTIONS FROM HIGH SCHOOL**

On-the-job training and/or minimal experience

- Baggage Porter and Bellhop
   Furniture Refinisher
- Cake Decorator Guide Waiter/Waitress
- Concierge Usher Short Order Cook
- Food Attendant
   Janitor and Hotel/Motel Cleaner
   Restaurant Host/Hostess

#### **CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE**

Community college, technical college, apprenticeship, experience

- Club Manager Motel/Hotel Manager Translator and Interpreter
- Conference Planner Recreation Director Caterer
- Food Service Supervisor
   Restaurant Manager
   Concierge
- Household Manager
   Taxidermist
   Restaurant Cook/Chef

#### **BACHELORS, PRE-PROFESSIONAL OR HIGHER DEGREE**

Colleges/Universities

- ◆ Archivist◆ Historian◆ Resort Manager
- ◆ Coach◆ Musicians Agent◆ Theatre Manager
- Conservation Technician
   Park Ranger
   Translator and Interpreter
- Curator Recreation Director Zookeeper

#### For recommended School District of Janesville courses please see page 44.



Preparing individuals for employment in career pathways that relate to families and human needs such as counseling and mental health services, family and community services, personal care, and consumer services.

#### **INTERESTS & ABILITIES**

#### Activities that describe what I like to do:

- □ Care about people, their needs, and their problems
- □ Participate in community services and/or volunteering □
- □ Listen to other people's viewpoints
- □ Help people be at their best
- □ Work with people from preschool age to old age
- Think of new ways to do things
- □ Make friends with different kinds of people

#### Personal qualities that describe me:

- □ Good communicator/good listener
- □ Caring
- □ Non-materialistic
- Uses intuition and logic
- Non-judgmental

#### School subjects that I like:

- Language Arts
- □ Psychology/Sociology
- Family and Consumer Sciences
- Finance
- Foreign Language

#### **PATHWAYS IN THIS CLUSTER**

- Early Childhood Development and Services
- Family and Community Services

- Counseling and Mental Health Services
- Personal Care Services
   Consumer Services

#### **CAREER OPTIONS FROM HIGH SCHOOL**

On-the-job training and/or minimal experience

- Aerobics Instructor Cro
  - Crossing Guard

• Household Cook

Nanny

#### **CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE**

Community college, technical college, apprenticeship, experience

- Community Organization Worker
- Institutional Cook

Shoe Repairer

• Cosmetologist

• Nail Technician

• Skin Care Specialist

Funeral Director

• Preschool Teacher

Child Care Assistant

• Embalmer

#### **BACHELORS, PRE-PROFESSIONAL OR HIGHER DEGREE**

Colleges/Universities

Dietician

Psychiatrist

• Financial Counselor

• Investment Advisor

Psychologist

• Personal Counselor

Liturgical Minister

School Counselor

Religious Worker

Clergy

Sociologist

• Vocational Rehab Counselor

Music Therapy

Social Worker

Career Counselor

• Alcohol and Drug Abuse Counselor

For recommended School District of Janesville courses please see page 44.



Building linkages in IT occupations for entry level, technical, and professional careers related to the design, development, support and management of hardware, software, multimedia, and systems integration services.

#### **INTERESTS & ABILITIES**

#### Activities that describe what I like to do:

- □ Work with computers
- □ Reason clearly and logically to solve complex problems□
- Use machines, techniques, and processes
- Read technical materials and diagrams and solve technical problems
- □ Adapt to change
- □ Play video games and figure out how they work
- □ Concentrate for long periods without being distracted

#### Personal qualities that describe me:

- Logic/analytical thinker
  - See details in the big picture
- Persistent
- □ Good concentration skills
- Precise and accurate

#### School subjects that I like:

- □ Math
- Science
- □ Computer Tech/Applications
- Communications
- Graphic Design

#### **PATHWAYS IN THIS CLUSTER**

- Network Systems
- Web and Digital Communications
- Information Support and Services
- Programming and Software Development

#### **CAREER OPTIONS FROM HIGH SCHOOL**

On-the-job training and/or minimal experience

Careers in this field require more than minimal experience or on-the-job training

#### **CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE**

Community college, technical college, apprenticeship, experience

- Computer Support Specialist
- Sound Manager

Computer System Analyst

- Recording Engineer
- Tool Programmer

• Webmaster

#### **BACHELORS, PRE-PROFESSIONAL OR HIGHER DEGREE**

Colleges/Universities

Animator

• Software Engineer

• Computer Programmer

• Computer Engineer

Webmaster

• Computer Security Specialist

- Computer Network Coordinator
- Video Game Designer
- Information Scientist

- Database Administrator
- Computer Systems Analyst
- Illustrator

• Scientific and Engineering Programmer

• Medical and Scientific Illustrator

For recommended School District of Janesville courses please see page 41.



Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.

#### **INTERESTS & ABILITIES**

#### Activities that describe what I like to do:

- □ Work under pressure or in the face of danger
- ☐ Make decisions based on my own observations
- □ Interact with other people
- □ Be in positions of authority
- Respect rules and regulations
- Debate and win arguments
- □ Observe and analyze people's behavior

#### Personal qualities that describe me:

- □ Adventurous
- Dependable
- Community-minded
- Decisive
- □ Optimistic

#### School subjects that I like:

- Language Arts
- □ Psychology/Sociology
- □ Government/History
- Law Enforcement
- □ First Aid/First Responder

#### **PATHWAYS IN THIS CLUSTER**

- Correction Services
- Security and Protective Services
- Emergency and Fire Management Services
- Law Enforcement Services
- Legal Services

#### CAREER OPTIONS FROM HIGH SCHOOL

On-the-job training and/or minimal experience

- Correctional Officer
- Parking Enforcement Officer
- Crossing Guard

Dispatcher

• Security Guard

#### **CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE**

Community college, technical college, apprenticeship, experience

Bailiff

Legal Secretary

• Police Officer

Copyright Law

Musician Law

• Fire Inspector

• Court Reporter

• Paralegal Assistant

• Police Canine Trainer

- Emergency Medical Technician
- Park Ranger

• Firefighter

#### **BACHELORS, PRE-PROFESSIONAL OR HIGHER DEGREE**

Colleges/Universities

Adjudicator

• Park Ranger

• State Patrol Officer

Arbitrator

- Probation and Parole Officer
- Police Officer

• FBI Agent

- Fingerprint Examiner
- Conservation Warden

Judge

- Correctional Officer Supervisor
- Forensic Science Technician

• Judicial Law Clerk

• Private Detective

Lawyer

• Emergency Management Specialist

For recommended School District of Janesville courses please see page 45.



Planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance, and manufacturing/process engineering.

#### **INTERESTS & ABILITIES**

#### Activities that describe what I like to do:

- □ Work with my hands and learn that way
- Put things together
- □ Do routine, organized and accurate work
- Perform activities that produce tangible results
- ☐ Apply math to work out solutions
- Use hand and power tools and operate equipment/machinery
- Visualize objects in three dimensions from flat drawings

#### Personal qualities that describe me:

- □ Practical
- □ Observant
- Physically active
- □ Step-by-step thinker
- Coordinated

#### School subjects that I like:

- Math-Geometry
- □ Chemistry
- Trade and Industry Courses
- Physics
- Language Arts

#### **PATHWAYS IN THIS CLUSTER**

- Health, Safety and Environmental Assurance
- Maintenance, Installation and Repair
- Production

• Engraver

- Logistics and Inventory Control
- Manufacturing Product Process Development
- Quality Assurance

#### **CAREER OPTIONS FROM HIGH SCHOOL**

On-the-job training and/or minimal experience

Brush Painter
 Oil Well Driller

● Tire Builder

Hand Worker

Production Assembler

Order Filler

Production and Planning Clerk
 Apparel and Home Furnishings Dyer

#### **CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE**

Community college, technical college, apprenticeship, experience

• Apparel Pattern Maker

Locksmith

• Combination Welder

Computer technician

• Musical Instrument Repairer

Electrical Engineer

• Electrical Appliance Technician

• Electric Motor Technician

• Quality Control Technician

• Industrial Engineering Technician

• Tool and Die Maker

Machinist

• Electronic Engineering Technician

#### **BACHELORS, PRE-PROFESSIONAL OR HIGHER DEGREE**

Colleges/Universities

• Electrical Engineer

• Environmental Engineer

Stage and Sound

• Electronic Engineer

• Industrial Engineer

• Production Supervisor

• Engineering Manager

• Mechanical Engineer

• Musical Instrument Design

• Equipment Manufacturer

Occupational Health and Safety Inspector

• Communications Operations Manager

For recommended School District of Janesville courses please see page 45.



Planning, managing, and performing marketing activities to reach organizational objectives such as brand management, professional sales, merchandising, marketing communications and market research.

#### **INTERESTS & ABILITIES**

Activities that describe what I like to do:			Pe	-	s that describe me:			
□ Shop and go to the mall			□ Enthusiastic					
	Be in charge			Competitive				
	Make displays and promote ideas			□ Creative				
□ Give presentations and enjoy public speaking			<ul><li>Self-motivated</li><li>Persuasive</li></ul>					
□ Persuade people to buy products or to participate in								
	activities		Sch	nool subjects tl				
□ Communicate my ideas to other people			□ Language Arts . □ Math					
	Take advantage of opportunities to make extra money		. 🗆					
					cation/Marketing			
				Economics				
				Computer Ap	plications			
РАТ	HWAYS IN THIS CLUSTER							
	Marketing Communications	<ul> <li>Marketing Mana</li> </ul>	agei	ment	<ul><li>Marketing Research</li></ul>			
	1erchandising	<ul> <li>Professional Sal</li> </ul>	es		<u> </u>			
CAR	EER OPTIONS FROM HIGH SCHOO	L						
On-t	he-job training and/or minimal expe	rience						
• /	Antique/Collectible Dealer	<ul><li>Cashier</li></ul>			• Counter Clerk			
• 5	treet Vendor	• Telemarketer			• Classified Ad Clerk			
• N	News Vendor	• Wedding Planner			• Customer Service Representative			
CAR	EERS WITH CERTIFICATION/ASSOC	CIATE DEGREE						
	nmunity college, technical college, ap							
• /	Advertising Layout Designer	<ul> <li>Auto Salesperson</li> </ul>			Real Estate Agent			
• /	Advertising Sales Representative	• Buyer			• Instrument Sales			
• /	Auctioneer							
	HELORS, PRE-PROFESSIONAL OR I	HIGHER DEGREE						
	Advertising Account Executive	• Public Relations N	Лan	ager	• Insurance Agent			
• /	Advertising Manager	<ul> <li>Purchasing Agent</li> </ul>	:		Purchasing Manager			
• E	Business Agent	• Research Analyst			Market Research Analyst			
• 1	Marketing Manager	• Real Estate Broke	er		• Public Relations Practitioner			

For recommended School District of Janesville courses please see page 45.



Planning, managing and providing scientific research and professional and technical services, (e.g., physical science, social science. engineering) including laboratory and testing services, and research and development services.

#### **INTERESTS & ABILITIES**

#### Personal qualities that describe me: Activities that describe what I like to do: Detail oriented Interpret formulas Inquisitive Find answers to questions Objective Work in a laboratory Methodical Figure out how things work and investigate new things□ Mechanically inclined Explore new technology School subjects that I like: Experiment to find the best way to do something П Math Pay attention to details and help things be precise □ Science Drafting/Computer Aided Drafting Electronics/Computer Networking Technical Classes/Technology Education

#### PATHWAYS IN THIS CLUSTER

Engineering and Technology

Science and Math

#### CAREER OPTIONS FROM HIGH SCHOOL

On-the-job training and/or minimal experience

Statistical Clerk

#### CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE

Community college, technical college, apprenticeship, experience

Biological Technician

- Veterinary Technician
- Electronics Engineering Technician

- Chemical Technician
- Mechanical Engineering Technician
- Civil Engineering Technician

- Civil Engineering Technician
- Nuclear Technician

• Petroleum Technician

- Mathematical Technician
- Industrial Engineering Technician

#### BACHELORS, PRE-PROFESSIONAL OR HIGHER DEGREE

Colleges/Universities

- Aerospace Engineer
- Civil Engineer

Mechanical Engineer

Anthropologist

Computer Engineer

Metallurgist

Archeologist

• Electrical Engineer

• Mining Engineer

Astronomer

Geologist

Nuclear Engineer

- Biomedical Engineer
- Industrial Engineer

Solar Engineer

Chemical Engineer

Mathematician

Solar Engineer

Statistician

For recommended School District of Janesville courses please see page 45.



The planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment, and facility maintenance.

#### **INTERESTS & ABILITIES**

#### Activities that describe what I like to do: Personal qualities that describe me: Realistic Travel Mechanical See well and have quick reflexes Coordinated Solve mechanical problems Observant Design efficient processes Planner Anticipate needs and prepare to meet them School subjects that I like: Drive or ride П Math Move things from one place to another Trade and Industry courses **Physical Sciences** П **Economics** Foreign Language

#### **PATHWAYS IN THIS CLUSTER**

- Transportation Operations
- Warehousing and Distribution Center Operations
- Sales and Service

- Logistics Planning and Management Services
- Facility and Mobile Equipment Maintenance
- Health, Safety and Environmental Management
- Facility Transportation Systems/Infrastructure Planning, Management and Regulation

#### **CAREER OPTIONS FROM HIGH SCHOOL**

On-the-job training and/or minimal experience

- Bus Driver
   Reservation and Ticket Clerk
- Traffic Clerk

Deckhand

- Service Station Attendant
- Taxicab Driver

• Delivery Driver

- Shipping and Receiving Clerk
- Light Truck Driver

• Highway Maintenance Worker

#### **CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE**

Community college, technical college, apprenticeship, experience

• Aircraft Mechanic

• Diesel Technician

• Security Consultant

- Auto Body Technician
- Motorcycle Technician
- Travel Agent

- Automobile Painter
- Railroad Conductor

Flight Attendant

• Cartographic Technician

#### BACHELORS, PRE-PROFESSIONAL OR HIGHER DEGREE

Colleges/Universities

• Airline Pilot

Environmentalist

• Mining Manager

• Air Traffic Controller

• Locomotive Engineer

• Public Health Sanitarian

Astronaut

• Mechanical Engineer

• Travel Agency Manager

For recommended School District of Janesville courses please see page 45.

# CAREER CLUSTER COURSE RECOMMENDATIONS



Introduction to Agriculture

TC Animal Science

Introduction Veterinary Science

AP Environmental Science

Small Animal Care I & II

TC Plant Science

**Economics** 

TC English Comp

Algebra 2

Biology / AP Biology Chemistry / AP Chemistry

AP Physics I & II

AP US Government and Politics

Agriculture Cooperative Education

**Graphic & Electronic Communications Courses** 

Computer Applications
Exploring Business/Marketing
Accounting I & II
Personal Finance
Marketing I & II
Construction Courses

World Language



TC English Comp I

AP US Government and Politics

Introduction to Engineering Design

Principles of Engineering

Civil Engineering Architectural Design

TC Chemistry / AP Chemistry

AP Physics I & II

Algebra 2

TC Micro-Economics

**AP Statistics** 

AP Environmental Science

**Business and Marketing Courses** 

World Language

AP 2-D Design Portfolio Home and Interior Design

Marketing I & II

Construction Courses

Digital Electronics

Drawing I & II



Advanced Studio Art Courses

Ceramics I Sculpture

Drawing I & II

Photography Web Design

Game Design

AP US Government and Politics

World Language

Concert Band Jazz Band Orchestra Choir

English 10 - Honors

TC Speech

AP English Literature & Composition

**Creative Writing** 

Computer Programming, I & II

Graphic & Electronic Communications Courses

CareerClusters® PATHWAYS TO COLLEGE & CAREER READINESS

### **Business Management** & Administration

Exploring Business/Marketing

Accounting I & II Introduction to Law International Business Personal Finance

Computer Applications I & II Digital Media & Design World Language

Entrepreneurship

Sports Entertainment Marketing TC Marketing Education I & II

Junior/Senior Internship

**Business COOP** TC English Comp I Finance and Investing **Business Communications**  Algebra 2

**AP Chemistry** 

Introduction to Journalism

Exploring Business/Marketing

Algebra 2

Newspaper

Personal Finance

**Digital Electronics** 

Biology / AP Biology Chemistry / AP Chemistry AP US Government and Politics Psychology / AP Psychology

**AP Statistics** 

TC Micro-Economics



TC Child Development

Assistant Childcare Teacher

**Aspiring Educators** 

Computer Applications I & II

Digital Media & Design

**AP Statistics** 

AP Physics I & II

**Art Courses** 

Psychology / AP Psychology

TC Sociology

Humanities A & B

AP English Language & Composition

AP English Literature & Composition

Biology / AP Biology

TC Micro-Economics

PATHWAYS TO COLLEGE & CAREER READINESS

World Language TC English Comp I

TC-Speech

AP US Government and Politics

United States History / AP US History

Algebra 2

Chemistry / AP Chemistry

Personal Finance



Introduction to Law

Exploring Business/Marketing

Marketing I & II Accounting I & II

Computer Applications I & II

Digital Media & Design **Business Communications** 

Finance and Investing

Personal Finance **Business COOP** TC Micro-Economics

TC Sociology

Psychology / AP Psychology AP US Government and Politics

Algebra 2

Pre-Calculus - Honors

AP Calculus AB / AP Calculus BC

TC English Comp I

AP English Literature & Composition

World Language **AP Statistics** 

**International Business** 

International Business Accounting I & II

**Business Communications** Computer Applications I & II Digital Media & Design

Exploring Business/Marketing Personal Finance

**Business COOP** 

Introduction to Statistics

AP US Government and Politics

**AP United States History** 

TC Sociology

TC Micro-Economics Humanities A / B

Psychology / AP Psychology AP Environmental Science

**AP Statistics** Intro to Law TC-Speech

TC English Comp I

AP English Literature & Composition

Biology / AP Biology

TC Chemistry / AP Chemistry

AP Physics I & II World Language

Finance and Investing



Biology / AP Biology Anatomy and Physiology I & II AP Environmental Science TC Chemistry / AP Chemistry

World Language Genetics I & II

Medical Microbiology

**Animal Science Health Occupations** Computer Applications I & II

Psychology / AP Psychology

Medical Terminology

TC-Sociology

TC-Child Development TC English Comp I

TC Speech

Personal Finance



**Business Communications** Marketing I & II **Culinary Courses** TC-Speech

World Language

Computer Applications I & II Digital Media & Design International Business TC Micro-Economics Personal Finance

**AP Statistics** Photography Web Design



Child Development TC-Child Development Accounting I & II

**Health Occupations** 

Genetics I & II

Computer Applications I & II Introduction to Law

World Language

Sociology

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PATHWAYS TO COLLEGE & CAREER READINESS

Information Technology

Computer Applications I & II **Application Development** Computer Programming, I & II

World Language

Graphic & Electronic Communication

AP Computer Science A – JAVA

Digital Media & Design

Game Design

Robotics, Engineering & Programming

Psychology / AP Psychology Contemporary Issues Health and Wellness

Lifetime Health and Fitness Anatomy and Physiology I & II

Digital Art **AP Statistics Digital Electronics** 

Introduction to Engineering



TC Sociology TC Psychology / AP Psychology Contemporary Issues Introduction to Law

World Language

Genetics I & II TC Speech Forensic Science

Anatomy and Physiology I & II AP US Government and Politics TC Micro-Economics TC Child Development



Manufacturing Courses Welding TC Welding Fabrication Introduction to Engineering Design World Language Coursework

Principles of Engineering **Digital Electronics** Music Technology Robotics, Engineering & Programming

**Health Occupations** AP Environmental Science AP Physics I & II Intro to Mechatronics



Marketing I & II Accounting I & II Computer Applications I & II

Digital Media & Design **AP Statistics** 

TC Sociology

International Business Web Design Sports and Entertainment Marketing Art I

**Business Communications** 

World Language Contemporary Issues Photography Digital Art

**Graphic & Electronic Communications** 

TC Micro-Economic

TC Psychology / AP Psychology



Introduction to Engineering Design Principles of Engineering **Digital Electronics Architectural Engineering** Civic Engineering

Aerospace Engineering

Robotics, Engineering & Programming

Physics / AP Physics Digital Art Manufacturing Courses Photography **Transportation Courses** 

Computer Programming, I & II **Application Development** 

TC Micro-Economic Web Design

**AP Statistics** World Language Coursework **Graphic & Electronic Communications Courses** 

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PATHWAYS TO COLLEGE & CAREER READINESS Transportation, **Distribution & Logistics** 

**Transportation Courses** Manufacturing Courses

Welding

Physics / AP Physics Art I TC Micro-Economic

World Language TC Speech

Robotics, Engineering & Programming

## NEW COURSES FOR 2022-2023

The following courses are new for the 2022-2023 academic year. The courses are listed by subject and then by course title. For further information on these courses, refer to the page listed.

Agriculture Science: The Art and Science of Plants (p.XX)

Business and Marketing: The Finance, Economics, and Law of Social Justice (p.XX)

**English**: Writing Through Films (p.XX)

Family and Consumer Science: Early Childhood Education: Health, Safety, and Nutrition (p.XX)
Family and Consumer Science: Early Childhood Education: Infant and Toddler Development (p.XX)

Music: Movies and Music (p.XX)

Physical Education: Athletic Performance and Training (p.XX)
Physical Education: Strength, Agility, and Conditioning II (p.XX)

## **COURSE TITLE CHANGES for 2022-2023**

The following are courses that have changed titles for the 2022-2023 academic year. The courses are listed by subject area and then by course title.

#### **Agriculture Science**

Pre-Veterinary Medicine Grades: 11,12 formerly Veterinary Science Procedures

#### **Mathematics**

Algebra 1 Grades: 9,10,11,12

formerly Integrated Math I

Geometry Grades: 9,10,11,12

formerly Integrated Math II

Algebra 2 Grades: 9,10,11,12

formerly Integrated Math III

#### **World Language**

Chinese Language and Culture I, II, III, IV, IV, and AP Grades: 9,10,11,12

formerly Chinese I, II, III, IV, IV, and AP

French Language and Culture I, II, III, IV, IV, and AP Grades: 9,10,11,12

formerly French I, II, III, IV, IV, and AP

Spanish Language and Culture I, II, III, IV, IV, and AP Grades: 9,10,11,12

formerly Spanish I, II, III, IV, IV, and AP

## **FOUR-YEAR PLAN**

Information necessary to map out a four-year plan is found in this <u>High School Academic and Career Planning Guide</u>. Information is also available from teachers or school counselors, or in conferences held with staff members during course selection.

#### **WORKSHEET**

		WORK				
		GRA	DE			1
Semester A C			Semester B			Credits
1 English			_	nglish		
2 Math			2	Math		
3 Freshman Seminar/Phy Ed			3	hy Ed/Freshman Seminar		
4 cience			4	Science		
5 Social Studies			5	ocial Studies		
6 Elective			6	Elective		
7 Elective			7	Elective		
8 Elective			8	Elective		
	Total Credits:				Total Credits	:
		GRA	DE 1	0		
Seme	ester A	Credits		Seme	ester B	Credits
1 English			1	nglish		
2 Math			2	Math		
3 Phy Ed/Health			3	Health/Phy Ed		
4 science			4	Science		
5 Social Studies			5	ocial Studies		
6 Elective			6	Elective		
7 Elective			7	Elective		
8 Elective			8	Elective		
	Total Credits:				Total Credits	:
		GRA	DE 1	1		
Seme	ester A	Credits		Seme	ester B	Credits
1 English			1	English		
2 Math			2	Math		
3 Personal Finance/Phy Ed			3	Phy Ed/Personal Finance		
4 science			4	Science		
5 Social Studies			5	ocial Studies		
6 Elective			6	Elective		
7 Elective			7	lective		
8 Elective			8	Elective		
,	Total Credits:				Total Credits	:
		GRA	DE 1	2		,
Seme	ester A	Credits		Seme	ester B	Credits
1 English			1	English		
2 Elective				Elective		
3 Elective			3	Elective		
4 Elective			-	Elective		
5 Elective			5	Elective		
6 Elective				Elective		
7 Elective			7	Elective		
8 Elective			_	Elective		
	Total Credits:				Total Credits	:

If a student is not financially able to pay a fee or have the appropriate equipment for a class, please contact the student's school counselor or administrator.

## INTERDISCIPLINARY STUDIES

#### **ELEVATE BUSINESS COMMUNICATIONS**

(Craig HS Only)

**Grades:** 11, 12

Credit: 1.0

Length: Year-Long

Prerequisites: None

Course Number: Semester A: 505631 or **Semester B:** 505632

This course combines classroom instruction with practical application through business immersion. ELEVATE is an innovative education capstone, designed by Craig High School to give high school students hands-on, real-world experiences immersed in a professional setting. Students in the ELEVATE program engage in a rigorous curriculum while also learning valuable skills for high-demand careers. Industry partners provide real project work and experiences, while providing students an opportunity to build their portfolios and resumes. Students are mentored by professionals in a career the student is interested in pursuing. ELEVATE students enter the program with a strong academic background and leave better prepared to be the next generation workforce. Students must complete the application and selection process to be considered or the Elevate program. Students can earn up to 3 full credits by participating in ELEVATE and students must enroll in 3 separate course that make up the entirety of the course; (1) Elevate-Business Communications, (2) Elevate-Global Business, and (3) Elevate- Business Finance and Processes. Successful completion of the program will earn students credits in the following departments: 1.0 English credit, .5 Social Studies or core requirement, 1.5 Elective credits. Juniors who participate in the program will also have their Personal Finance graduation requirement fulfilled.

#### **ELEVATE GLOBAL BUSINESS** (Craig HS Only)

**Grades: 11, 12** Credit: 1.0

Length: Year-Long

Prerequisites: None

Course Number: Semester A: 664141/Semester B: 664142

This course combines classroom instruction with practical application through business immersion. ELEVATE is an innovative education capstone, designed by Craig High School to give high school students hands-on, real-world experiences immersed in a professional setting. Students in the ELEVATE program engage in a rigorous curriculum while also learning valuable skills for high-demand careers. Industry partners provide real project work and experiences, while providing students an opportunity to build their portfolios and resumes. Students are mentored by professionals in a career the student is interested in pursuing. ELEVATE students enter the program with a strong academic background and leave better prepared to be the next generation workforce. Students must complete the application and selection process to be considered or the Elevate program. Students can earn up to 3 full credits by participating in ELEVATE and students must enroll in 3 separate course that make up the entirety of the course; (1) Elevate-Business Communications, (2) Elevate-Global Business, and (3) Elevate-Business Finance and Processes. Successful completion of the program will earn students credits in the following departments: 1.0 English credit, .5 Social Studies or core requirement, 1.5 Elective credits. Juniors who participate in the program will also have their Personal Finance graduation requirement fulfilled.

#### **ELEVATE BUSINESS FINANCE and** PROCESSES (Craig HS Only

**Grades:** 11, 12

Credit: 1.0

Length: Year-Long

**Prerequisites:** None

Semester A: 660431 or Semester B: 660432

This course combines classroom instruction with practical application through business immersion. ELEVATE is an innovative education capstone, designed by Craig High School to give high school students hands-on, real-world experiences immersed in a professional setting. Students in the ELEVATE program engage in a rigorous curriculum while also learning valuable skills for high-demand careers. Industry partners provide real project work and experiences, while providing students an opportunity to build their portfolios and resumes. Students are mentored by professionals in a career the student is interested in pursuing. ELEVATE students enter the program with a strong academic background and leave better prepared to be the next generation workforce. Students must complete the application and selection process to be considered or the Elevate program. Students can earn up to 3 full credits by participating in ELEVATE and students must enroll in 3 separate course that make up the entirety of the course; (1) Elevate-Business Communications, (2) Elevate-Global Business, and (3) Elevate-Business Finance and Processes. Successful completion of the program will earn students credits in the following departments: 1.0 English credit, .5 Social Studies or core requirement, 1.5 Elective credits. Juniors who participate in the program will also have their Personal Finance graduation requirement fulfilled.

#### **FRESHMAN SEMINAR**

**Grades:** 9 **Credit:** 0.5

Length: Semester

Prerequisites: None

Course Number: Sem. A/B 754021 or 754022

Freshman Seminar is a required course for all 9<sup>th</sup> grade students. Study skills, self-advocacy and college and career readiness will be areas of focus, as well as other skills that are necessary to be successful in the high school setting. In addition, students in Freshman Seminar will use Xello, a program that will help students develop a four-year educational plan for high school that aligns with their post-secondary goals. This class is required for graduation starting with the class of 2018.

#### INTERNATIONAL SEMINAR

**Grades:** 10, 11, 12 **Credit:** 0.5 or 1.0

Length: Semester or Year

Prerequisites: None

Course Number: Semester A: 754421 and/or Semester B: 754422 International Seminar is intended for students in grades 10-12 who are interested in enhancing their global competency and, in some cases, pursuing the Global Education Achievement Certificate. The course is also intended for F1, tuition-paying international students to fulfill the Freshman Seminar graduation requirement (this course does <u>not</u> replace the Freshman Seminar requirement for Janesville resident, non-immigrant students). As with Freshman Seminar, study skills, self-advocacy, and leadership will be areas of focus with a special emphasis on global competency. Additionally, students will develop or continue to refine a high school educational plan that aligns with their post-secondary goals in this course. Janesville residents and F1, tuition-paying students will benefit from cross cultural sharing as a fundamental outcome of this course.

#### JUJIOR/SENIOR INTERNSHIP

**Grades:** 11,12

Credit: 0.5

**Length:** Semester, can be taken for one

additional semester

**Prerequisites:** Statement of interest and consent of instructor.

Course Number: 753111

753112

This course is designed to provide a challenging opportunity for motivated, responsible students who are ready to direct their own learning. After an initial period of classroom instruction dealing with leadership, ethics, critical and creative thinking, students will gain experience through career exploration in a business, non-profit, government or academic setting. Students will be released in the seventh period of the day as part of the 50-hour field experience with their professional mentor. Additional contact hours can be arranged as agreed upon by student, teacher and mentor. A detailed log, portfolio and final project are presented at the completion of the course.

#### **LEADERSHIP SKILLS**

**Grades:** 9, 10, 11, 12 **Credit:** 0.5 or 1.0

**Length:** Semester or Year

Prerequisites: None

Course Number: Semester A: 753021

And/or Semester B: 753022

The goal of this course is to develop skills in the following areas: team and climate building, organization, leadership, communication, facilitation, as well as personal reflection and prioritizing. Students can expect to develop leadership skills in project planning and execution that requires communication, creativity, critical thinking, and collaboration. Projects will be related to school improvement and provide students with the opportunity to act on their opinions/issues in our community.

#### PERSONAL FINANCE

Grades: 11 Credit: 0.5

Length: Semester

**Prerequisites:** None

Course Number: Semester A: 750121

Or Semester B: 750122

This course is designed to equip high school students with the knowledge and skills necessary to manage their personal finances effectively. Students will learn "Real Life" skills, which they can use throughout their own lives. Students will learn about investing in a variety of securities (stocks, bonds, mutual funds, etc.). Other topics covered include: careers, post-secondary planning, financial aid, college applications, analyzing pay and benefits, taxes, budgeting, use of banking services, real estate, credit, buying an automobile, buying a home and insurance. In addition, students will use Xello, a program that will help them develop a four-year educational plan for high school that aligns with their post-secondary goals.

#### **SEMINAR**

**Grades:** 10, 11, 12

Credit: 0.5

Length: Semester

**Prerequisites:** None

Course Number: Semester A: 754421

Semester B: 754422

Seminar is intended for students in grades 10 – 12 who have not met the Freshman Seminar requirement. Study skills, self-advocacy and leadership will be areas of focus; as well as other skills that are necessary to be successful in the high school setting. In addition, students in Seminar will use Xello, a program that will help students develop a four-year educational plan for high school that aligns with their post-secondary goals.

#### **TECH SQUAD**

Grades: 9, 10, 11, 12 Credit: 0.5 Length: Semester

**Prerequisites:** Instructor Consent **Course Number:** Semester A: 753011

Or Semester B: 753012

Do you have an interest in helping your teachers and fellow classmates as well as the School District of Janesville (SDJ) move forward with innovative technology approaches to teaching and learning? Students will take on a leadership role among their peers in offering a fresh perspective towards integrating technology in the classroom. Tech Squad students will have the opportunity to offer their services to staff members and student groups who are in need of technology tools and resources. They should be willing to try new things and seek out new opportunities for learning.

# **AGRICULTURE**





COURSE TITLE	9 <sup>™</sup> GRADE	10 <sup>TH</sup> GRADE	11 <sup>TH</sup> GRADE	12 <sup>TH</sup> GRADE
Agriculture Cooperative Education (A.C.E.)			E	E
TC Animal Science (ES)			R	R
AP Environmental Science (Alternate Year 2022-2023)		R	R	R
Art and Science of Plants	E	E	E	E
Field Study in Wildlife Ecology		E	E	E
Introduction to Agriculture	E	E	E	E
Introduction to Veterinary Science (ES)		R	R	R
Large Animal Care (Alternate Year 2023-2024)	E	E	E	E
TC Plant Science (ES)			R	R
Small Animal Care and Management I	E	E	E	E
Small Animal Care and Management II	E	Е	E	E
Pre-Veterinary Medicine		E	E	E
Wildlife Ecology		E	E	E

**E** = Elective for Grade Level **R** = Fulfills Graduation Requirement for Grade Level

AP = Advanced Placement

**AS** = Advanced Standing

**EM** = Equivalent Mathematics

**ES** = Equivalent Science

TC = Transcripted Credit

**MSOE** = Milwaukee School of Engineering

**PLTW** = Project Lead the Way

#### AGRICULTURE COOPERATIVE EDUCATION

(A.C.E)

**Grades:** 11, 12

Credit: 1.0 Length: Year

**Prerequisites:** Currently enrolled in an

agriculture class **Course Number:** 629621

629622

Students who have an agribusiness career objective in mind, or who would like to explore an agribusiness career and enter the work force upon graduation from high school, may be interested in this program. Students will be placed on a job site based upon their interest. For this work experience, students will receive one hour of school release time for job training. Students will take part in FFA career development activities. Students must be enrolled in Agriculture class to enroll in this course.



#### **TC ANIMAL SCIENCE ES**

Grades: 11, 12 Credit: 0.5

Length: Semester

Prerequisites: Small Animal Care Course Number: Semester A: 621521

Or Semester B: 621522

This course is designed to give students an advanced knowledge of production animals and the science that is surrounding the industry. Students will learn about the structural functions of reproduction, digestion, nervous, muscular and endocrine systems. Students will gain an understanding of technical areas such as growth hormones, artificial insemination, embryo transfer, heat synchronization, and cloning to improve efficient livestock production. Science based inquiry, group collaboration in problem solving, and hands-on laboratories activities will be included. Students can expect to take part in FFA activities. This is a college course that will produce a permanent college transcript and grade point average for each student. If you believe that producing a permanent college transcript and grade point is not in your best interest academically at this time, please consider requesting a non-transcripted credit (TC) course. If you need more information about Transcripted Credit, see your counselor before requesting courses. This course is also offered under Science. Transcripted credit may be offered if the SDJ has a licensed staff member employed to teach this course.

#### THE ART AND SCIENCE OF PLANTS

**Grades:** 9, 10, 11, 12

Credit: 0.5

Length: Semester

Prerequisites: None

Course Number: 621211

621212

This course will provide students with lifelong skills working with plants and flowers. Students will learn tips and techniques to develop their ideal landscape or garden. You will be able to identify and assess landscaping needs, understand design principles, and implement your creative ideas. You will learn design principles, material application, cost estimation, identifying the correct plants for your climate, water features, and designs for outdoor living. This course will also offer you the basics of how to create a garden in your space, prepare the soil, choose the right fertilizers, and prevent weeds. Additionally, you will learn about organic gardening, as well as container gardening. Students will have an opportunity to express their creativity by assembling floral arrangements, boutonnieres, and corsages following design elements and principles.

#### **AP ENVIRONMENTAL SCIENCE**

**Grades:** 10, 11, 12

Credit: 1.0

Length: Year

**Prerequisites:** Algebra 1 and 2.0 credits of Science and/or Wildlife Ecology and Field Study in Wildlife Ecology

Course Number: 623231

623232

AP Environmental Science will provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Students will have the opportunity to take the Advanced Placement exam.

This course is also offered under Science.

#### FIELD STUDY IN WILDLIFE ECOLOGY

**Grades:** 10, 11, 12

Credit: 0.5

Length: Semester

**Prerequisites:** None: Wildlife Ecology is

recommended

Course Number: Semester A: 623221

Or Semester B: 623222

This course examines how America's resources provide aesthetic, scientific, recreational and economic benefits. Units of study include the principles of habitat, human impact on habitat, wildlife and waterfowl management, ducks, songbirds, avian predators, shorebirds, reptiles, amphibians, and careers in wildlife and fishery management. Laboratory skills that are ideal for hunters, outdoor enthusiasts, taxidermists and environmentalists alike will be taught. Students are encouraged to participate in FFA activities including the Wildlife Ecology Career Development Event.

#### INTRODUCTION TO AGRICULTURE

**Grades:** 9, 10, 11, 12 **Credit:** 0.5

Length: Semester
Prerequisites: None

Course Number: Semester A: 621021

Or Semester B: 621022

This introductory course will acquaint students with the broad field of agriculture. The student will explore career clusters such as agriculture production; pet/pleasure animals and crops; natural resources including soil, air, water, forestry, and wildlife; and the production and processing of meats, fruits, vegetables, and dairy products. Horticultural science, including greenhouse, nursery and landscape/turf, will be covered as well as agribusiness sales and marketing and agriculture in government. FFA and agricultural leadership opportunities are recommended and will be provided. Resource speakers, field trips and hands-on activities will be included. Students can expect to take part in FFA activities.

#### INTRODUCTION TO VETERINARY SCIENCE

(ES)

**Grades:** 10, 11, 12 **Credit:** 0.5

**Length:** Semester

Prerequisites: Completion of Small Animal

Care & Management I

Course Number: Semester A: 622021

Or Semester B: 622022

This course is designed for students who have a sincere interest in a career related to small animals. Students planning to become a veterinarian, small animal technician, animal scientist, or animal researcher, then this course is highly recommended. Topics to be discussed include medical terminology, anatomy, careers, safety, health, reproduction, scientific research and animal welfare. Each student will complete hands-on veterinary skills including weighing an animal, diagnosis and administering a treatment, cleaning, clipping, grooming, and practicing mock surgery procedures. A school or community animal awareness project will be developed and facilitated through the course. Students can expect to take part in FFA activities.

This course is also offered under Science.

#### LARGE ANIMAL CARE

Grades: 9, 10, 11, 12 Credit: 0.5 Length: Semester

Prerequisites: None

(Alternate Year 2021--2022)

Course Number: Semester A: 621921

Or Semester B: 621922

This course is designed to give students advanced knowledge of large farm animals. The production animals that will be covered will include dairy, beef, swine, poultry, sheep, and goats. This course will provide an understanding of breeds, animal health, nutrition, anatomy and physiology, training, and judging of each animal. Students will learn information, knowledge, and skills associated with careers in animal production and animal science. This curriculum provides laboratory, lecture, and hand on activities. Students will learn through classroom discussions, demonstrations, notes, lectures, and experiments. Student self-guided learning using technology will be incorporated into the course. Guest speakers and field trips to businesses will be utilized when appropriate for the lessons. Laboratory activities relating to each of the species will be incorporated into the course work. Students can expect to take part in FFA activities.



#### **TC PLANT SCIENCE ES**

Grades: 11, 12 Credit: 0.5

**Length:** Semester

**Prerequisites:** None - Introduction to Agriculture and The Art and Science of Plants are recommended.

Course Number: Semester B: 621622

Students will study the processes involved in plant growth, production and reproduction. The functions of plant structures, as well as crop production, will also be studied. Genetic improvement of plants, plant diseases, plant cultural practices and harvest of crops will be explored in detail. There will be various identifications of crops, weeds and seeds. Students will work in the school greenhouse to complete lab activities. Students can expect to take part in FFA activities. This is a college course that will produce a permanent college transcript and grade point average for each student. If you believe that producing a permanent college transcript and grade point is not in your best interest academically at this time, please consider requesting a non-transcripted credit (TC) course. If you need more information about Transcripted Credit, see your counselor before requesting courses. This course is also offered under Science. Transcripted credit may be offered if the SDJ has a licensed staff member employed to teach this course.

## SMALL ANIMAL CARE AND MANAGEMENT I

**Grades:** 9, 10, 11, 12 **Credit:** 0.5

Length: Semester

**Prerequisites:** None

Course Number: Semester A: 621721

Or Semester B: 621722

This course is for students who enjoy domestic animals and want to learn more about the small animal industry and related careers. Animals discussed include dogs, cats, rabbits, small rodents, and other pet and laboratory animals. Topics discussed include safety, feeding, training, animal rights and welfare, anatomy, reproduction, health, behavior, housing, and equipment needed for care. Students will be working with animals in the classroom, which will enhance the course materials. Students can expect to take part in FFA activities.

## SMALL ANIMAL CARE AND MANAGEMENT II

**Grades:** 9, 10, 11, 12 **Credit:** 0.5

Length: Semester

Prerequisites: None

Course Number: Semester A: 621821

Or Semester B: 621822

This course will cover the classification, history, characteristics, housing and equipment, feeding, handling, diseases and ailments, and reproduction of the following species; ferrets, chinchillas, birds, fish, amphibians, reptiles, and exotic pets. Students will learn through classroom discussions, demonstrations, notes, lectures, and experiments. Guest speakers and field trips to businesses, research labs, and veterinarian offices will be used when appropriate for the lessons. Laboratory activities relating to each of the species will be incorporated into the course work. Students will handle and care for small animals. Students will be working with animals in the classroom, which will enhance the course materials. An animal welfare and career project will be developed as part of the course. Students can expect to take part in FFA activities.

#### PRE-VETERINARY MEDICINE

**Grades:** 10,11, 12 **Credit:** 0.5

Length: Semester

**Prerequisites:** Introduction to Veterinary Science ES or Instructor Consent

Course Number: Semester A:622121

Or Semester B: 622122

This course incorporates the concepts and knowledge of basic veterinary science techniques and puts them into practice. Laboratory skills that are ideal for students interested in the veterinary science field or medical field will be taught. Students are guided through different real-life case studies related to large and small animals. Students will work through medical cases and determine the best treatment like a veterinarian would.

#### WILDLIFE ECOLOGY

**Grades:** 10, 11, 12 **Credit:** 0.5

**Length:** Semester **Prerequisites:** None

Course Number: Semester A: 623121

Or Semester B: 623122

This course examines how America's resources provide aesthetic, scientific, recreational and economic benefits. Units of study include the principles of fish and wildlife management, ecology, history of wildlife management, small game, big game, fur bearing animals, fish management, game laws and issues, endangered and threatened species, and aquaculture. Students will take part in FFA activities.





COURSE TITLE	9 <sup>™</sup> GRADE	10 <sup>TH</sup> GRADE	11 <sup>TH</sup> GRADE	12 <sup>TH</sup> GRADE
Advanced Studio: Art Metals (Craig HS Only)			E	E
Advanced Studio: Ceramics		E	E	E
Advanced Studio: Digital Art			E	E
Advanced Studio: Drawing		E	E	E
Advanced Studio: Painting			E	E
Advanced Studio: Photography			E	E
Advanced Studio: Sculpture (Craig HS Only)			E	E
AP Drawing			E	E
AP 2-D Design Portfolio			E	E
AP 3-D Design Portfolio			E	E
3D Art (Parker HS Only)		E	E	E
Art I	E	E	E	E
Art Metals (Craig HS Only)		E	E	E
Ceramics	E	E	E	E
Digital Art I		E	E	E
Digital Art II		E	E	E
Drawing I	E	E	E	E
Drawing II	E	E	E	E
History Through Art I (Parker HS Only)	E	E	E	E
History Through Art II (Parker HS Only)	E	E	E	E
Painting		E	E	E
Photography I		E	E	E
Photography II		E	E	E
Sculpture (Craig HS Only)		Е	E	E

**E** = Elective for Grade Level

**R** = Fulfills Graduation Requirement for **AP** = Advanced Placement

**Grade Level** 

AS = Advanced Standing

**EM** = Equivalent Mathematics

**ES** = Equivalent Science

**MSOE** = Milwaukee School of Engineering

**PLTW** = Project Lead the Way

**ADVANCED STUDIO: ART METALS (Craig HS** Designed for students with a passion and interest in art metals. This course offers Only) an opportunity for the self-motivated artist to advance their design and technical skills in art metals through the advanced exploration of metal as a medium. This **Grades:** 11, 12 course option may be repeated for additional credits. Credit: 0.5 or 1.0 Length: Semester **Prerequisites:** Art Metals Course Number: Semester A: 642221 **ADVANCED STUDIO: CERAMICS** Designed for students with a passion and interest in ceramic arts. This course offers an opportunity for the self-motivated artist to advance their design and technical **Grades:** 10, 11, 12 skills in ceramic arts through the advances exploration of clay as a 3-dimensional Credit: 1.0 medium. This course option may be repeated for additional credits. Length: Year **Prerequisites:** Ceramics Course Number: 641321 641322 **ADVANCED STUDIO: DIGITAL ART** Designed for students with a passion and interest in digital art technology. This course offers an opportunity for the self-motivated artist to advance their skills in a **Grades:**11, 12 variety of digital art techniques. This course option may be repeated for additional Credit: 0.5 or 1.0 Length: Semester or Year Prerequisites: Digital Art I & Digital Art II Course Number: Semester A: 643321 And/or Semester B: 643322 **ADVANCED STUDIO: DRAWING** Designed for students with a passion and interest in drawing. This course offers an opportunity for the self-motivated artist to advance their skills in technical aspects **Grades:** 10, 11, 12 and creativity in drawing and media exploration through a 2-dimensional medium. Credit: 0.5 or 1.0 This course option may be repeated for additional credits. Length: Semester or Year Prerequisites: Drawing I and Drawing II Course Number: Semester A: 640421 And/or Semester B: 640422 **ADVANCED STUDIO: PAINTING** Designed for students with a passion and interest in painting. This course offers an opportunity for the self-motivated artist to advance their skills and creativity in **Grades: 11, 12** painting and media exploration. This course option may be repeated for additional Credit: 1.0 credits. Length: Year **Prerequisites:** Painting Course Number: 644221 644222 **ADVANCED STUDIO: PHOTOGRAPHY** Designed for students with a passion and interest in photography. This course offers an opportunity for the self-motivated artist to advance their technical skills **Grades:** 11, 12 and creativity in traditional and non-traditional photographic experiences. This Credit: 0.5 or 1.0 course option may be repeated for additional elective credits. Length: Semester or Year Prerequisites: Photography I and II Course Number: Semester A: 645221 And/or Semester B: 645222 **ADVANCED STUDIO: SCULPTURE (Craig HS** Designed for students with a passion and interest in sculpture. This course offers an Only) opportunity for the self-motivated artist to advance their design and technical skills in sculptural arts through the advanced exploration of 3-dimensional mediums as an **Grades:** 11, 12 art form. This course option may be repeated for additional elective credits. Credit: 0.5 Length: Semester Prerequisites: Sculpture Course Number: Semester B: 646222

**AP DRAWING** The AP Drawing class enables highly motivated students to do college-level work in Studio Art while still in high school. The AP exam for this course is not solely based **Grades:** 11, 12 on a written examination; instead, students must submit a portfolio of work for Credit: 1.0 evaluation at the end of the school year. Guidelines for the AP Drawing Studio Art Length: Year Portfolios have been designed to encompass a variety of interests and approaches to Prerequisites: Drawing I, Drawing II or drawing. Instructor Consent Course Number: 640521 640522 **AP 2-D DESIGN PORTFOLIO** The AP 2D Design class enables highly motivated students to do **Grades:** 11, 12 college level work in Studio Art while still in high school. The AP exam for this course is not solely based on a written examination; instead, students must submit a Credit: 1.0 portfolio of work for evaluation at the end of the school year. Guidelines for the AP Length: Year 2D Design Studio Art Portfolios have been designed to encompass a variety of Prerequisites: Art I and a 2-D Art course or interests and approaches to design in all 2D media including, but not limited to, Instructor Consent Digital Art, Photography, Printmaking, Painting, Mixed Media and Drawing. Course Number: 649121 649122 **AP 3-D DESIGN PORTFOLIO** The AP 3D Design class enables highly motivated students to do **Grades:** 11, 12 college level work in Studio Art while still in high school. The AP exam for this course is not solely based on a written examination; instead, students must submit a Credit: 1.0 portfolio of work for evaluation at the end of the school year. Guidelines for the AP Length: Year 3D Design Studio Art Portfolios have been designed to encompass a variety of Prerequisites: Art I and a 3-D Art course or interests and approaches to design in all 3D media including, but not limited to, Instructor Consent Ceramics, 3D Art, Sculpture, and Art Metals. Course Number: 649221 649222 This upper-level art course offers an opportunity for students who wish to create **3-D Art** (Parker HS Only) three-dimensional art. Students will explore the element of form using a variety of **Grades:** 10, 11, 12 materials such as clay, plaster, wood, and metals. Students are encouraged to explore Credit: 1.0 individual styles while producing a diverse body of three-dimensional work. We will be Length: Year covering everything from sculpting the human form to abstract sculpture and jewelry Prerequisites: Art I making. Course Number: 641421 641422 ART I This is an introductory course that is a prerequisite for <u>all</u> other art courses except Ceramics I, and Drawing I. Students will learn how to apply the art elements and **Grades:** 9, 10, 11, 12 design principles to original works of art in drawing, painting, printmaking, digital art, Credit: 1.0 art metals, ceramics and sculpture. Length: Year Prerequisites: None Course Number: 640121 640122 **ART METALS** (Craig HS Only) Students will learn to design and shape wires, metals, and related materials into jewelry, sculpture, and constructions. Students will learn jewelry castings, and Grades: 10, 11, 12 stone setting. Students will use basic metal-forming techniques of cutting, sawing, Credit: 0.5 soldering, filing, drilling, hammering and finishing. Students will apply the elements Length: Semester and principles of design to objects made from metal. Prerequisites: Art I or Senior Status Course Number: Semester A: 642121 **CERAMICS** Students will learn the basic forms of clay construction working with coil and slab construction. They will be introduced to the potter's wheel, and various techniques Grades: 9, 10, 11, 12 for surface decorations will be demonstrated and explored. Students will create Credit: 1.0 both functional pottery and nonfunctional sculptural clay forms. Students will Length: Year critique ceramic works of art and research ceramic artists and movements in the

Prerequisites: None

641122

Course Number: Semester: 641121

history of ceramics.

**DIGITAL ART I** 

**Grades:** 10, 11, 12

Credit: 0.5

Length: Semester

Students will create original artwork using Adobe Photoshop and Illustrator drawing and design software. A variety of digital drawing, illustration and design techniques will be explored and applied to original artwork using the elements and principles of design. Students may continue their exploration of digital art technology in Digital Art II.

Prerequisites: Art I or Senior Status

Course Number: Semester A: 643121

**DIGITAL ART II Grades:** 10, 11, 12

Credit: 0.5

Length: Semester

Prerequisites: Digital Art I

Course Number: Semester B: 643222

Using skills acquired in Digital Art I, students will create original graphic design imagery – designs that visually communicate – using more advanced Photoshop and Illustrator techniques. Students will become familiar with current digital terminology, technology and equipment. Advanced Studio – Digital Art can be taken multiple times after successfully completing Digital Art II.

**DRAWING I** 

Grades: 9, 10, 11, 12

Credit: 0.5

Length: Semester

**Prerequisites:** None

Course Number: Semester A: 640221

And Semester B: 640222

Students will learn the basic skills and techniques of drawing in black and white media. Students will learn how to use and apply the design elements - line, value, texture and perspective – to express the principles of art in their work. Students will draw a variety of subject matter with a variety of materials.

**DRAWING II** 

**Grades:** 9, 10, 11, 12

Credit: 0.5

Length: Semester

Prerequisites: Drawing I

Course Number: Semester A: 640321

And Semester B: 640322

Students continue to apply the basic drawing skills and techniques they learned in Drawing I to more complex and difficult subject matter including color. Students will continue to work with a variety of materials. Advanced Studio-Drawing can be taken multiple times after successfully completing Drawing II.

**HISTORY THROUGH ART I** 

(Parker HS Only)

**Grades:** 9, 10, 11, 12

Credit: 0.5

Length: Semester

Prerequisites: None

Course Number: Semester A: 648121

Or Semester B: 648122

History Through Art I will allow students to study world history from Prehistory to the Middle Ages through the study of the major paintings, sculptures and architecture of those times. Students will participate in discussions/activities comparing and contrasting both Western and non-Western art. Civilizations, religions and political and social events will be studied as related to the emergence of new forms and movements in art. Students have the option to take this class and History Through Art II as prerequisites to AP Art History.

This course is also offered under Social Studies.

HISTORY THROUGH ART II

(Parker HS Only)

**Grades:** 9, 10, 11, 12

Credit: 0.5

Length: Semester

Prerequisites: None

Course Number: Semester A: 648221

Or Semester B: 648222

History Through Art II will allow students to study world history from the Renaissance to the Modern Era through the study of the major paintings, sculptures and architecture of those times. Students will participate in discussions/activities comparing and contrasting both Western and Non-western art. Civilizations, religions and political and social events will be studied as related to the emergence of new forms and movements in art. Students have the option to take this class and History Through Art I as prerequisites to AP Art History.

This course is also offered under Social Studies.

**PAINTING** 

**Grades:** 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: Art I or Senior Status

Course Number: 644121

644122

Students will express their ideas in various painting techniques and mediums. They will use the elements and principles of design to create sound compositions. Students will learn about major artists and art movements and learn to appreciate various styles of painting. It is highly recommended to take a drawing course. Advanced -Studio-Painting can be taken multiple times after successfully completing Painting.

#### **PHOTOGRAPHY I**

**Grades:** 10, 11, 12 **Credit:** 0.5

Length: Semester

**Prerequisites:** Art I or Senior Status **Course Number:** Semester A: 645121

Or Semester B: 645122

This course is designed for students who are interested in learning the fundamentals of photography. Primary attention is directed at understanding artistic composition and the important role it plays in producing quality visual imagery. Students will demonstrate proficiency in processes connected with planning, taking, and developing, and printing black and white film photographs. In addition, a variety of special techniques will be taught that extend creativity and design options.

#### **PHOTOGRAPHY II**

**Grades: 10,** 11, 12 **Credit:** 0.5

Length: Semester

**Prerequisites:** Photography I **Course Number:** Semester A: 645321

Or Semester B: 645322

This course is designed for students who are interested in learning the fundamentals of digital photography. The course will review the elements of composition, as well as the basic to intermediate features of Adobe Photoshop and Adobe Lightroom. Students will demonstrate proficiency in processes connected with planning, taking, and editing digital photographs. Students will develop visual understanding and apply critical thinking skills to create creative digital imagery and design projects. Portfolio development, client relationships, career options, lighting strategies, and critique methods will be taught. Advanced Studio-Photography can be taken multiple times after successfully completing Photography 2.

Students will explore, design and construct sculpture as an art form. Using various

#### **SCULPTURE** (Craig HS Only)

**Grades:** 10, 11, 12 **Credit:** 0.5

Length: Semester

**Prerequisites:** Art I or Senior Status **Course Number:** Semester B: 646122

sculpture techniques students will learn how to apply methods to achieve desired results. Various materials and found objects will be used. Students will apply their learned knowledge in a large individual or group sculpture for possible installation.

# BUSINESS and MARKETING





COURSE TITLE	9 <sup>™</sup> GRADE	10 <sup>TH</sup> GRADE	11 <sup>TH</sup> GRADE	12 <sup>TH</sup> GRADE
AS Accounting I		E	E	E
Accounting II			E	E
Business Communications			E	E
Business COOP			E	E
Computer Applications I	E	E	E	E
Computer Applications II	E	E	E	E
Digital Media & Design		E	E	E
Entrepreneurship			E	E
Exploring Business/Marketing	E	E		
Finance and Investing			E	E
International Business			E	E
Introduction to Law			E	E
Keyboarding	E	E	E	E
Marketing Education I		E	E	E
TC Marketing Education II			E	E
Marketing Education COOP			E	E
Personal Finance			R	
Sports and Entertainment Marketing			E	E
Only)		E	E	E
Sports and Entertainment Marketing  The Finance, Economics, and Law of Social Justice (Craig Only)  F - Elective for Grade Level R - Fulfills Graduation Re	quirement for Crad			E

**E** = Elective for Grade Level

R = Fulfills Graduation Requirement for Grade Level

**AP** = Advanced Placement

**AS** = Advanced Standing

**EM** = Equivalent Mathematics

**ES** = Equivalent Science

**TC** = Transcripted Credit

**MSOE** = Milwaukee School of Engineering

**PLTW** = Project Lead the Way



#### **AS ACCOUNTING I**

Grades: 10, 11, 12 Credit: 1.0 Length: Year

**Prerequisites:** None **Course Number:** 662421

662422

Knowledge of accounting is important to all areas of business and finance. Career opportunities for people with accounting backgrounds are rapidly increasing and expanding. In this course, students learn and apply the basics of accounting principles and procedures to complete the accounting cycle. In addition to completing the basic accounting forms, students will also learn how to use computer software to complete accounting records. During the fourth quarter, students will get on-the-job experience by completing an accounting simulation. This course is a must for students who are pursuing a degree in business or a business-related major at a post-secondary school or for those wanting to learn how to keep a record system for personal use. Students will also gain extensive experience using Microsoft Excel.

This is a college course that will produce a permanent college transcript and grade point average for each student. If you believe that producing a permanent college transcript and grade point is not in your best interest academically at this time, please consider requesting a non-transcripted credit (TC) course. If you need more information about Transcripted Credit, see your counselor before requesting courses. Transcripted credit may be offered if the SDJ has a licensed staff member employed to teach this course.

#### **ACCOUNTING II**

**Grades:** 11, 12

Credit: 1.0 Length: Year

Prerequisites: Accounting I

Course Number: 662421

662422

This course will build on the knowledge gained in the AS Accounting I course and provide them with a solid understanding of corporate accounting practices. Students will be able to analyze transactions and prepare various corporate financial reports. Students will also gain practical experience working with dividends, plant assets, depreciation, accrued revenue and expenses, retained earnings, stockholders' equity, and more. Students will continue to develop their skills in Microsoft Excel.

#### **BUSINESS COMMUNICATIONS**

Grades: 11, 12 Credit: 0.5

Length: Semester

Lengui: Semester

Prerequisites: None

Course Number: Semester B: 665122

This business course provides students the opportunity to develop the skills and attitudes necessary for success in the business world. The goal of this course is to provide students with an understanding of communication skills, current technology, and its impact on college and career readiness. Competencies will be developed in the areas of verbal and written communications, interpersonal skills, and the use of current technology including social media.

#### **BUSINESS COOP**

Grades: 11, 12

Credit: 1.0

**Length:** Year (Offered every other year

beginning in 2022)

**Prerequisites:** Previously taken a business class. Instructor Consent and application

required.

Course Number: 667121

667122

In this course, students work in a local business to gain supervised business experience in a field related to his/her career objective. Students are trained and evaluated by the employer. Students receive school credit as well as wages for employment. Students are given release time to work in the afternoon. Examples of employers are: law offices, insurance companies, real estate offices, banks, dental offices, or any other office/business. It is recommended that students be enrolled in a coordinating business class.

COOP requirements include: weekly work logs and quarterly employer completed evaluations.

#### **COMPUTER APPLICATIONS I**

Grades: 9, 10, 11, 12

Credit: 0.5

Length: Semester

**Prerequisites:** None

Course Number: Semester A: 661321

Or Semester B: 661322

Computer Applications I is a semester course where students will learn to apply computer software and technology. Students will achieve a working knowledge of Microsoft Word, Microsoft Excel, Microsoft PowerPoint, and File Management, as they complete projects. Successful completion of Computer Applications I and II will lead to MOS Certification (Microsoft Office Specialist) which demonstrates a nationally recognized employability skill.

This course is also offered under Computer Science.

#### **COMPUTER APPLICATIONS II**

**Grades:** 9, 10, 11, 12

Credit: 0.5

Length: Semester

Prerequisites: Computer Applications I

Course Number: Semester A: 661351

Or Semester B: 661352

Computer Applications II is a semester course where students apply computer software and technology. Students will learn advanced features of Microsoft Excel, and Microsoft Word. They will also learn basic functions of Microsoft Access. Students will integrate all programs in Microsoft Office Suite to prepare documents and complete projects. Successful completion of Computer Applications I and II will lead to MOS Certification (Microsoft Office Specialist) which demonstrates a nationally recognized employability skill.

This course is also offered under Computer Science.

#### **DIGITAL MEDIA & DESIGN**

**Grades:** 10, 11, 12

Credit: 0.5

**Length:** Semester (Offered odd years

starting in 2023)

Prerequisites: None

Course Number: Semester A: 661421

Or Semester B: 661422

Digital Media & Design is a one semester class. Students will create and produce digital design layouts and visual communications projects (logos, ads, brochures, magazines, newsletters, and posters) using Adobe In-Design, Spark, Photoshop, Illustrator, and Microsoft Publisher. A variety of video creation software for multimedia, movies and the web will complete this course.

This course is also offered under Computer Science.

#### **ENTREPRENEURSHIP**

**Grades:** 11, 12

Credit: 0.5

**Length:** Semester (Offered odd years

starting in 2023)

Prerequisites: AS Account I or Marketing I

Course Number: 660331

660332

Entrepreneurship is a leading factor in driving the global economy. In this class, students will learn the entrepreneurial process and the operations of a business. Students will develop an innovative idea and create a business plan. The entrepreneurs of today and tomorrow must understand how a competitive marketplace operates, as well as comprehend production, marketing, finance, human resources, social environment, and legal issues. Communication skills, initiative, creativity, and problem-solving techniques are instrumental to success in the class.

#### **EXPLORING BUSINESS/MARKETING**

**Grades:** 9, 10

Credit: 0.5

Length: Semester

Prerequisites: None

Course Number: Semester A: 660121

Or Semester B: 660122

This semester course gives students a general overview of the world of business. This introductory level course allows students a chance to get a taste of other business and marketing courses offered at the high school level. Students will explore different topics involving economics, business management, accounting, personal finance, maintaining a checkbook, basic budgeting, ethics, business communications, entrepreneurship, and other business-related careers. Students will understand why business-related majors are one of the most popular in post-secondary education today.

#### FINANCE AND INVESTING

**Grades:** 11, 12

Credit: 0.5

Length: Semester

Prerequisites: Personal Finance

Course Number: 750211

750212

Do you want to learn how to invest money to retire earlier, travel the world, or buy your dream car? These are a few of the things that successful investors can accomplish. According to a Transamerica survey, 72 percent of millennials say they do not think they know enough about investing! In Finance and Investing you'll learn the skills it takes to become a better investor. You will also develop the skills and abilities to conduct financial analyses for companies that help shape the decisions each and every company makes.

#### **INTERNATIONAL BUSINESS**

**Grades: 11, 12** 

Credit: 0.5

**Length:** Semester (Offered in even years starting in 2022)

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Prerequisites: None

Course Number: Semester A: 664121

This course will provide a foundation for becoming informed about the global business environment. Students will cover topics related to international business and their impact on society. Students will learn about advancements in the global economy through trade, marketing, and entrepreneurship. Students will enhance their understanding of International Business through studying real-life business examples.

#### INTRODUCTION TO LAW

**Grades:** 11, 12

Credit: 0.5

Length: Semester

Prerequisites: None

Course Number: Semester A: 663121

Or Semester B: 663122

Introduction to Law is a business and personal-use law course covering the subjects of crimes, torts, court procedures and other legal topics. Students will learn about law enforcement and the courts, criminal law, civil law, contract law, consumer law, personal property law, legalities of renting an apartment, and the legalities of purchasing a vehicle. Guest speakers from the community will also visit the class to share their expertise in these areas.

#### **KEYBOARDING**

**Grades:** 9, 10, 11, 12

**Credit:** 0.5 **Length:** Semester

Prerequisites: None

Course Number: Semester A: 661121

Or Semester B: 661122

Keyboarding is designed for students to learn how to touch type on the computer keyboard. Using proper finger placement and technique, students will develop their skill, speed, and accuracy to an employable level. Students will use Microsoft Word to format personal and business letters, tables, memos, and reports that will enhance their performance in school, in their personal lives, and in their careers. Previous keyboarding experience is not required.

#### **MARKETING EDUCATION I -**

Branding, Product Development, Social Media

**Grades:** 10, 11, 12

Credit: 1.0

**Length:** Year

**Prerequisites:** None **Course Number:** 660221

660222

This course provides students insight into business and the world of marketing through a sound foundation of marketing principles. Units covered in this course include Economics, all aspects of Marketing, the Selling Process, Product Planning & Development, Promotion, Social Media, Channels of Distribution, and Pricing Strategies. Materials used for instruction are all from the real world of business. Student leadership development and employment skills are integrated into this class through our co-curricular organization, DECA.

#### TC MARKETING EDUCATION II -

Management, Market Research, Digital Marketing

**Grades:** 11, 12 **Credit:** 1.0

Length: Year

**Prerequisites:** Marketing Education I – Branding, Product Development, & Social Media

Course Number: 660321

660322

This course is for students who have successfully completed TC Marketing Education I – Branding, Product Development and Social Media. Students will have the opportunity to operate our school store in cooperation with this class. An emphasis is placed on discussion of business/job related problems and successful problemsolving techniques. Units covered include Economics, Principles of Management, Marketing Information Management, Risk Management, Digital Marketing, and introductory units of Entrepreneurship and Sports & Entertainment Marketing. Student leadership development and employment skills are integrated into this class through our co-curricular organization, DECA.

This is a college course that will produce a permanent college transcript and grade point average for each student. If you believe that producing a permanent college transcript and grade point is not in your best interest academically at this time, please consider requesting a non-transcripted credit (TC) course. If you need more information about Transcripted Credit, see your counselor before requesting courses. Transcripted credit may be offered if the SDJ has a licensed staff member employed to teach this course.

#### MARKETING EDUCATION COOP

Grades: 11, 12 Credit: 1.0

Length: Year

**Prerequisites:** Previously taken a marketing class. Instructor Consent & application required.

. . . .

Course Number: 667221

667222

Students work in the community in a job related to business or marketing. Students receive school credit and wages for employment. A major emphasis is placed on learning about the operation of a business, exploring business as a career and working with common problems faced in the world of work. Students will commit to working at the job the full year. Students must be enrolled in a coordinating marketing class as determined by the instructor.

 ${\it COOP\ requirements\ include:\ weekly\ work\ logs\ and\ quarterly\ employer\ completed\ evaluations.}$ 

#### **PERSONAL FINANCE**

Grades: 11 Credit: 0.5

Length: Semester

Prerequisites: None

Course Number: Semester A: 750121

Or Semester B: 750122

This course is designed to equip high school students with the knowledge and skills necessary to manage their personal finances effectively. Students will learn "Real Life" skills, which they can use throughout their own lives. Students will learn about investing in a variety of securities (stocks, bonds, mutual funds, etc.). Other topics covered include: careers, post-secondary planning, financial aid, college applications, analyzing pay and benefits, taxes, budgeting, use of banking services, real estate, credit, buying an automobile, buying a home and insurance. In addition, students will use Xello, a program that will help them develop a four-year educational plan for high school that aligns with their post-secondary goals.

#### **SPORTS AND ENTERTAINMENT MARKETING**

Grades: 11, 12 Credit: 0.5

Length: Semester

**Prerequisites:** TC Marketing Education I **Course Number:** Semester A: 660421

Or Semester B: 660422

This marketing course provides students with an opportunity to learn about two of the most profitable industries in the United States: Sports and Entertainment. This class is for students who have a desire to continue in marketing education. This course will review basic principles of marketing and economics as to how they relate to the sports and entertainment world. Topics covered include branding, licensing, sponsorship, promotion, advertising, selling, finance, distribution, and careers within the field. Students will have the opportunity to apply topics learned by running a sports franchise through a simulated computer program called Virtual Business-Sports. This program provides students with a real-world learning experience in sports marketing.

## THE FINANCE, ECONOMICS, AND LAW OF SOCIAL JUSTICE (CRAIG ONLY)

Grades: 10, 11, 12 Credit: .5 Length: Semester

**Prerequisites:** None **Course Number:**750311

750312

This course aims to gain a deeper understanding about generational societal issues in finance, economics, entrepreneurship, and law that disproportionately affect minorities. The course will take a deep look into the historical effects of these topics that have created the realities of today. The course will also empower students with an introduction to the concepts of finance, economics, entrepreneurship, and law with the goal of encouraging students to study these topics in future Craig High School courses.

## **COMPUTER SCIENCE**



COURSE TITLE	9 <sup>™</sup> GRADE	10 <sup>TH</sup> GRADE	11 <sup>TH</sup> GRADE	12 <sup>TH</sup> GRADE
TC Advanced Computer Science AB – JAVA (EM)			E/R	E/R
AP Computer Science A – JAVA (EM)		E/R	E/R	E/R
AP Computer Science Principles (EM)		E/R	E/R	E/R
Application Development	E	E	E	E
Computer Applications I	E	E	E	E
Computer Applications II	E	E	E	E
Computer Programming, I (EM)	E	E	E/R	E/R
Computer Programming II (EM)	E	E	E/R	E/R
Digital Media & Design		E	E	E
Game Design I	E	E	E	E
Game Design II		E	E	E
Robotics, Engineering, and Programming	E	E	E	E
Web Design	E	Е	E	E

**E** = Elective for Grade Level

R = Fulfills Graduation Requirement for Grade Level

**AP** = Advanced Placement

AS = Advanced Standing

**EM** = Equivalent Mathematics

**ES** = Equivalent Science

MSOE = Milwaukee School of Engineering

**PLTW** = Project Lead the Way

**TC** = Transcripted Credit



## TC ADVANCED COMPUTER SCIENCE AB – JAVA (EM)

**Grades:** 11, 12

Credit: 1.0

Length: Year

Prerequisites: AP Computer Science A - JAVA

Course Number: 684421

684422

This yearlong course is comparable to the second course in the introductory sequence for computer science majors in college. Advanced Computer Science AB is intended to serve both as a second step for computer science majors and as a course for students who will major in other disciplines that require significant involvement with technology. JAVA is a platform independent language, and the programs students write will compile successfully on Macintosh or Windows operating systems. Upon completion of the course, students will have finished the equivalent of a second semester course in college computer science. Students will be responsible for paying for the tuition, which is about one third of the cost as an undergraduate (approximately \$300).

This course is also offered under Mathematics.

#### AP COMPUTER SCIENCE A – JAVA (EM)

**Grades:** 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: Algebra 1

Course Number: 684321

684322

This yearlong course is comparable to the first course in the introductory sequence for computer science majors in college. An AP Computer Science A course is intended to serve both as an introductory course for computer science majors and as a course for students who will major in other disciplines that require significant involvement with technology. JAVA is a platform independent language and the programs students write will compile successfully on Macintosh or Windows operating systems. Students will have the opportunity to take the Advanced Placement exam.

This course is also offered under Mathematics.

#### AP COMPUTER SCIENCE PRINCIPLES (EM)

**Grades:** 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: Algebra 1

Course Number: 684521

684522

This course offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cyber-security concerns, and computing impacts. AP Computer Science Principles will give students the opportunity to use technology to address real-world problems and build relevant solutions. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science. Students will have the opportunity to take the Advanced Placement exam.

#### This course is also offered under Mathematics.

#### **APPLICATION DEVELOPMENT**

**Grades:** 9, 10, 11,12

Credit: 0.5

Length: Semester

Prerequisites: Concurrent enrollment or completion of Computer Programming I Course Number: Semester A: 682121

Or Semester B: 682122

This course will introduce the development of mobile apps for the Android platform through MIT's App Inventor, the Java programming language, and the IOS platform through XCode. Students will begin by learning the basics of the app inventor and then apply those skills to labs that will create applications that can be launched on a mobile phone emulator and then on an actual mobile phone. As time permits, students will be able to generate their own ideas for apps and create apps that access phone features such as GPS and movement/acceleration.

#### **COMPUTER APPLICATIONS I**

**Grades:** 9, 10, 11, 12

Credit: 0.5

Length: Semester

Prerequisites: None

Course Number: Semester A: 663121

Or Semester B: 663122

Computer Applications I is a semester course where students will learn to apply computer software and technology. Students will achieve a working knowledge of Microsoft Word, Microsoft Excel, Microsoft PowerPoint, and File Management, as they complete projects. Successful completion of Computer Applications I and II will lead to MOS Certification (Microsoft Office Specialist) which demonstrates a nationally recognized employability skill.

This course is also offered under Business and Marketing.

#### **COMPUTER APPLICATIONS II**

**Grades:** 9, 10, 11, 12

Credit: 0.5

Length: Semester

Prerequisites: Computer Applications I

Course Number: Semester A: 661351

Or Semester B: 661352

Computer Applications II is a semester course where students apply computer software and technology. Students will learn advanced features of Microsoft Excel, and Microsoft Word. They will also learn basic functions of Microsoft Access. Students will integrate all programs in Microsoft Office Suite to prepare documents and complete projects. Successful completion of Computer Applications I and II will lead to MOS Certification (Microsoft Office Specialist) which demonstrates a nationally recognized employability skill.

This course is also offered under Business and Marketing.

#### COMPUTER PROGRAMMING, I (EM)

**Grades:** 9, 10, 11,12

Credit: 0.5

Length: Semester

Prerequisites: None

Course Number: Semester A: 681121

Or Semester B: 681122

modern object orientated programming language that produces programs for Macintosh or Windows machines. Students will design programs that will include music, audio, movies, graphics and interactive real-world applications. These projects will emphasize communication of ideas and information available to a wide range of student interests. This will allow for a smooth transition to other languages such as JAVA and C++. Topics include the use of algorithms and variables with decision and repeat structures.

Computer Programming I is a beginning programming course. Students will learn a

This course is also offered under Mathematics.

#### **COMPUTER PROGRAMMING II (EM)**

**Grades:** 9, 10, 11, 12

Credit: 0.5

Length: Semester

Prerequisites: Computer Programming I

Course Number: Semester A: 681221

Or Semester B: 681222

Computer Programming II is the advanced programming course which expands the computing knowledge and skills acquired in the Computer Programming I class. Students will learn advanced programming techniques. Multimedia projects will include the use of video and sound technologies. The emphasis will be on effective communication of ideas and information through high level programming strategies involving objects and classes. These strategies include control structures and the handling of numerical and word data through functions and classes.

This course is also offered under Mathematics.

#### **DIGITAL MEDIA & DESIGN**

**Grades:** 10, 11, 12

Credit: 0.5

**Length:** Semester

Prerequisites: None

Course Number: Semester A: 661421

Or Semester B: 661422

Digital Media & Design is a one semester class. Students will create and produce digital design layouts and visual communications projects (logos, ads, brochures, magazines, newsletters, and posters) using Adobe In-Design, Spark, Photoshop, and Illustrator, and Microsoft Publisher. A variety of video creation software for multimedia, movies and the web will complete this course.

This course is also offered under Business and Marketing.

#### **GAME DESIGN I**

Grade: 9, 10, 11, 12

Credit: 0.5

Length: Semester

**Prerequisites:** Concurrent enrollment in or completed Programming I

Course Number: Semester A: 661331

Or Semester B: 661332

The purpose of Game Design I is to expose students to the basic principles of creative design through computational thinking. In Game Design, students will play, and then learn how games "do that". Along with the games, students will work through a variety of digital tutorials in Gamemaker Studio® so they can develop skills such as 3D mapping, collision, physics, animation, and other skills needed by the industry. The program will also introduce students to some basic and advanced scripting (computer programming). Going beyond the basics, this class will also plant the seeds of wonder for future programming classes and Game Design II.

#### **GAME DESIGN II**

**Grade:** 10, 11, 12

Credit: 0.5

Length: Semester

**Prerequisites:** Game Design I and one other

programming course

Course Number: Semester A: 661341

Or Semester B: 661342

Game Design II will expand on the Gamemaker Studio knowledge by collaboratively creating two more complete games. In the second half of the course, students will tap into either Unity or Unreal game making engines.

## ROBOTICS, ENGINEERING, AND PROGRAMMING

Grade: 9, 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: None

Course Number: 681321

681322

Robotics, Engineering, and Programming is an exciting class to allow students to feel comfortable with the new and sometimes very complicated concepts. To build an autonomous robot, students must learn the basic concepts of computer programming, design, electronics, engineering, and mechanics.

#### **WEB DESIGN**

Grades: 9, 10, 11, 12

Credit: 0.5

Length: Semester

Prerequisites: None

Course Number: Semester A: 683121

Or Semester B: 683122

Web Design is a class designed to teach the components of web design and web page creation for the Internet. Students will learn and use both HTML and the formatting techniques provided in CSS. Students will learn to plan effective page designs. Time will be spent researching topics, planning web sites, and mastering web software. Individual projects will incorporate all of this with topics selected to reinforce interests and learning in other subject areas. Students will also develop web buttons, rollover images, and web animations that will be used on their web sites.

## **ENGLISH**



















COURSE TITLE	9 <sup>™</sup> GRADE	10 <sup>TH</sup> GRADE	11 <sup>TH</sup> GRADE	12 <sup>TH</sup> GRADE
Accelerated English 9-10 – Honors	R			
Advanced Acting				E
AP English Language and Composition			R	R
AP English Literature and Composition			R	R
Creative Writing			R	R
English 9	R			
English 9 – Honors	R			
English 10		R		
English 10 – Honors		R		
English 11		R	R	
English 11 – Honors		R	R	
English 12				R
TC English Comp I			R	R
Introduction to Media & Journalism	E	E	E	E
Introduction to Theater and Acting	E	E	E	E
Literacy Strategies 9	E			
Literacy Strategies 10		E		
Literacy Strategies 11			E	
Multi-Media Production		E	E	E
Newspaper		E	E	E
Novel Studies			R	R
TC Speech			R	R

Science Fiction and Fantasy		R	R
Social Justice: The Power of Choice & Voice!		E/R	E/R
Writing Through Films		E/R	E/R
Yearbook	E	E	E

**E** = Elective for Grade Level

**R** = Fulfills Graduation Requirement for Grade Level

**AP** = Advanced Placement

AS = Advanced Standing

**EM** = Equivalent Mathematics

**ES** = Equivalent Science **TC** = Transcripted Credit

MSOE = Milwaukee School of Engineering

**PLTW** = Project Lead the

Way

#### **ACCELERATED ENGLISH 9-10 – HONORS**

**Grade:** 9

Credit: 1.0

Length: Year

Prerequisites: None

Course Number: 501011

501012

This yearlong course is for students who are especially committed to challenging their reading and writing skills as this course takes students on a journey through English 9 -honors and English 10-honors curriculum. Following completion of this course, students will enroll in English 11 Honors during their sophomore year. Students will experience an increased level of written and oral analysis of literature, informational text, drama, and poetry. Non-fiction selections will be used to prompt writing and extend the study of issues and themes. It is expected that students will be able to read independently. Students who register for this course are proficient or advanced writers and readers and will continue to develop those skills.

#### ADVANCED ACTING

Grade: 12

Credit: 0.5

Length: Semester

Prerequisites: Introduction to Theater and

Acting

Course Number: Semester A: 506021

Or Semester B: 506022

Advanced Acting explores in greater depth the topics and techniques from Introduction to Theater and Acting, with a greater focus on performing one-act & full-length plays.

The course begins with a review of basic acting techniques & skills through improvisation & short, scripted scenes. Techniques to be reviewed include transitions, inner monologue, oral interpretation, concrete & figurative gestures, and blocking. Whole-part & part-whole memorization will be used by students as they prepare one-act plays in conjunction with Drama Guild, to be performed during an evening performance. Students may perform for elementary students at Janesville Leisure Services Enchanted Forest, or at a neighboring elementary school. The course may culminate in a full-length play performed one evening with both high school theater classes.

#### AP ENGLISH LANGUAGE AND COMPOSITION

**Grades:** 11, 12

Credit: 1.0

Length: Year

Prerequisites: English 11 or English 11 -

Honors

Course Number: 505921

505922

Advanced Placement English Language and Composition is a college-level introductory course that engages students in becoming skilled readers of mature prose, primarily non-fiction, and in becoming skilled writers who compose for a variety of purposes with a focus on analysis and argumentation. The overarching purpose is to enable students to write effectively and confidently in their college courses across the curriculum and in their personal and professional lives. Students will have the opportunity to take the Advanced Placement exam.

## AP ENGLISH LITERATURE AND COMPOSITION

**Grades:** 11, 12

Credit: 1.0

Length: Year

Prerequisites: English 11 or English 11 -

Honors

Course Number: 505821

505822

AP English Literature & Composition engages students in the careful reading and critical analysis of college-level literature. Through the close reading of selected texts, students deepen their understanding of the ways writers simultaneously use language, structure, imagery, symbolism, setting, character, tone as well as other literary strategies to create both meaning and pleasure for the reader. Writing is an integral part of the AP English Literature and Composition course which will focus on the critical analysis of literature including expository, analytical, and argumentative essays. Students should expect rigorous outside reading assignments of complex texts including short stories, novels, poetry, and drama. In class, students will participate in analytical discussion of the literature and will engage in frequent timed essay writing. Students will have the opportunity to take the Advanced Placement exam.

#### **CREATIVE WRITING**

Grades: 11, 12 Credit: 0.5

Length: Semester

Prerequisites: English 10
Course Number: Semester A: 505221

Or Semester B: 505222

This class will encourage and develop a student's creative writing abilities. Freedom will be provided in most assignments to allow students to add their own unique perspectives. Short fiction, poetry, scriptwriting, and multimedia projects are all items which are typically covered. Students will be expected to write and review on a continual basis, and beginning to experienced writers are able to enroll.

#### **ENGLISH 9**

Grade: 9 Credit: 1.0

Length: Year Prerequisites: None

Course Number: 501121

501122

#### **ENGLISH 9 – HONORS**

Grade: 9 Credit: 1.0

**Length:** Year

**Prerequisites:** None **Course Number:** 501021

501022

Students will study conflict, identity, and responsibility through the study of literature and informational text. Non-fiction, poetry, and short stories will also be used to prompt writing and extend the study of essential questions. Critical thinking skills and close reading of text are emphasized. Students will complete short research projects and continue building vocabulary knowledge and skills. Writing instruction will focus on paragraph writing using textual evidence and multiparagraph persuasive essay writing. Grammar instruction will include sentence structure, punctuation, and proper usage.

Students will study conflict, identity, and responsibility through the study of literature and informational text. Non-fiction, poetry, and short stories will also be used to prompt writing and extend the study of essential questions. Critical thinking skills and close reading of text are heavily emphasized, and students will complete research projects and continue building vocabulary knowledge and skills. Writing instruction will focus on paragraph writing using textual evidence and multiparagraph essay writing. Grammar instruction will include sentence structure, punctuation, and proper usage.

Note: What sets this course apart from a "regular" level course is extensive, independent reading and analysis of text.

#### **ENGLISH 10**

Grade: 10 Credit: 1.0

Length: Year

**Prerequisites:** English 9 **Course Number:** 502021

502022

The emphasis for this course are exploring the themes of identity, perspective, nature, liberty, change, and power in the human experience. Non-fiction selections will be used to prompt writing and extend the study of literature. Critical thinking skills and close reading of text are emphasized. Writing instruction will focus on using textual evidence to support analysis and multi-paragraph argumentative essay writing. In addition, students will use the research process as they write a research paper. Vocabulary instruction will continue to build vocabulary knowledge and skills with a focus on figurative language, words with multiple meanings, and the impact of word choice on tone and mood. Grammar instruction will focus on parts of a sentence, phrases, and clauses with an application on applying these skills to construct correct and varied sentences in students' writing.

#### **ENGLISH 10 - HONORS**

**Grade:** 10 or Grade 9 if student has completed Challenge Magnet Program English

Credit: 1.0

Length: Year

**Prerequisites:** English 9 or Challenge Magnet

Program English

Course Number: 502011

502012

The emphasis for this course are exploring the themes of identity, perspective, nature, liberty, change, and power in the human experience. Non-fiction selections will be used to prompt writing and extend the study of literature. Critical thinking skills and close reading of text are heavily emphasized. Writing instruction will focus on using textual evidence to support analysis and multi-paragraph argumentative essay writing. In addition, the research process will be a major part of this course as students complete a research paper. Vocabulary instruction will continue to build vocabulary knowledge and skills with a focus on figurative language, words with multiple meanings, and the impact of word choice on tone and mood. Grammar instruction will focus on parts of a sentence, phrases, and clauses with an application on applying these skills to construct correct and varied sentences in students' writing. Note: What sets this course apart from a "regular" level course is extensive, independent reading and analysis of text. In addition, students will be asked to show divergent thinking through the research and completion of a college-level research paper.

**ENGLISH 11** 

**Grade:** 11 or Grade 10 if student has completed Accelerated English 9-10 – Honors

Credit: 1.0 Length: Year

Prerequisites: English 10

Course Number: 503021

503022

Students will examine the American literary experience through the writings of significant authors of American Literature. In addition to major works, supplemental pieces including poetry, non-fiction, and speeches from different literary periods will be studied and analyzed. In addition, literature circles will be used to expose students to the varying perspectives of the American Experience. Critical thinking skills and close reading of text are emphasized. ACT-style argumentative essay writing will be a key component to this course.

#### **ENGLISH 11 – HONORS**

**Grade:** 11 or Grade 10 if student has completed Accelerated English 9-10 – Honors

Credit: 1.0

Length: Year

Prerequisites: English 9/10 Accelerated or

English 10

Course Number: 503011

503012

Students will examine the American literary experience through the writings of significant authors of American Literature. In addition to major works, supplemental pieces including poetry, non-fiction, and speeches from different literary periods will be studied and analyzed. In addition, literature circles will be utilized to expose students to the varying perspectives of the American Experience. Critical thinking skills and close reading of text are heavily emphasized.

College preparatory writing will be emphasized in this course. This includes ACT-style argumentative essay writing and literary analysis writing.

Note: What sets this course apart from a "regular" level course is the extensive, independent reading and analysis of college-level text.

#### **ENGLISH 12**

Grade: 12

Credit: 1.0

Length: Year

Prerequisites: English 11

Course Number: 504821

504822

In this course students will examine a variety of major American and British authors in addition to contemporary multicultural writings. Composition; literature, both fiction and nonfiction; literature circles; vocabulary; and grammar are covered in this course. Writing assignments will include expository, analytical, persuasive, responsive, and research compositions to develop understanding and prepare students for future responsibilities as workers and students.

#### WRITING THROUGH FILMS

**Grades:** 11, 12

Credit: 0.5

Length: Semester

Prerequisites: None

Course Number: 505311

505312

In this semester's English elective course, the film will serve as the medium by which students will work to improve their writing and critical understanding of the way texts through film create meaning. Students will analyze the film genres while engaging with and analyzing various films exposing students to narrative techniques, cinematic terminology, and the director's stylistic innovation. The threefold purpose of the class allows students to become familiar with the interpretive language of film, cultivate the reading of the film as text, and create critical arguments regarding the analysis of those texts. Also, students will be required to complete a culminating project at the end of the semester.

#### **INTRO TO MEDIA & JOURNALISM**

**Grades:** 9, 10, 11, 12

Credit: 0.5

Length: Semester

Prerequisites: None

Course Number: Semester A: 507011

Or Semester B: 507012

This will be a hands-on, production-based course grounded in sound journalistic practices, laws, and ethics. Students will learn news literacy, news writing, design & layout, photojournalism, broadcast scripting, storyboarding, and multimedia production. Units covered will include newspaper design & layout, on & off camera interviewing, documentary shorts, and photography for print media, podcasts, and broadcasting among others. Students will be responsible for creating content for school publications.

#### INTRODUCTION TO THEATER AND ACTING

**Grades:** 9, 10, 11, 12

Credit: 0.5

Length: Semester

Length: Semester

Prerequisites: None

Course Number: Semester A: 506011

Or Semester B: 506012

Learn on your feet, not on your seat! Topics include theater games, improvisation, characterization, and script analysis. Skills include public speaking and nonverbal communication (gestures, facial expressions, body language) for careers in the arts, business, or any field requiring clear and confident presentation skills. Materials include monologues, two-person acting scenes, group skits and plays, cut from classic and modern plays, TV shows and movies. Students will write, direct, and act out original scripts. Informal journals and formal expository writings will analyze scenes, plays and movies. Students may attend a live play and write a formal review. Students may take this class more than once.

#### **LITERACY STRATEGIES 9**

**Grade:** 9

Credit: 1.0

Length: Year

**Prerequisites:** Course referral and concurrent

enrollment in English 9

Course Number: 501221

501222

This course builds student success in English 9. Together, both classes increase student confidence and proficiency in reading and writing. Students will apply reading strategies and technology tools to text from English 9. They also will read supplemental fiction and nonfiction and student selected materials. Because this course earns elective credit toward graduation, students should also be enrolled in English 9.

#### **LITERACY STRATEGIES 10**

Grade: 10

Credit: 1.0

Length: Year

**Prerequisites:** Course referral and concurrent enrollment in English 10

Course Number: 502221

502222

This course builds student success in English 10. Together, both classes increase student confidence and proficiency in reading and writing. Students will apply reading strategies and technology tools to text from English 10. They also will read supplemental fiction and nonfiction and student selected materials. Because this course earns elective credit towards graduation, students should also be enrolled in English 10.

#### **LITERACY STRATEGIES 11**

Grade: 11

Credit: 1.0

Length: Year

**Prerequisites:** Course referral and concurrent enrollment in English 11

**Course Number:** 503221 & 503222

This course builds student success in English 11. Together, both classes increase student confidence and proficiency in reading and writing. Students will apply reading strategies and technology tools to text from English 11. They also will read supplemental fiction and nonfiction and student selected materials. Because this course earns elective credit towards graduation, students should also be enrolled in English 11.

## MULTI-MEDIA PRODUCTION

**Grades:** 9, 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: Intro to Media & Journalism

Course Number: 507111

507112

Be part of the team producing student videos and news broadcasts. Students will learn multi-media production skills including scripting, storyboarding, lighting, filming, sound, directing, acting, and editing. Practice these skills by creating short personal introduction videos, video scavenger hunts and video yearbook segments to be uploaded to a portfolio website. Train in a state-of-the-art broadcast studio equipped with two studio cameras, seven camcorders, four field cameras, a green screen, 32-channel light board, iPad teleprompter, boom mics and industry-standard broadcast mics. Join one of four field camera crews creating school spirit videos like "Teachers Read "Mean Tweets" and "Bad Lip Reading," as well as promotional videos for school events such as Bags of Hope and Operation Click. Apply for leadership roles including Editor-In-Chief, Features Editor, Sports Editor, and Social Media Editor.

#### **NEWSPAPER**

**Grades:** 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: Intro to Media & Journalism

Course Number: 509011

509012

Newspaper is a production-based journalism class. Students work on a team to create the school newspaper. This periodical publication tells stories of the events, trends, and people that make up the daily life of the school and its surrounding community. Newspaper staff members conduct research and interviews, attend school events, take pictures, write and edit stories, organize layouts, and format photos. Students may reach out to community businesses to raise ad revenue as well as use social media to engage the community and to increase interest in the newspaper. This class also provides students with opportunities for leadership roles, and juniors and seniors can earn membership in Quill and Scroll, the international journalism honor society. Its members earn the privilege of wearing an honor cord at their graduation. Overall, the newspaper class will refine students' technical, creative, and problem-solving skills as they produce content for a real audience.

#### **NOVEL STUDIES**

Grades: 11, 12 Credit: 0.5

Length: Semester

Length: Semester

Prerequisites: English 10

Course Number: Semester A: 505321

Or Semester B: 505322

This is a course designed for students who enjoy reading and analyzing literature. Students will improve comprehensive reading skills and analytical writing skills through exposure to a variety of literature. The course will also encourage students to become a life-long reader.



#### TC SPEECH

Grades: 11, 12 Credit: 0.5

Length: Semester

**Prerequisites:** English 10 **Course Number:** Semester A: 505621

Or Semester B: 505622

This class will develop the basic skills of oral communication and help students become effective communicators. Units of study include the communication process, interpersonal communication, effective listening, small group discussion, and public speaking. Students can expect to participate in regular task-oriented groups and to make several public presentations to the class.

This is a college course that will produce a permanent college transcript and grade point average for each student. If you believe that producing a permanent college transcript and grade point is not in your best interest academically at this time, please consider requesting a non-transcripted credit (TC) course. If you need more information about Transcripted Credit, see your counselor before requesting courses. Transcripted credit may be offered if the SDJ has a licensed staff member employed to teach this course.

#### **SCIENCE FICTION AND FANTASY**

Grades: 11, 12 Credit: 0.5

Length: Semester

Prerequisites: English 10

Course Number: Semester A: 505421

Or Semester B: 505422

This course offers a survey of science fiction and fantasy, transporting readers to planets light-years away, or deep inside the caves of a far-distant past. The goals of Science Fiction and Fantasy are to develop the following: to examine science fiction themes and motifs in literature and film, to explore the basis for these themes in society and how they were reflected in literature and film of the time, to examine these themes in detail and discuss the similarities and differences, to examine and discuss current world tensions and how they might play out in literature and film, and to think critically about the relationship between societal issues and how they are reflected in popular culture.

## SOCIAL JUSTICE: THE POWER OF CHOICE AND VOICE

Grades: 11, 12 Credit: 1.0

Length: Year

Prerequisites: None

Course Number: 501311

501312

Students will study how writers and performers use "text" in all genres to fight for social justice. This course will develop skills in language, critical and creative thinking, and reading as student's research social justice and culturally charged issues and create multi-genre projects of their choice to affect change. The genres could include, but not be limited to, performance poetry, music, documentary films, visual art, public speaking, and other internet or print publications. This course will expand self-discipline, confidence, and creative expression while reinforcing the importance and responsibility of informed citizens instigating change for a more socially just community.



#### TC ENGLISH COMP I

Grade: 11, 12 Credit: 0.5

**Length:** Semester **Prerequisites:** English 11

Course Number: Semester A: 505121

Or Semester B: 505122

This course is for students who want to write at the college level. Students will solidify their understanding of the writing process by planning, organizing, writing, and revising papers. Students will explore writing by constructing a narrative essay, an objective summary, a rhetorical analysis essay, and an inquiry-based research paper. In addition, students will not only learn the difference between academic and non-academic language but will also demonstrate appropriate use of the APA citation format. Through written discussion boards, grammar review, and engaging in critical reading, thinking, and writing activities, this course provides students with multiple opportunities for peer interaction.

This is a college course that will produce a permanent college transcript and grade point average for each student. If you believe that producing a permanent college transcript and grade point is not in your best interest academically at this time, please consider requesting a non-transcripted credit (TC) course. If you need more information about Transcripted Credit, see your counselor before requesting courses. Transcripted credit may be offered if the SDJ has a licensed staff member employed to teach this course.

#### **YEARBOOK**

**Grades:** 10, 11, 12

Credit: 1.0

Length: Year

**Prerequisites:** Intro to Media & Journalism or

Instructor Consent

Course Number: 509021

509022

Students will publish a yearbook for their peers. They will learn the basics of yearbook journalism – theme development, financial responsibility, page layout and design, copy writing and editing, graphics and special effects, indexing, and student press law. Students interested in photography will study photo composition, organization, and editing using Adobe Suite. *This course requires time outside of the scheduled school day.* 

# FAMILY AND CONSUMER SCIENCES









COURSE TITLE	9 <sup>™</sup> GRADE	10 <sup>TH</sup> GRADE	10 <sup>TH</sup> GRADE 11 <sup>TH</sup> GRADE	
TC Aspiring Educators		E	E	E
Assistant Child Care Teacher A.C.C.T.			E	E
TC Child Development		E	E	E
AS Culinary Arts I	E	E	E	E
AS Culinary Arts II	E	E	E	E
AS Culinary Arts III ProStart		E	E	E
AS Culinary Arts IV ProStart			E	E
AS Medical Terminology		Е	E	E
Early Childhood Education: Infant and Toddler Development		E	E	E
Early Childhood Education: Health Safety and Nutrition		E	E	E
FACS COOP			E	E
Global Foods		E	E	E
Health Occupations		E	E	E
Principles of Baking		E	E	E

**E** = Elective for Grade Level

**R** = Fulfills Graduation Requirement for Grade Level

**AP** = Advanced Placement

**AS** = Advanced Standing

**EM** = Equivalent Mathematics

**ES** = Equivalent Science

TC = Transcripted Credit

MSOE = Milwaukee School of Engineering

**PLTW** = Project Lead the Way

#### TC ASPIRING EDUCATORS



**Grades:** 10, 11, 12

Credit: 0.5 Length: Semester

**Prerequisites:** None **Course Number:** 722241

722242

Aspiring Educators is a course designed for students who want to become educators. The course involves classroom discussions of educational principles, concepts, and issues related to student-teacher-school-community interaction. This will include developmental aspects, socio-cultural influences and human relations aspects.

The class will consist of a combination of classroom instruction as well as field experiences. Each student will be given the opportunity to observe in the School District of Janesville classrooms.

This is a college course that will produce a permanent college transcript and grade point average for each student. If you believe that producing a permanent college transcript and grade point is not in your best interest academically at this time, please consider requesting a non-transcripted credit (TC) course. If you need more information about Transcripted Credit, see your counselor before requesting courses. Transcripted credit may be offered if the SDJ has a licensed staff member employed to teach this course.

## TC ASSISTANT CHILD CARE TEACHER A.C.C.T.

**Grades:** 11, 12

**Credit:** 0.5 and an opportunity to earn licensure (providing competency and attendance requirements are met)

Length: Semester

**Prerequisites:** TC Child Development **Course Number:** Semester B: 723422

The purpose of this course is to assist students in attaining the necessary skills needed to enter the world of work or post-secondary education in the childcare services field. Units include the childcare center environment, child guidance, establishing positive occupational relationships, professional development, food, and nutrition for children, health and safety, classroom activities/curriculum, and special needs. Observation of children and possible field trips should be expected. Students participating in this course have the opportunity to be licensed through the State of Wisconsin.

This is a college course that will produce a permanent college transcript and grade point average for each student. If you believe that producing a permanent college transcript and grade point is not in your best interest academically at this time, please consider requesting a non-transcripted credit (TC) course. If you need more information about Transcripted Credit, see your counselor before requesting courses. Transcripted credit may be offered if the SDJ has a licensed staff member employed to teach this course.

# b

#### TC CHILD DEVELOPMENT

Grades: 10, 11, 12 Credit: 0.5 Length: Semester

Prerequisites: None

Course Number: Semester A: 722221

This course examines child development within the context of the early childhood education setting. Course competencies include: analyze social, cultural and economic influences on child development; summarize child development theories; analyze development of children age three through age eight; summarize the methods and designs of child development research; analyze the role of heredity and the environment; and examine the role of brain development in early learning (ages 3-8).

This is a college course that will produce a permanent college transcript and grade point average for each student. If you believe that producing a permanent college transcript and grade point is not in your best interest academically at this time, please consider requesting a non-transcripted credit (TC) course. If you need more information about Transcripted Credit, see your counselor before requesting courses. Transcripted credit may be offered if the SDJ has a licensed staff member employed to teach this course.



#### **AS CULINARY ARTS I**

Grades: 9, 10, 11, 12 Credit: 0.5 Length: Semester

Prerequisites: None

Course Number: Semester A: 721621

Or Semester B: 721622

Explore a variety of different food preparation methods, develop cooking and measuring skills, and understand the function of ingredients, healthy eating, and current topics in nutrition & hunger in America. Major Topics: Safety & sanitation; grains, fruits & vegetables, proteins, meal planning. Some examples of Labs: Pizzas, cinnamon rolls, stir fry, fried rice.



#### **AS CULINARY ARTS II**

**Grades:** 9,10, 11, 12 Credit: 0.5

Length: Semester **Prerequisites:** Culinary Arts I

Course Number: Semester A: 722021

Or Semester B: 722022

This course will expand on a variety of different food preparation methods, including quantity cooking, mass production, food safety and presentation. The skills learned throughout the course can be used in preparation for many food occupations. Expect to run a mini business with catering, restaurant and special food events and projects. Serve Safe curriculum will be used and students will be given an opportunity to prepare for National Restaurant Association certification.

#### **AS CULINARY ARTS III ProStart**



**Grades:** 10, 11, 12

Credit: 0.5 Length: Semester

Prerequisites: Culinary Arts II

**Instructor Consent** 

Course Number: Semester A: 722031

Or Semester B: 722032

This course is part of the ProStart Program. ProStart is a nationally recognized twoyear School-to-Career program designed by the Educational Foundation of the National Restaurant Association. ProStart teaches the basic skills and knowledge that students need for success in the foodservice industry. Students are offered instruction ranging from basic food preparation to accounting and cost control. In addition, there is an emphasis on safety and sanitation, communication, management, customer service, and workplace safety. At the conclusion of the safety and sanitation unit, the culinary lab experience, which includes soups, sauces, fruits, vegetables, and grains, will begin. There is an opportunity for work experience credit for students who are employed in the foodservice industry. Students will take the first part of a national credentialing exam at the conclusion of this course.

#### **AS CULINARY ARTS IV ProStart**



**Grades:** 11, 12 Credit: 0.5

Length: Semester

Prerequisites: Culinary Arts III

**Instructor Consent** 

Course Number: Semester A: 722041

Or Semester B: 722042

This course is designed for those especially interested in pursuing a career in a Restaurant or Hospitality and Tourism. Students at the culmination of this course will take the ProStart National Exams and earn the National ProStart Certificate of Achievement. Students who successfully complete the 2-year program will receive certification from the National Restaurant Association (NRA) which will provide them with articulated college credit or advanced standing opportunities at some 30+ colleges and universities across the United States, along with many scholarship opportunities. Students will also work toward receiving SERV Safe® Sanitation Management Certification through the NRA which allows the student to get their sanitation managers license through the State of Wisconsin Health Department. As part of the practical learning process, students will have catering experiences through the high school. Students interested in pursuing this class as an option should intend on gaining employment in a related field to gain full certification. Students are encouraged to enroll in the FACS Coop concurrently if they are employed in a food service related occupation.

#### AS MEDICAL TERMINOLOGY



Grades: 10, 11, 12 Credit: 0.5 Length: Semester Prerequisites: None

Course Number: 586521

This course should be taken by students interested in entering the healthcare field or learning the medical language. This course is designed to provide the student with a foundation in the medical language. Throughout this course, students will begin to understand/explore the wide variety of health care careers. Units of study include: In-depth study of word parts to pronounce, spell, build, analyze and define medical terms: Introduction to anatomy & terminology revolving around several body organs/systems. This course is also offered under Science.

#### TC: EARLY CHILDHOOD EDUCATION: INFANT AND TODDLER DEVELOPMENT



**Grades:** 10, 11, 12 Credit: 0.5 Length: Semester

Prerequisites: None Course Number: 723111

723112

This course you will study infant and toddler development as it applies to an early childhood education setting. Course competencies include: integrate strategies that support diversity, cultural responsiveness, and anti-bias perspectives; analyze development of infants and toddlers (conception to thirty-six months); correlate prenatal and postnatal conditions with development; summarize child development theories; analyze the role of heredity and the environment; examine culturally and developmentally appropriate environments for infants and toddlers, examine the role of brain development in early learning (conception through thirty-six months); examine caregiving routines as curriculum; and examine developmental and environmental assessment strategies for infants and toddlers. This course offers the enrichment activity of caring for a Real Care infant simulator as part of the learner experience. (Previously Parenting) This is a college course that will produce a permanent college transcript and grade point average for each student. If you believe that producing a permanent college transcript and grade point is not in your best interest academically at this time, please consider requesting a non-transcripted credit (TC) course. Transcripted credit may be offered if the SDJ has a licensed staff member employed to teach this course.

## TC: EARLY CHILDHOOD EDUCATION: HEALTH, SAFETY, AND NUTRITION



**Grades:** 10, 11, 12 **Credit:** 0.5

**Length:** Semester **Prerequisites:** None

Course Number: 723411

723412

This course examines the topics of health, safety, and nutrition within the context of the early childhood educational setting. Course competencies include: integrate strategies that support diversity, cultural responsiveness, and anti-bias perspectives; examine governmental regulations and professional standards as they apply to health, safety, and nutrition; plan a safe early childhood environment; plan a healthy early childhood environment; plan nutritionally sound menus; examine child abuse and neglect issues and mandates; apply Sudden Infant Death Syndrome (SIDS) risk reduction strategies, describe strategies to prevent the occurrence of Abusive Head Trauma (AHT) formerly known as Shaken Baby Syndrome (SBS); incorporate health, safety, and nutrition concepts into the children's curriculum. This is a college course that will produce a permanent college transcript and grade point average for each student. If you believe that producing a permanent college transcript and grade point is not in your best interest academically at this time, please consider requesting a non-transcripted credit (TC) course. If you need more information about Transcripted Credit, see your counselor before requesting courses. Transcripted credit may be offered if the SDJ has a licensed staff member employed to teach this course.

#### **FACS COOP**

Grades: 11, 12\*
Credit: 1.0

Length: Year

**Prerequisites:** Previously taken or concurrent enrollment in an FACS class.

Course Number: 729521

729522

Employment opportunities exist in childcare, restaurants, and health care. Students will work in their chosen career area and receive pay and credit for on-the-job work experience. Students will receive release time from school for working at least 12-15 hours per week.

COOP requirements include weekly work logs and quarterly employer completed evaluations.

#### **GLOBAL FOODS**

**Grades:** 10, 11, 12

Credit: 0.5

Length: Semester

Prerequisites: Culinary Arts 1

Course Number: Semester A: 721821

Or Semester B: 721822

This course offers opportunities to explore and taste different cuisine from countries around the world as students use their cooking skills learned in Foods for Life.

Students will investigate the geographical and cultural factors that influence the kinds of foods grown and eaten in each country. Students will come away with a broadened view of the world and deeper understanding of other cultures and ethnic

cuisine.

#### **HEALTH OCCUPATIONS**

**Grades:** 10, 11, 12

Credit: 0.5

Length: Semester

Prerequisites: None

Course Number: Semester A: 723021

Or Semester B: 723022

#### PRINCIPLES OF BAKING

**Grades:** 10, 11, 12 **Credit:** 0.5

Length: Semester

Prerequisites: Culinary Arts I

Course Number: Semester A: 721921

The field of Health Care is full of opportunities and growing rapidly every year. Students will have many opportunities to investigate the wide range of career opportunities in health. A variety of guest speakers and activities are offered during the semester. Students will study ethics, medical history, the health system, and medical terminology. This course is also offered under Health.

During this course, students will participate in activities and labs that link chemistry and food preparation. Students will investigate baking principles that affect the outcome of food products. This course will include different preparation techniques and ingredients. General lab activities include bread making, cake baking & decorating, desserts, pies and more.

## **HEALTH**

COURSE TITLE	9 <sup>™</sup> GRADE	10 <sup>TH</sup> GRADE 11 <sup>TH</sup> GRADE		12 <sup>TH</sup> GRADE
Health Applications*		R	E/R	E/R
Health Occupations		E	E	E

**E** = Elective for Grade Level

**R** = Fulfills Graduation Requirement for Grade Level

**AP** = Advanced Placement

AS = Advanced Standing

**EM** = Equivalent Mathematics

**ES** = Equivalent Science

TC = Transcripted Credit

**MSOE** = Milwaukee School of Engineering

**PLTW** = Project Lead the Way

#### **HEALTH APPLICATIONS**

**Grade:** 10, 11, 12 **Credit:** 0.5

Length: Semester

Prerequisites: None

Course Number: Semester A: 521021

Or Semester B: 521022

This course offers an emphasis on decision making & healthy lifestyles. A variety of topics are discussed such as mental health issues like self-esteem, mental illness, suicide, and grief. ATODA issues (Alcohol, Tobacco, and other Drugs of Abuse) with an emphasis on alcohol, "street" drugs and "club" drugs as well as addiction and treatment options will also be discussed. Relationships and sexuality issues are also investigated. Topics including love & lust, reproduction, STI's (Sexually Transmitted Infections) and HIV/AIDS are all discussed. Nutrition & nutrition related topics are also included.

#### **HEALTH OCCUPATIONS**

**Grades:** 10, 11,12 **Credit:** 0.5

Length: Semester

**Prerequisites:** None **Course Number:** Semester A: 723021

Or Semester B: 723022

The field of Health Care is full of opportunities and growing rapidly every year. Students will have many opportunities to investigate the wide range of career opportunities in health. A variety of guest speakers and activities are offered during the semester. Students will study ethics, medical history, the health system and medical terminology. This course is also offered under Family and Consumer Sciences.



# MATHEMATICS Career Clusters PATHWAYS TO COLLEGE & CAREER READNESS Science, Technology, Engineering & Mathematics



COURSE TITLE	9 <sup>TH</sup> GRADE	10 <sup>TH</sup> GRADE	11 <sup>TH</sup> GRADE	12 <sup>TH</sup> GRADE
TC Advanced Computer Science AB – JAVA (EM)			E / EM +*	E / EM +*
AP Calculus AB			R	R
AP Calculus BC				R
AP Computer Science A – JAVA (EM)		E / EM +*	E / EM +*	E / EM +*
AP Computer Science Principles (EM)		E / EM +*	E / EM +*	E / EM +*
AP Statistics			R+	R+
Algebra 1	R	R	R	R
Algebra 1-Honors	R	R	R	R
Algebra 2		R	R	R
Algebra 2 - Honors		R	R	R
Computer Programming, I (EM)	E / EM*	E / EM*	E / EM*	E / EM*
Computer Programming II (EM)	E / EM*	E / EM*	E / EM*	E / EM*
Digital Electronics (EM, PLTW, MSOE)		E / EM*	E / EM*	E / EM*
Geometry	R	R	R	R
Geometry – Honors	R	R	R	R
Integrated Math IV including Discrete Mathematics			R	R
TC Intermediate Algebra with Apps			E/R	E/R
TC Introductory Statistics			E/R +	E/R +
AS Math for the Trades			E/R	E/R
Math Strategies I (Parker HS Only)	E	E	E	E
Math Strategies II (Parker HS Only)	E	E	E	E
Math Strategies III (Parker HS Only)		E	E	E
Math Strategies IV (Parker HS Only)			E	E
Precalculus – Honors		R	R	R

**E** = Elective for Grade Level

**R** = Fulfills Graduation Requirement for Grade Level

AP = Advanced Placement

AS = Advanced Standing

**EM** = Equivalent Mathematics\*

**ES** = Equivalent Science

**TC** = Transcripted Credit

MSOE = Milwaukee School of Engineering

**PLTW** = Project Lead the Way

For additional clarification or alternatives to the options indicated, consult your Mathematics Department chairperson or high school counselor. Students must complete each course with a passing grade before proceeding to the next level course.

<sup>\*</sup> A student can earn up to one equivalent math (EM) credit towards the math requirement for graduation.

<sup>+</sup> Not all post-secondary institutions provide math credit for this course but would provide credit towards something else.



#### TC ADVANCED COMPUTER SCIENCE AB – JAVA (EM)

Grades: 11, 12 Credit: 1.0

Length: Year

Prerequisites: AP Computer Science A -

ΙΔ\/Δ

Course Number: 684421

684422

This yearlong course is comparable to the second course in the introductory sequence for computer science majors in college. The Computer Science course is intended to serve both as a second step for computer science majors and as a course for people who will major in other disciplines that require significant involvement with technology. JAVA is a platform independent language and the programs students write will compile successfully on Macintosh or Windows operating systems. Upon completion of the course, students will have finished the equivalent of a second semester course in college computer science. Students will be responsible for paying for the tuition, which is about one third of the cost as an undergraduate (approximately \$300).

This course is also offered under Computer Sciences.

#### **AP CALCULUS AB**

Grade: 11, 12 Credit: 1.0

Length: Year

**Prerequisites:** Precalculus – Honors, Math III Honors, or Instructor consent

Course Number: 545021

545022

The purpose of this course is to introduce students to derivatives, integrations and their applications. This is university level calculus. Students will have the opportunity to take the Advanced Placement exam. A graphing calculator is recommended for this course.

#### **AP CALCULUS BC**

Grade: 12

Credit: 1.0

Length: Year

Prerequisites: AP Calculus AB

Course Number: 545121

545122

This is a full year course in the calculus of functions of a single variable. It includes all topics covered in Calculus AB plus parametric, polar, and vector functions; improper integrals; differential equations; advanced integration techniques; polynomial approximations and series. This is university level calculus. Students will have the opportunity to take the Advanced Placement exam. A graphing calculator is recommended for this course.

#### AP COMPUTER SCIENCE A – JAVA (EM)

**Grades:** 10, 11, 12

Credit: 1.0

Length: Year

**Prerequisites:** Integrated Math I deports

Integrated Math I Honors

Course Number: 684321

684322

This yearlong course is comparable to the first course in the introductory sequence for computer science majors in college. An AP Computer Science A course is intended to serve both as an introductory course for computer science majors and as a course for people who will major in other disciplines that require significant involvement with technology. JAVA is a platform independent language and the programs students write will compile successfully on Macintosh or Windows operating systems. Students will have the opportunity to take the Advanced Placement exam.

This course is also offered under Computer Sciences.

graphing calculator is recommended for this course.

#### AP COMPUTER SCIENCE PRINCIPLES (EM)

**Grades:** 10, 11, 12

Credit: 1.0

Length: Year

**Prerequisites:** Integrated Math I or

Integrated Math I Honors

Course Number: 684521

684522

This course offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cyber-security concerns, and computing impacts. AP Computer Science Principles will give students the opportunity to use technology to address real-world problems and build relevant solutions. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science. Students will have the opportunity to take the Advanced Placement exam.

#### **AP STATISTICS**

**Grade:** 11, 12

Credit: 1.0

Length: Year

Prerequisites: Math III or Math III Honors

with Pre-Calculus

Course Number: 545221

545222

This course is also offered under Computer Sciences.

Advanced Placement Statistics introduces students to the major concepts and tools for collecting, organizing, analyzing, and interpreting data. Students will explore patterns in data, plan and conduct a study through sampling and experimentation, anticipate patterns using probability and simulation, and estimate population parameters. Introductory statistics is typically required for majors such as social sciences, health sciences and business. Science, engineering and mathematics majors usually take an upper-level calculus-based course in statistics, for which the AP Statistics course is preparation. Students planning to enroll in Calculus in college are encouraged to take this course concurrently with either Precalculus or AP Calculus. Students will have the opportunity to take the Advanced Placement exam. A

**ALGEBRA 1** 

**Grades:** 9

Credit: 1.0

Length: Year

Prerequisites: None

Course Number: 540121 & 540122

The fundamental purpose of this course is to formalize and extend the mathematics that students learned in the middle grades. Students will deepen and extend their understanding of linear and exponential relationships and engage in methods for analyzing, solving, and using quadratic functions, as well as make sense of problems to solve.

**ALGEBRA 1 - HONORS** 

**Grades:** 9

Credit: 1.0

Length: Year

Prerequisites: Instructor Consent

Course Number: 540021

540022

This course includes all topics covered in Algebra 1 and additional related content, such as linear programming. This course requires students to demonstrate deeper proficiencies related to the conceptual understanding, procedural fluency, and application of the standards. Students will apply the Math Practice Standards to solve complex problems that require multiple steps.

ALGEBRA 2

**Grades:** 9, 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: Integrated Math II or Integrated Math II Honors

Course Number: 543121

543122

Students will build on their work with linear, quadratic, and exponential functions, and extend their repertoire of functions to include polynomial, rational, and radical functions. They will work closely with expressions and continue to expand their abilities to model situations and solve equations, such as exponential equations using the properties of logarithms. Students will make sense of problem situations to solve.

**ALGEBRA 2 - HONORS** 

Grades: 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: Integrated Math II or Integrated Math II Honors, or Instructor

consent

Course Number: 543441

543442

This course includes all topics covered in Algebra 2 and additional content standards, such as inverse relations and functions and matrices. This course requires students to demonstrate deeper proficiencies related to the conceptual understanding, procedural fluency, and application of the standards. Students will apply the Math Practice Standards to solve complex problems that require multiple steps.

**COMPUTER PROGRAMMING, I (EM)** 

Grades: 9, 10, 11,12

Credit: 0.5

Length: Semester

Prerequisites: None

Course Number: Semester A: 681121

Or Semester B: 681122

Computer Programming I is the beginning programming semester course. Students will learn a modern object orientated programming language that produces programs for Macintosh or Windows machines. Students will design programs that will include music, audio, movies, graphics and interactive real-world applications. These projects will emphasize communication of ideas and information available to a wide range of student interests. This will allow for a smooth transition to other languages such as JAVA and C++. Topics include use of algorithms and variables with decision and repeat structures.

This course is also offered under Computer Sciences.

**COMPUTER PROGRAMMING II (EM)** 

Grades: 9, 10, 11, 12

Credit: 0.5

Length: Semester

Prerequisites: Computer Programming I

Course Number: Semester A: 681221

Or Semester B: 681222

Computer Programming II is the advanced programming semester course which expands the computing knowledge and skills acquired in the Computer Programming I class. Students will learn advanced programming techniques. Multimedia projects will include the use of video and sound technologies. The emphasis will be on effective communication of ideas and information through high level programming strategies involving objects and classes. These strategies include control structures and the handling of numerical and word data through functions and classes.

This course is also offered under Computer Sciences.



## DIGITAL ELECTRONICS (EM, PLTW, MSOE)

**Grades:** 10, 11, 12

Credit: 1.0

Length: Year

**Prerequisites:** IED and Integrated Math I or

Integrated Math I Honors

**Course Number:** 782221 & 782222

Digital Electronics introduces students to the fundamentals and applications of digital electronics, programmable logic controls, and the application of electronic circuits and devices. Students will design and test digital circuitry through a blend of hands-on and academic activities.

This course is also offered under Technology and Engineering.

#### **GEOMETRY**

Grades: 9, 10, 11, 12

Credit: 1.0

Length: Year

**Prerequisites:** Integrated Math I or Integrated Math I Honors

Course Number: 543021

543022

The fundamental purpose of this course is to formalize and extend students' geometric experiences. Students explore complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments. Course content will also include transformations. Students will make sense of problem situations to solve.

#### **GEOMETRY - HONORS**

Grades: 9, 10, 11, 12

Credit: 1.0

Length: Year

**Prerequisites:** Integrated Math I or Integrated Math I Honors or Instructor

consent

Course Number: 542021

542022

This course includes all topics covered in Geometry and additional content standards, such as applications of the Law of Sines and Cosines to find unknown measurements in triangles. This course requires students to demonstrate deeper proficiencies related to the conceptual understanding, procedural fluency, and application of the standards. Students will apply the Math Practice Standards to solve complex problems that require multiple steps.

#### INTEGRATED MATH IV INCLUDING DISCRETE

## MATHEMATICS

**Grades:** 11, 12

Credit: 0.5 or 1.0

Length: Semester or Year

Prerequisites: Math III or Math III Honors

with Pre-Calculus

Course Number: 542441

542442

This course will analyze the common core math standards beyond those previously learned in Algebra 1, Geometry, and Algebra 2. Students will learn about the complex number system, vectors, and matrix operations. Students will focus on how to apply these topics to real-world situations. This course will also help prepare students for the ACT and placement tests at the post-secondary level.

Students can enroll in this course during semester 1, semester 2, or for the entire year.

#### TC Intermediate Algebra w/Application



**Grades:** 11,12 Credit: 1.0 Length: Year

**Prerequisites:** Math III or Math III Honors with Pre-Calculus

Course Number: 544111

544112

This course is designed to review and develop fundamental concepts of mathematics in the areas of algebra, geometry, trigonometry, measurement and data. Algebra topics emphasize simplifying algebraic expressions, solving linear equations and inequalities with one variable, solving proportions and percent applications. Geometry and trigonometry topics include: finding areas and volumes of geometric figures, applying similar and congruent triangles, applying Pythagorean Theorem, and solving right triangles using trigonometric ratios. Measurement topics emphasize the application of measurement concepts and conversion techniques within and between U.S. customary and metric systems to solve problems. Data topics emphasize data organization and summarization skills, including: frequency distributions, central tendency, relative position and measures of dispersion. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators.

This is a college course that will produce a permanent college transcript and grade point average for each student. If you believe that producing a permanent college transcript and grade point is not in your best interest academically at this time, please consider requesting a non-transcripted credit (TC) course. If you need more information about Transcripted Credit, see your counselor before requesting courses. Transcripted credit may be offered if the SDJ has a licensed staff member employed to teach this course.



#### TC INTRODUCTORY STATISTICS

**Grades:** 11, 12 Credit: 1.0

Length: Year

Prerequisites: Math III or Math III Honors with Pre-Calculus

Course Number: 545321

Students taking Introductory Statistics display data with graphs, describe distributions with numbers perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses.

This is a college course that will produce a permanent college transcript and grade point average for each student. If you believe that producing a permanent college transcript and grade point is not in your best interest academically at this time, please consider requesting a non-transcripted credit (TC) course. If you need more 545322 information about Transcripted Credit, see your counselor before requesting courses. Transcripted credit may be offered if the SDJ has a licensed staff member employed to teach this course.



#### AS MATH FOR THE TRADES

**Grades:** 11, 12 Credit: 1.0

Length: Year Prerequisites: Math III

Course Number: 545131

545132

This course consists of Shop Mathematics I and Shop Mathematics II. This course begins with the basic principles of arithmetic as applied to typical manufacturing and construction problems and continues with the study of the properties of circles, olumes and surface areas of various solids, an introduction to practical algebra and trigonometric principles used in solving right triangles as well as applications of the sine and cosine law in solving oblique triangles.

#### MATH STRATEGIES I (Parker HS Only)

**Grades:** 9, 10, 11, 12

Credit: 1.0

Length: Year

**Prerequisites:** Take concurrently with

Algebra 1

Course Number: 541111 & 541112

This math intervention course is designed to be taken simultaneously with Algebra 1. Students will work on developing the essential math skills that are the foundation of the high school math curriculum. Students will also learn and practice different strategies to help them succeed in their core math class. Students should also be enrolled in Algebra 1. This course does not meet mathematics graduation requirements.

#### MATH STRATEGIES II (Parker HS Only)

**Grades:** 9, 10, 11, 12

Credit: 1.0

Length: Year

**Prerequisites:** Take concurrently with

Geometry

Course Number: 542321

542322

This math intervention course is designed to be taken simultaneously with Geometry. Students will work on developing the essential math skills that are the foundation of the high school math curriculum. Students will also learn and practice different strategies to help them succeed in their core math class. Students should also be enrolled in Geometry. This course does not meet mathematics graduation requirements.

MATH STRATEGIES III (Parker HS Only)

Grades: 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: Take concurrently with

Algebra 2

Course Number: 543221

543222

MATH STRATEGIES IV (Parker HS Only)

Grades: 11, 12

Credit: 1.0

Length: Year

This math intervention course is designed to be taken simultaneously with Algebra 2. Students will work on developing the essential math skills that are the foundation of the high school math curriculum. Students will also learn and practice different strategies to help them succeed in their core math class. Students should also be enrolled in Algebra 2. This course does not meet mathematics graduation requirements.

**Prerequisites:** Take concurrently with Integrated Math IV including Discrete Mathematics

Course Number: 543231

543232

This math intervention course is designed to be taken simultaneously with Integrated Math IV including Discrete Mathematics. Students will work on developing the essential math skills that are the foundation of the high school math curriculum. Students will also learn and practice different strategies to help them succeed in their core math class. Students should also be enrolled in Integrated Math IV including Discrete Mathematics. This course does not meet mathematics graduation requirements.

**PRECALCULUS - HONORS** 

**Grades:** 10, 11, 12

Credit: 1.0 Length: Year

**Prerequisites:** Integrated Math II Honors or

Math III

Course Number: 543521

543522

The purpose of this course is to take a graphing calculator approach to understanding the following types of functions: algebraic, polynomial, exponential, logarithmic and trigonometric functions. This course will prepare students for AP Calculus AB. A graphing calculator is recommended for this course.

# **MUSIC**



COURSE TITLE	9 <sup>™</sup> GRADE	10 <sup>TH</sup> GRADE	11 <sup>TH</sup> GRADE	12 <sup>TH</sup> GRADE
A Cappella Choir		E	E	E
Accelerated A Cappella Choir – Honors			E	E
Accelerated Orchestra – Honors			E	E
Accelerated Wind Ensemble – Honors			E	E
AP Music Theory			E	E
Aurora Choir (Parker HS Only)	E	E	E	E
Bel Canto Choir (Parker HS Only)		Е	E	E
Bella Voce (Craig HS Only)	Е	E	E	E
Concert Band	Е			
Introduction to Music Theory/Music History		E	E	E
Introduction to Theater Design and Construction (Craig HS Only)	E	E	E	E
Jazz Ensemble		E	E	E
Mixed Choir (Craig HS Only)	E	E	E	E
Movies and Music		E	E	E
Music Technology I (Parker HS Only)	Е	E	E	E
Music Technology II (Parker HS Only)	Е	E	E	E
Philharmonic Orchestra	Е	E	E	E
The Power Chords (Craig HS Only)	E	E	E	E
Symphonic Band		E	E	E
Symphonic Orchestra		E	E	E
Viking Choir (Parker HS Only)	E	E	E	E
Wind Ensemble		E	E	E

**E** = Elective for Grade Level

**R** = Fulfills Graduation Requirement for Grade Level

**AP** = Advanced Placement

**AS** = Advanced Standing

**EM** = Equivalent Mathematics

**ES** = Equivalent Science

**TC** = Transcripted Credit

**MSOE** = Milwaukee School of Engineering

**PLTW** = Project Lead the Way

#### A CAPPELLA CHOIR

**Grades:** 10, 11, 12

Credit: 1.0 Length: Year

Prerequisites: Audition

Course Number: 764521

764522

Students selected will be expected to exhibit a high degree of competence in musical and vocal skills. Work in the A Cappella Choir will center around techniques in using the singing voice for both solo and ensemble work. Understanding will be gained in music of many periods and styles, although the "classics" of choral literature are highly emphasized. Through musical analysis and performance, A Cappella Choir students are engaged in exploring great music. Students electing A Cappella Choir must audition with the instructor. Students are encouraged to participate in the Musical and District Solo and Ensemble Festival. The choir usually participates in at least 4 concerts. Attendance is required at all scheduled performances. Students may repeat for credit each year.

## ACCELERATED A CAPPELLA CHOIR – HONORS

Grades: 11, 12 Credit: 1.0

**Length:** Year

**Prerequisites:** Audition **Course Number:** 764821

764822

This rigorous course provides students who are developing their vocal skills at a high level the opportunity to demonstrate their abilities through a variety of demanding performance opportunities. Students taking this course are seeking opportunities beyond the expectations of a comprehensive choral music education. Leadership skills will be enhanced through active participation as section leaders. Individual expectations, demanding rehearsal requirements, and additional state/community programs complete a list of involvements that are designed to promote musical excellence and real-world applications of responsibility, cooperation, and assertiveness.

#### **ACCELERATED ORCHESTRA - HONORS**

**Grades: 11, 12** 

Credit: 1.0

**Length:** Year

Prerequisites: Audition

**Course Number:** 766221 766222

This rigorous course provides students with evolving instrumental skills the opportunity to demonstrate their abilities through a variety of demanding performance opportunities. A portfolio of summative student work will be produced in addition to classroom activities. Demanding rehearsal requirements, leadership opportunities, and additional state/community programs complete a list of possible involvements that are designed to promote real world applications of responsibility, cooperation, and assertiveness.

#### **ACCELERATED WIND ENSEMBLE - HONORS**

**Grades:** 11, 12

Credit: 1.0

Length: Year

**Prerequisites:** Audition

Course Number: 762821

, 762822 This rigorous course provides students who are developing their instrumental performance skills at a high level the opportunity to demonstrate their abilities through a variety of demanding performance opportunities. Students taking this course are seeking opportunities beyond the expectations of the comprehensive instrumental curriculum. Leadership skills will be enhanced through active participation as section leaders. Individual expectations, demanding rehearsal requirements, and additional state/community programs complete a list of involvements that are designed to promote musical excellence and real-world applications of responsibility, cooperation, and assertiveness.

#### **AP MUSIC THEORY**

**Grades:** 11, 12

Credit: 1.0

Length: Year

**Prerequisites:** Introduction to Music Theory/Music History or Instructor Consent

Course Number: 766401

766402

Music oriented students will be exposed to a rigorous, systematic study of the musical process. Students will become competent in rhythm, melody, keyboard studies, scales, key signatures, intervals, triads, tonality, sight-singing, part writing, composition, and electronic music. Students will have the opportunity to take the Advanced Placement exam. **Depending on the number of students registered at each school, this course may or may not be a site-specific class.** 

#### **AURORA CHOIR**(Parker HS Only)

**Grades:** 9, 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: None

Course Number:

Aurora Choir is a curricular Level I choir for 9th-12th grade sopranos and altos. Emphasis is placed on the development of proper singing technique during the changing voice. The curriculum focuses on healthy and efficient vocal production, ensemble techniques, choral repertoire from varied cultures, time periods, and styles, and music literacy through regular sight-singing, ear-training, and music theory. The choir will participate in concerts and festivals throughout the school year.

#### **BEL CANTO CHOIR**

(Parker HS Only)

**Grades:** 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: Audition

Course Number: 764921

764922

Female students selected will be expected to exhibit a high degree of competence in musical and vocal skills. Work in the Bel Canto Choir will center around techniques in using the singing voice for both solo and ensemble work. Understanding will be gained in music of many periods and styles, although the "classics" of choral literature are highly emphasized. Through musical analysis and performance, Bel Canto Choir students are engaged in exploring great music. Attendance is required at all scheduled performances. Students are encouraged to participate in the musical and District Solo and Ensemble Festival. Students may repeat for credit each year.

#### **BELLA VOCE**

(Craig HS Only)

**Grades:** 9, 10, 11, 12 **Credit:** 0.5 or 1.0

**Length:** Semester or Year **Prerequisites:** Audition

Course Number: Semester A: 764021

And/or Semester B: 764022

This course is catered towards the workings of soprano and alto voices. Materials in this course stress fundamentals of singing and musicianship in the performance of music of all periods and styles. Music representing many styles is represented, although "classics" are emphasized. Attendance is required at all scheduled concerts.

#### **CONCERT BAND**

Grade: 9

Credit: 1.0

Length: Year

**Prerequisites:** 8<sup>th</sup> Grade Band or Instructor

Consent

Course Number: 761021

761022

This is the freshman band. This band performs a wide variety of music, with emphasis placed on continued growth and development of playing skills, as well as ensemble performance skills. During the first quarter, emphasis is on preparation for marching band performances at parades and home football games. This includes some required outside-of-class rehearsals; these rehearsals do not conflict with other sports practices or games. During the remaining three quarters, students perform at several concerts. Outside-of-school performances are a class requirement. Practice time outside of class is required and considered vital to the student's growth on his/her instrument. Students also participate in the pep band which performs at a number of home athletic events. Students will receive information on the summer band camp. Participation in District Solo and Ensemble Festival is optional and encouraged. Grading is based on performance and written assessments. Students may repeat for credit each year.

## INTRODUCTION TO MUSIC THEORY/MUSIC HISTORY

**Grade:** 10, 11, 12

Credit: 0.5

**Length:** Semester **Prerequisites:** None

Course Number: Semester A: 766421

Or Semester B: 766422

This course is an introduction to Music Theory and Music History. Basic music theory concepts will be introduced such as note names, rhythmic structures, scales, key signatures and other foundational music concepts. This course will also focus on music from all periods (Medieval, Renaissance, Baroque, Classical, Romantic and 20<sup>th</sup> Century) and its composers. Students who are interested in taking AP Music Theory are encouraged to take this course.

## INTRODUCTION TO THEATER DESIGN AND CONSTRUCTION

(Craig HS Only)

**Grade:** 9, 10, 11, 12

Credit: 0.5

Length: Semester

zengun semester

Prerequisites: None

Course Number: Semester B: 783522

Introduction to Theater Design and Construction will expose students to set design and construction as well as theatrical lighting and sound in this hands-on class. Students will be making the sets and props for the current musical/theatrical productions as well as working with sounds and lighting for the shows. This course may be taken multiple academic years for credit.

This course is also offered under Technology and Engineering.

#### JAZZ ENSEMBLE

**Grades:** 10,11, 12 **Credit:** 1.0

**Length:** Year

Prerequisites: Audition

Course Number: 761621

761622

Jazz Ensemble is a performance group that will rehearse and perform a variety of jazz music from all associated musical eras including, but not limited to, big bands, progressive, blues, Dixieland, modern, fusion and bebop. Students will also study the origins and history of jazz music. Written and performance assignments and assessments will be used. The Jazz Ensemble is open to all students. Instrumentation includes brass and woodwind instruments as well as piano, guitar, and bass guitar, drum set and mallet percussion instruments. Students must have played an instrument for at least one year.

#### **MIXED CHOIR**

(Craig HS Only)

**Grades:** 9, 10, 11, 12 **Credit:** 0.5 or 1.0

Length: Semester or Year

Prerequisites: None

Course Number: Semester A: 763021

And/or Semester B: 763022

Fundamentals of musicianship and singing skills are learned and implemented. Emphasis is placed on the large ensemble; however, individual and small group singing is encouraged. Singers in this choir may audition for the musical and participate in District Solo and Ensemble Festival. Attendance is required for all scheduled concerts. Students may repeat for credit each semester or year.

#### **MOVIES AND MUSIC**

**Grades:** 10, 11, 12

Credit: .5

**Length:** Year

Prerequisites: None

**Course Number:** 767021 & 767022

This class is one semester and is intended to look at how music can improve, affect or even detract from the story that is being presented on screen. There is also an emphasis on various aspects of the craft of making movies. We will follow primarily a historic timeline beginning with the first commercially successful "talking" picture through musicals, movies with political overtones, action, horror and science fiction. After each film we view, you will have short writing assignments to be completed on your Chromebook in class that will include some technical information about the film as well as your reactions to the story and the music. There may also be a number of written tests and/or quizzes that will assess what you have learned. Some of the testing may include identifying the source and title of musical examples that will be played for you.

#### MUSIC TECHNOLOGY I (Parker HS Only)

**Grade:** 9, 10, 11, 12

Credit: 0.5

Length: Semester

Prerequisites: None

Course Number: Semester A: 763001

Or Semester B: 763002

This course introduces students to the study of music technology and music fundamentals. It features the latest developments in music technology, such as synthesizers, computers, and recording equipment. The historical aspects of music technology will be discussed from early M.I.D.I. (Musical Instrument Digital Interface) applications to the latest equipment and computer software.

A variety of compositional software will be used such as Sibelius, Finale, Audacity and Garage Band. Students will learn basic piano keyboard techniques as well as how to arrange music for everything from Bach Chorales to Popular Music for a variety of instruments and voices. Students will learn a variety of computer note entries as well as basic recording techniques.

#### MUSIC TECHNOLOGY II (Parker HS Only)

**Grade:** 9, 10, 11, 12

Credit: 0.5

**Length:** Semester

Prerequisites: Music Technology I or

Instructor Consent

Course Number: Semester A: 763011

Or Semester B: 763012

This course will explore real-life applications of microphones, recording equipment, video and audio editing and applications in concert settings. Students will work directly with the equipment found in the recording studio and in the auditorium. This is a class designed for students who are interested in pursuing a career in sound engineering or another music technology field.

#### THE POWER CHORDS

(Craig HS Only)

**Grades:** 9, 10, 11, 12

Credit: 0.5

**Length:** Semester

**Prerequisites:** None

Course Number: Semester B: 764312

Students in this ensemble have the unique opportunity to perform repertoire selected for **the baritone**, **bass and tenor voice**. Fundamentals of vocal technique and music reading skills are developed. Emphasis is placed on performing music representing various historical/stylistic periods. While emphasis is placed on **music for basses**, **tenors and baritones as an ensemble**, there are opportunities for participation in solo and ensemble festivals and the musical. Attendance is required at all scheduled performances. Students may repeat for credit each semester or year.

#### PHILHARMONIC ORCHESTRA

**Grades:** 9, 10, 11, 12

Credit: 1.0 Length: Year

**Prerequisites:** 8<sup>th</sup> Grade Orchestra or Instructor Consent

Course Number: 766021

766022

Students in this ensemble are involved in exploring new techniques to develop musicianship. The music performed by the orchestra is selected for expanding the scope of musical understanding and for improving the technical skills of the students enrolled. Music of many periods and styles are studied and opportunity is offered for chamber ensemble performance. Attendance is required at all performances. Students may repeat for credit each year.

#### **SYMPHONIC BAND**

**Grades:** 10, 11, 12

Credit: 1.0

Length: Year

**Prerequisites:** Concert Band

Course Number: 761521

761522

This is the intermediate level band. This band performs a wide variety of music, with emphasis placed on continued growth and development of playing skills, as well as ensemble performance skills. During the first quarter, emphasis is on preparation for marching band performances at parades and home football games. This includes some required outside-of-class rehearsals. During the remaining three quarters, students perform at several concerts. Outside-of-school performances are a class requirement. Practice time outside of class is required and considered vital to the student's growth on his/her instrument. Students also participate in the pep band which performs at a number of home athletic events. Students will receive information on the summer band camp. Participation in District Solo and Ensemble Festival is optional and encouraged. Grading is based on performance and written assessments. Students may repeat for credit each year.

#### **SYMPHONIC ORCHESTRA**

**Grades:** 10,11, 12

Credit: 1.0

Length: Year

**Prerequisites:** Philharmonic Orchestra and

Instructor Consent

**Course Number:** 766121 & 766122

**VIKING CHOIR**(Parker HS Only)

Grades: 9, 10, 11, 12

Credit: 1.0

**Length:** Year

Prerequisites: None

**Course Number:** 

#### WIND ENSEMBLE

**Grades:** 10, 11, 12

Credit: 1.0

**Length:** Year

**Prerequisites:** Audition

Course Number: 762021

762022

Students selected for this ensemble have demonstrated the musicianship necessary to perform intermediate to advanced literature for orchestra. Emphasis is placed on developing musicianship, musical sensitivity, and performance skills in large and small ensembles. Attendance is required at all performances. Students may repeat for credit each semester or year.

The Viking Choir is a curricular Level I choir for 9th-12th grade tenors and basses. Emphasis is placed on the development of proper singing technique during the changing voice. The curriculum focuses on healthy and efficient vocal production, ensemble techniques, choral repertoire from varied cultures, time periods and styles, and music literacy through regular sight-singing, ear-training, and music theory. The choir will participate in concerts and festivals throughout the school year.

This ensemble is composed of select musicians who have demonstrated the musicianship necessary to perform more advanced works for wind ensemble or full band. Emphasis is placed on the development of musicianship, aesthetic sensitivity, and performance skills. During the first quarter, emphasis is on preparation for marching band performances at parades and home football games. This includes some required outside of class rehearsals; these rehearsals do not conflict with other sports practices or games. During the remaining three quarters, students perform at several concerts. Outside-of-school performances are a class requirement. Practice time outside of class is required and considered vital to the student's growth on his/her instrument. Students also participate in the pep band which performs at a number of home athletic events. Students will receive information on the summer band camp. Participation in District Solo and Ensemble Festival is optional and encouraged. Grading is based on performance and written. Students may repeat for credit each year.

## PHYSICAL EDUCATION

COURSE TITLE	9 <sup>™</sup> GRADE	10 <sup>™</sup> GRADE	11 <sup>TH</sup> GRADE	12 <sup>TH</sup> GRADE
Adventure Physical Education				E
American Red Cross Lifeguard Training		R	R	R
Athletic Performance and Training		R	R	R
Core Physical Education Grade 9	R			
Core Physical Education Grade 10, 11, 12		R	R	R
Freshman Weight Training	E			
Lifetime Health and Fitness		R	R	R
Physical Education Advanced			R	R
Physical Education Alternative	R	R	R	R
Physical Education Cadet Leadership			R	R
Pre-Cadet Leadership Class		R	R	
Strength, Agility, and Conditioning I		R	R	R
Strength, Agility, and Conditioning II		R	R	R
Team Sports		R	R	R

**E** = Elective for Grade Level

**R** = Fulfills Graduation Requirement for Grade Level

**AP** = Advanced Placement

**AS** = Advanced Standing

**EM** = Equivalent Mathematics

**ES** = Equivalent Science

**TC** = Transcripted Credit

MSOE = Milwaukee School of Engineering

**PLTW** = Project Lead the Way

#### **ADVENTURE PHYSICAL EDUCATION**

Grade: 12 Credit: 0.5

Length: Semester

**Prerequisites:** 12th grade and all other Physical Education requirements met. Students must be comfortable in deep

**Course Number:** Semester A: 565221 Or Semester B: 565222 Adventure physical education will include the following stages of adventure:

- 1) Teambuilding: get acquainted, movement, communication, problem solving, trust building, and debriefing/processing.
- 2) Survival: map and compass, geocaching, wilderness first aid, camping, outdoor cooking, fire-starting, and trip planning.
- 3) Prusik Climbing: learn basic knots, how to belay, rappel, and climbing techniques.
- 4) Outdoor Pursuits: canoeing, hiking, snow shoeing, downhill skiing, and archery.

Fitness workouts and team sports will also be part of the curriculum.

## AMERICAN RED CROSS LIFEGUARD TRAINING

**Grades:** 10, 11, 12 **Credit:** 0.5

Length: Semester

**Prerequisites:** Must be age 16 by completion of course and have passed the American Red Cross Level IV of Learn to Swim program and/or be able to swim 300 yards using proper technique of front crawl and breaststroke.

Course Number: Semester A: 565121 Or Semester B: 565122 Upon completion of required skills and receiving 80% or better on written tests, students will become certified as an American Red Cross Lifeguard. American Red Cross training makes learning fun and easy. Through classroom learning and handson practice, students will learn:

- Surveillance skills to help recognize and prevent injuries
- Rescue skills in the water and on land
- First aid training and professional rescuer CPR/AED to help prepare for any emergency
- Professional lifeguard responsibilities like interacting with the public and addressing uncooperative patrons

## \$38 Red Cross Certification Fee. In addition to the fee, students need to purchase the required course materials (Red Cross Lifeguard Manual and Rescue Mask)

#### ATHLETIC PERFORMANCE AND TRAINING

**Grades:** 10, 11, 12

Credit: 0.5 Length: Semester

Prerequisites: Core PE 9 or Freshmen Weight

Training

Course Number: 565311

565412

This course is designed to effectively and safely take you to the next level in your athletic performance. Each day you will complete a group workout specifically designed to improve your overall strength, power, explosiveness, speed, agility and endurance with a continual emphasis on overall physical athletic performance. Students will train in an environment that will breed success in the training setting that will carry over to the competition level. Competitive warm-ups, dynamic Olympic lifts, and explosive speed and agility drills will be used on a weekly basis. Each student should expect to train at a high level during class with an overall focus on becoming more athletic through movement education.

#### **CORE PHYSICAL EDUCATION GRADE 9**

Grade: 9

Credit: 0.5

Length: Semester

**Prerequisites:** None

Course Number: Semester A: 561021

Or Semester B: 561022

#### **CORE PHYSICAL EDUCATION GRADE 10, 11, 12**

**Grade:** 10, 11, 12

Credit: 0.5

Length: Semester or year

**Prerequisites:** None

Course Number: Semester A: 562021

Or Semester B: 562022

Curriculum covered in this course is intended for personal fitness improvement, enjoyment of lifetime activities and overall wellness. Students will participate in a variety of units that balance fitness, individual sports and team sports. The focus of the fitness unit is for students to acquire knowledge about the components of fitness, learn about the benefits of exercise and participate in fitness activities. Individual sports include, but not limited to, badminton, swim, pickle ball and weight training. Team sports include, but are not limited to, ultimate, basketball, speedball and soccer.

Core Physical Education for 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grade is designed for the students who want to continue developing the <u>basic</u> skills and knowledge to participate in a variety of activities. The curriculum covered in this course is intended for personal fitness improvement, enjoyment of lifetime activity and overall wellness. The curriculum could include but is not limited to: Badminton, tennis, pickleball, fitness conditioning, basketball, slow pitch softball, volleyball, soccer, ultimate games and other team sports. (The first semester passed will count as the required physical education credit for graduation, second semester will count towards a passed elective credit. Students must take PE credits over 3 years.)

#### FRESHMAN WEIGHT TRAINING

**Grade:** 9

Credit: 0.5

Length: Semester

**Prerequisites:** None

Course Number: Semester A: 564011

Or Semester B: 564012

As students enter high school, it is a time when many students want to weight train seriously and with a purpose. Without proper knowledge of training and safety students can be putting themselves at risk for injuries. Freshman weight training will help to ensure students have the knowledge to be successful and benefit from strength training.

#### LIFETIME HEALTH AND FITNESS

**Grade:** 10, 11, 12

Credit: 0.5

Length: Semester or year

Prerequisites: None

Course Number: Semester A: 564021

Or Semester B: 564022

This class is designed to help students improve their fitness knowledge as well as provide an opportunity to improve their fitness levels. The class is broken into a combination of classroom and activity days. Students will participate in a variety of cardiovascular activities, flexibility training, muscular strength and endurance, and resistance training activities. The emphasis of this course is to introduce the students to a wide variety of personal fitness concepts that they may actively engage in outside of the classroom setting. On classroom day's topics such as fitness strategies, nutrition, dieting, body image & composition, basic anatomy and physiology, along with the development of a personal fitness plan.

The goal of the class is to provide instruction while enjoying the execution of activities that lead to a lifetime of wellness. Some of the activities covered in this course may include: interval workouts on cardiovascular equipment, agility activities, fitness activities using bosu balls, resistance bands, stability ball equipment, step aerobics, Pilates, yoga, water activities, Zumba and an ongoing strength training workout that focuses on each student's personal fitness goal. (The first semester passed will count as the required physical education credit for graduation, second semester will count towards a passed elective credit. Students must take PE credits over 3 years.)

#### PHYSICAL EDUCATION ADVANCED

**Grade:** 11, 12

Credit: 0.5 **Length**1 Semester or Year

Prerequisites: None

Course Number: Semester A: 565021

And/or Semester B: 565022

This course is designed for students who have a high level of physical education skills, to participate with others in a competitive environment. The curriculum has many of the same activities, but not limited to those that will be found in the 10<sup>th</sup>-11<sup>th</sup>-12th grade Core class and team sports class. The Advanced class is designed for students who want to participate with other students who are also highly motivated and skilled. This course has high expectations and will be very challenging. (The first semester passed will count as the required physical education credit for graduation, second semester will count towards a passed elective credit. Students must take PE credits over 3 years.)

#### PHYSICAL EDUCATION ALTERNATIVE

Grades: 9, 10, 11, 12

Credit: 0.5

Length: Semester

Prerequisites: Instructor Consent

Course Number: Semester A: 568721

Or Semester B: 568722

Alternative physical education is a semester course in which students will participate in physical activities to promote wellness. The activities can be but are not limited to walking, weightlifting, basketball, volleyball, tennis, water games, kickball, badminton, and paddleball. Student will participate in daily physical activities. They will learn the rules and promote classroom safety.

#### PHYSICAL EDUCATION CADET LEADERSHIP

**Grades:** 11, 12

Credit: 0.5 or 1.0

Length: Semester or Year

Prerequisites: Pre-cadet Leadership class

Course Number: Semester A: 563121

And/or Semester B: 563122

This course provides opportunities for the students to use and strengthen their leadership skills. They assist the physical education teacher in a variety of ways which include but are not limited to: leading warm-ups, equipment set up, officiating and the development of skills (The first semester passed will count as the required physical education credit for graduation, second semester will count towards a passed elective credit. Students must take PE credits over 3 years.)

#### PRE-CADET LEADERSHIP CLASS

**Grades:** 10, 11

Credit: 1.0

Length: Year

Prerequisites: Application and consent of

Pre-Cadet instructor

Course Number: 563021

563022

This course is a comprehensive program focusing on: positive leadership skills; skills needed to assist the physical education instructor and students in class; learning the rules and skills to participate and officiate in the various activities offered at the high school level. After completion of the class the student is required to be a cadet Leader for a minimum of 1 semester during their junior/senior year.

#### STRENGTH, AGILITY, AND CONDITIONING I

**Grades:** 10, 11, 12

Credit: 0.5

Length: Semester or Year

Prerequisites: None

Course Number: Semester A: 564121

And/or Semester B: 564122

In Strength, Agility, and Conditioning I, students will gain an understanding of training principles and their application to the achievement and maintenance of physical fitness. Fundamental comprehension of strength and conditioning concepts will be gained through the completion of this course. These concepts include, but are not limited to: strength training principles, energy systems, and program design. Students will gain knowledge necessary to develop training programs based on their individual needs and goals(The first semester passed will count as the required physical education credit for graduation, second semester will count towards a passed elective credit. Students must take PE credits over 3 years.)

#### STRENGTH, AGILITY, AND CONDITIONING II

**Grades:** 10, 11, 12

Credit: 0.5

**Length:** Semester or Year

**Prerequisites:** Freshmen Weight Training or Strength, Agility, and Conditioning I

Course Number: 565411

565412

#### **TEAM SPORTS**

**Grade:** 10, 11, 12

Credit: .5

**Length:** Semester or year

Prerequisites: None

Course Number: Semester A: 564221

Or Semester B: 564222

In Strength, Agility, and Conditioning II, students will further their understanding of training principles and their application to the achievement and maintenance of physical fitness. A more detailed approach to strength and conditioning concepts will take place in this course. Most importantly, program design will be emphasized. Students will demonstrate their understanding of strength and conditioning concepts through the development and implementation of individualized training programs(The first semester passed will count as the required physical education credit for graduation, second semester will count towards a passed elective credit. Students must take PE credits over 3 years.)

This course is designed for the physical education student that is interested in participating in various team sports. Students will develop a deeper understanding of the rules and regulations of each sport, and more in-depth strategies of each sport. Students will also be working on physical fitness through the components of skill related fitness (agility, balance, coordination, power, and reaction time and speed). The following sports may be covered, but are not limited to: soccer, speedball, flag football, zone football, team handball, volleyball, swim activities, softball, basketball, mat ball, floor hockey, bowling, tennis, ultimate, etc(The first semester passed will count as the required physical education credit for graduation, second semester will count towards a passed elective credit. Students must take PE credits over 3 years.)

# **SCIENCE**







COURSE TITLE	9 <sup>TH</sup> GRADE	10 <sup>TH</sup> GRADE	11 <sup>TH</sup> GRADE	12 <sup>TH</sup> GRADE
TC Anatomy and Physiology – Year		R	R	R
Aerospace Engineering (PLTW and MSOE) (ES)		R/ES R/ES		R/ES
Anatomy and Physiology I	R	R R		R
Anatomy and Physiology II	R	R	R	R
TC Animal Science (ES)			R/ES	R/ES
AP Biology		R	R	R
AP Chemistry		R	R	R
AP Environmental Science		R	R	R
AP Physics I		R	R	R
AP Physics II		R	R	R
Applied Microbiology		R	R	R
Biology	R	R	R	R
Biology – Honors	R	R	R	R
Biomedical Innovation (PLTW and MSOE)				R
Chemistry	R	R	R	R
TC Chemistry -Honors	R	R	R	R
Earth Science I			R	R
Earth Science II			R	R
Forensic Science			R	R
Genetics I		R	R	R
Genetics II		R	R	R
Human Body Systems (PLTW and MSOE)		R	R	R
Introduction to Veterinary Science (ES)		R	R	R
Medical Microbiology		R	R	R
Medical Interventions (PLTW and MSOE)			R	R
AS Medical Terminology		E	Е	E
TC Microbiology – Year		R	R	R
Physical Science		R	R	R

TC Physics		R	R	R
TC Plant Science (ES)	R/ES	R/ES	R/ES	R/ES
Principles of Engineering (PLTW and MSOE) (ES)	R/ES	R/ES	R/ES	R/ES
Principles of Biomedical Science (PLTW and MSOE)	R	R	R	R

**E** = Elective for Grade Level

R = Fulfills Graduation Requirement for Grade Level

**AP** = Advanced Placement **TC** = Transcripted Credit

AS = Advanced Standing

**EM** = Equivalent Mathematics

**ES** = Equivalent Science\*

MSOE = Milwaukee School of Engineering

**PLTW** = Project Lead the Way

A student can earn up to one equivalent science (ES) credit toward requirements for graduation.



#### TC ANATOMY AND PHYSIOLOGY -

#### YEAR

**Grades:** 10, 11, 12 **Credit:** 1.0

Length: Year

Prerequisites: Biology, Biology - Honors,

or AP Biology

Course Number: 586421

586422

Students will complete a detailed unit on human tissues, and will study the structure and function of each of the 11 human body systems (skeletal, muscular, cardiovascular, respiratory, digestive, integumentary, nervous, urinary, endocrine, lymphoid, and reproductive). Students will participate in data-collection labs using Vernier sensors and software, and will complete dissections of representative mammal specimens. Students will learn medical terminology relevant to each unit, and will complete a comprehensive project each semester.

This is a college course that will produce a permanent college transcript and grade point average for each student. If you believe that producing a permanent college transcript and grade point is not in your best interest academically at this time, please consider requesting Anatomy and Physiology I and II. If you need more information about Transcripted Credit, see your counselor before requesting courses. Transcripted credit may be offered if the SDJ has a licensed staff member employed to teach this course.

#### ANATOMY AND PHYSIOLOGY I

**Grades:** 10, 11, 12

Credit: 0.5

**Length:** Craig – Semester (A or B)

Parker – Semester A only

**Prerequisites:** Biology, Biology Honors, or

**AP Biology** 

Course Number: Semester A: 586121

Or Semester B: 586122

#### ANATOMY AND PHYSIOLOGY II

**Grades:** 10, 11, 12

Credit: 0.5

**Length:** Craig – Semester (A or B)

Parker – Semester B only

Prerequisites: Anatomy and Physiology I Course Number: Semester A: 586221

Or Semester B: 586222

During this course, students will examine the structure and complex functioning of the human body. Students will complete a unit on human tissues, and will begin a detailed analysis of human body systems. Students will participate in data collection laboratory activities, small dissections, and relevant projects related to the systems being studied.

During this course, students will examine the structure and complex functioning of the human body. Students will participate in a detailed analysis of several human body systems. Students will complete lab activities including a detailed dissection of a representative mammal.



#### TC ANIMAL SCIENCE (ES)

Grades: 11, 12 Credit: 0.5

**Length:** Semester

**Prerequisites:** Small Animal Care **Course Number:** Semester A: 621521

Or Semester B: 621522

This course is designed to give students an advanced knowledge of production animals and the science that is surrounding the industry. Students will learn about the structural functions of reproduction, digestion, nervous, muscular and endocrine systems. Students will gain an understanding of technical areas such as growth hormones, artificial insemination, embryo transfer, heat synchronization, and cloning to improve efficient livestock production. Science based inquiry, group collaboration in problem solving, and hands-on laboratories activities will be included. Students can expect to take part in FFA activities. TC Animal Science ES may meet one semester of college entrance science requirements at University of Wisconsin Schools.

This is a college course that will produce a permanent college transcript and grade point average for each student. If you believe that producing a permanent college transcript and grade point is not in your best interest academically at this time, please consider requesting a non-transcripted credit (TC) course. If you need more information about Transcripted Credit, see your counselor before requesting courses. Transcripted credit may be offered if the SDJ has a licensed staff member employed to teach this course. This course is also offered under Agriculture Sciences.

#### **AP BIOLOGY**

**Grades:** 10,11, 12

Credit: 1.0

**Length:** Year

**Prerequisites:** TC Chemistry or Chemistry-

Honors

Course Number: 582321

582322

#### **AP CHEMISTRY**

**Grades:** 10, 11, 12 **Credit:** 1.0

**Length:** Year

Prerequisites: Geometry and

Chemistry, or TC Chemistry, or Chemistry- Honors

Course Number: 583221

583222

The AP Biology course is designed to be the equivalent of an introductory college biology course usually taken by life science majors during their first year. The goal of this course is the development of a conceptual framework for studying modern biology. Content will be covered at a rigorous pace, and laboratory work will stimulate scientific inquiry and critical thinking. The course curriculum will stress an understanding of molecular biology as a unifying theme and an emphasis on evolutionary biology will permeate our yearlong curriculum. Additionally, cytology, genetics, mechanisms of evolution, ecology, plant/animal form and function will be covered. Students will have the opportunity to take the Advanced Placement exam.

This is a demanding college-level course. Topics include atomic structure, bonding, chemical reactions, physical and chemical changes, thermodynamics, reaction rates, equilibrium, and electrochemistry. Students will have the opportunity to take the Advanced Placement exam.

#### AP ENVIRONMENTAL SCIENCE

**Grades:** 10, 11, 12

Credit: 1.0

Length: Year

**Prerequisites:** Algebra 1 and 2.0 credits of Science and/or Wildlife Ecology and Field Study in Wildlife Ecology

Course Number: 623231

AP Environmental Science will provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Students will have the opportunity to take the Advanced Placement exam.

This course is also offered under Agriculture Sciences.

#### **AP PHYSICS I**

623232

**Grades:** 10, 11, 12

Credit: 1.0

Length: Year

**Prerequisites:** Geometry

Course Number: 584121

584122

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore these topics: kinematics; dynamics; circular motion and gravitation; energy; momentum; simple harmonic motion; torque and rotational motion; electric charge and electric force.

Who might want to take AP Physics 1: Anyone curious about understanding the rule book of the universe that reality follows! Recommended for students interested in studying science; teaching science, engineering, astronomy, robotics, architecture, environmental science, medicine, nursing, and other careers in the medical field.

**AP PHYSICS II** 

**Grades:** 11, 12

Credit: 1.0

Length: Year

Prerequisites: Physics or AP Physics I

Course Number: 584221

584222

AP Physics II is a continuation of the topics covered in AP Physics I. This course will cover fluid mechanics; thermodynamics; electricity and magnetism; optics; atomic and nuclear physics. Students will gain knowledge through class discussion, problem solving, and laboratory activities. Students will have the opportunity to take the Advanced Placement exam.

#### APPLIED MICROBIOLOGY

**Grades:** 10, 11, 12

Credit: 0.5

Length: Semester

**Prerequisites:** Biology or equivalent, or consent of instructor

Course Number: Semester A: 582521

Or Semester B: 582522

Students will develop the skills and lab techniques required to research bacteria. Multiple lab investigations, including cultivation and isolation are required so that students can independently identify bacterial species. These techniques can be applied in biotechnology fields of research such as cancer research, genetic recombination therapy, and industrial applications.



### AEROSPACE ENGINEERING

(PLTW, MSOE)

**Grades:** 10, 11, 12 **Credit:** 1.0

**Length:** Year

Prerequisites: IED and Geometry

Course Number: 782121

782122 This

The major focus of the Aerospace Engineering course is to expose students to the world of aeronautics, flight and engineering. Students will be introduced to the Project Lead the Way activity-based, project-based, and problem-based learning through exploring the world of aerospace engineering. Students should have experience in physics, mathematics and technology education. They will employ engineering and scientific concepts in the solution of aerospace problems. Offered every other year. Parker High School will offer this course every other year. Offered, 2022-2023, 2024-2025, 2026-2027, etc.

This course is also offered under Technology Education.

**BIOLOGY** 

Grades: 9, 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: None

Course Number: 582121

582122

This introductory survey course is designed to help the student develop a better understanding of living things and of life functions. Units studied include the nature of science, cells and cell processes, ecology, nature of DNA, genetics, reproduction and development, evolution and the change of species over time, and biodiversity.

#### **BIOLOGY - HONORS**

Grades: 9, 10, 11,12

Credit: 1.0

Length: Year

Prerequisites: None

Course Number: 582021

582022

This course is designed to help the student develop a better understanding of living things and of life functions. Units studied include experimental design, cells and cell processes, ecology, nature of DNA, genetics, reproduction and development, evolution and the change of species over time, animal diversity and physiology. Topics are examined in greater depth than in the general Biology course.



#### **BIOMEDICAL INNOVATION**

(PLTW, MSOE)

Grade: 12

Credit: 1.0

Length: Year

**Prerequisites:** Medical Interventions

Course Number: 586211

586212

Students build on the knowledge and skills gained from previous courses to design their own innovative solutions for the most pressing health challenges of the 21st century.



#### **TC CHEMISTRY-HONORS**



**Grades:** 9, 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: Algebra 1 Course Number: 583121

583122

The main topics studied are the metric system, problem solving, matter, atomic structure, bonding, the periodic table, periodic relationships, chemical equations, kinetic molecular theory, gas laws, solutions, chemical equilibrium, acids, bases and salts. Faster pacing of chemical topics will include a more in-depth study of equilibrium and acid & base topics. A solid Algebra background is necessary to comprehend the math concepts in this course. This course is designed for students planning to take AP Chemistry or pursue a science career. Chemistry is recommended for a career in health, as well as careers requiring a technical or technological background.

This is a college course that will produce a permanent college transcript and grade point average for each student. If you believe that producing a permanent college transcript and grade point is not in your best interest academically at this time, please consider requesting Chemistry. If you need more information about Transcripted Credit, see your counselor before requesting courses. Transcripted credit may be offered if the SDJ has a licensed staff member employed to teach this course.

#### **CHEMISTRY**

**Grades:** 9, 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: Algebra 1

Course Number: 581031 & 581032

Chemistry is a physical science course where students study the composition and physical and chemical properties of various forms of matter. For instance, students identify substances, and the ways they interact, combine and change. Topics of study include items such as the metric system, atomic structure, bonding, the periodic table, chemical equations, gas laws, solutions, and acids and bases. Students in this course will work with chemical equations and solve problems. Chemistry includes applications of math and requires a working knowledge of algebra.

#### **EARTH SCIENCE I**

**Grades: 11, 12** 

Credit: 0.5

Length: Semester

Prerequisites: None

Course Number: Semester A: 586011

The Earth Science course is designed to give a better understanding of our planet and universe. It gives an introduction to several areas that may be of interest as career choices. Topics studied during the first semester (Earth Science I) are geology, astronomy, mineralogy, plate tectonics, earthquakes and volcanoes. This course does not meet the requirements of a physical science course.

#### **EARTH SCIENCE II**

**Grades:** 11, 12 Credit: 0.5

Length: Semester

Prerequisites: None Course Number:

Semester B: 586022

The Earth Science course is designed to give a better understanding of our planet and universe. It gives an introduction to several areas that may be of interest as career choices. Topics studied during second semester (Earth Science II) topics are cartography, oceanography, and meteorology. This course does not meet the requirements of a physical science course.

#### **FORENSIC SCIENCE**

**Grades: 11, 12** 

Credit: 0.5

Length: Semester

**Prerequisites:** Physical Science or Chemistry AND Biology

Course Number: Semester A: 586321

Or Semester B: 586322

This course is designed to introduce the science of solving crimes. Students will apply science and math principles to the analysis of many forms of evidence: possible topics include trace evidence, fingerprinting, blood & blood spatter, drugs & toxicology, arson & explosions, death investigation, forensic entomology, forensic anthropology, DNA evidence, ballistics & firearms, and forensic psychology. The content will be relevant, engaging, explorative, and very hands-on.

#### AS MEDICAL TERMINOLOGY



**Grades:** 10, 11, 12 Credit: 0.5 Length: Semester

Prerequisites: None Course Number: 586521

This course should be taken by students interested in entering the healthcare field or learning the medical language. This course is designed to provide the student with a foundation in the medical language. Throughout this course, students will begin to understand/explore the wide variety of health care careers. Units of study include: In-depth study of word parts to pronounce, spell, build, analyze and define medical terms: Introduction to anatomy & terminology revolving around several body organs/systems. This course is also offered under Family and Consumer Science.

#### **GENETICS I**

**Grades:** 10, 11, 12

Credit: 0.5

Length: Semester

**Prerequisites:** Biology

Course Number: Semester A: 585021

Or Semester B: 585022

During this course, students will concentrate on one of the units in general biology genetics. DNA, RNA, protein synthesis, mitosis, and meiosis will be reviewed and expanded upon. Problems involving the various patterns of inheritance will be solved by using pedigrees, Punnett squares, and the laws of probability. There is an emphasis on human genetics. Genetic disorders will be studied along with genetic screening and counseling.

#### **GENETICS II**

Grades: 10, 11, 12

Credit: 0.5

Length: Semester

Prerequisites: Biology and Genetics I Course Number: Semester A: 585031

Or Semester B: 585032

The purpose of this course is to provide students with an understanding of the importance genes play in our health. In addition, students will develop an appreciation for gene therapies and technologies which have the potential to greatly improve quality of life. The genetics of cancer and heart disease will be explored in depth. Technologies involving cloning, stem cells, gene therapy, forensics, and genetic counseling will be expanded upon. Labs, projects, case studies, Internet assignments, problem-solving, ethical role-playing, and reading guides will be used to reinforce these concepts.

## PLTW

#### **HUMAN BODY SYSTEMS**

(PLTW, MSOE)

Grades: 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: Successful completion of Principles of Biomedical Science and

Biology Course Number: 586111

586112

Through projects such as determining the identity of a skeleton using both forensic anthropology and DNA analysis, students examine the interactions of human body systems and apply what they know to solve real-world medical cases.

#### INTRODUCTION TO VETERINARY SCIENCE (ES)

Grades: 10, 11, 12

Credit: 0.5

Length: Semester

**Prerequisites:** Completion of Small Animal Care & Management I or TC Animal

Science (ES)

Course Number: Semester A: 622021

Or Semester B: 622022

This course is designed for students who have a sincere interest in a career related to small animals. Students planning to become a veterinarian, small animal technician, animal scientist, or animal researcher, then this course is highly recommended. Topics to be discussed include medical terminology, anatomy, careers, safety, health, reproduction, scientific research and animal welfare. Each student will complete hands-on veterinary skills including weighing an animal, diagnosis and administering a treatment, cleaning, clipping, grooming, and practicing mock surgery procedures. A school or community animal awareness project will be developed and facilitated through the course. Students can expect to take part in FFA activities.

This course is also offered under Agriculture Sciences.

#### **MEDICAL MICROBIOLOGY**

Grades: 10, 11, 12

Credit: 0.5

Length: Semester

Prerequisites: Biology or equivalent, or

consent of instructor

Course Number: Semester A: 582621

Or Semester B: 582622

This course focuses on viruses to start with, and includes a survey of infectious diseases caused by both viruses and bacteria. Units will also include epidemiology, microbe host interactions, the immune response, HIV, bio-weapons, and a survey of systemic infections. Students should expect to develop an understanding of infectious diseases and the prevention/control of its spread.

## PLTW

#### **MEDICAL INTERVENTIONS**

**Grades:** 11, 12 Credit: 1.0

Length: Year

Prerequisites: Human Body Systems Course Number: 582631

582632

Students delve into activities like designing a prosthetic arm as they follow the life of a fictitious family and investigate how to prevent, diagnose, and treat disease



#### TC MICROBIOLOGY - YEAR

**Grades:** 10, 11, 12 Credit: 1.0

Length: Year

**Prerequisites:** Physical Science or TC Chemistry AND Biology, Biology Honors, or AP Biology

Course Number: 582721

582722

#### PHYSICAL SCIENCE

Grade: 10 Credit: 1.0

Length: Year

Prerequisites: None

Course Number: 581121

581122

Students can expect to experience the same curriculum as the Applied and Medical Microbiology courses. This articulated course with BTC provides students with additional study in antimicrobials that the separate classes do not offer.

This is a college course that will produce a permanent college transcript and grade point average for each student. If you believe that producing a permanent college transcript and grade point is not in your best interest academically at this time, please consider requesting a non-transcripted credit (TC) course. If you need more information about Transcripted Credit, see your counselor before requesting courses. Transcripted credit may be offered if the SDJ has a licensed staff member employed to teach this course.



#### TC PHYSICS

**Grade:** 10, 11, 12

Credit: 1.0 **Length:** Year

**Prerequisites:** Geometry

Course Number: 584111

584112

Chemistry topics include measurement, tools of science including the scientific method, matter (physical and chemical properties and changes, classification, structure, and the periodic table), and chemical reactions. Physics topics include forces (related to motion, work and power, energy, heat) and waves (characteristics, light and sound).

This math-based curriculum covers introductory concepts of chemistry and physics.

Physics aids students in synthesizing the fundamental concepts and principles concerning matter and energy through the laboratory study of kinematics, dynamics, vectors, wave motion, light, sound, electricity, magnetism, and relativistic mechanics. Students have opportunities to: 1) acquire an awareness of the history of physics and its role in the birth of technology, 2) explore the uses of its models, theories, and laws in its various careers, and 3) investigate physics questions, discover and apply principles, and strengthen problem solving skills.

This is a college course that will produce a permanent college transcript and grade point average for each student. If you believe that producing a permanent college transcript and grade point is not in your best interest academically at this time, please consider requesting a non-transcripted credit (TC) course. If you need more information about Transcripted Credit, see your counselor before requesting courses. Transcripted credit may be offered if the SDJ has a licensed staff member employed to teach this course.



#### **TC PLANT SCIENCE ES**

**Grades:** 9, 10, 11, 12

Credit: 0.5

**Length:** Semester B

Prerequisites: None - Introduction to

Agriculture recommended.

Course Number: Semester B: 621622

Students will study the processes involved in plant growth, production and reproduction. The functions of plant structures, as well as crop production, will also be studied. Genetic improvement of plants, plant diseases, plant cultural practices and harvest of crops will be explored in detail. There will be various identifications of crops, weeds and seeds. Students will work in the school greenhouse to complete lab activities. (Students planning to use this course to meet college entrance science requirements should verify its acceptance with the intended college.) Students can expect to take part in FFA activities. Plant Science ES may meet one semester of college entrance science requirements at University of Wisconsin Schools.

This is a college course that will produce a permanent college transcript and grade point average for each student. If you believe that producing a permanent college transcript and grade point is not in your best interest academically at this time, please consider requesting a non-transcripted credit (TC) course. If you need more information about Transcripted Credit, see your counselor before requesting courses. Transcripted credit may be offered if the SDJ has a licensed staff member employed to teach this course. This course is also offered under Agriculture Sciences.



#### PRINCIPLES OF ENGINEERING (PLTW, MSOE)

Grades: 9,10, 11, 12

Credit: 1.0 Length: Year

Prerequisites: None

Course Number: 581621

581622



#### PRINCIPLES OF BIOMEDICAL

**SCIENCE** 

Grades: 9, 10, 11, 12

(PLTW, MSOE)

Credit: 1.0 Length: Year

Prerequisites: Biology (can be taken at the

same time as this class) Course Number: 586211

586212

Are you interested in applying your math and science skills through a mix of handson and academic activities? Principles of Engineering are designed to introduce students to the fundamental skill sets necessary to be a successful engineer. Utilizing technology to design experiments, students will fabricate products which meet specific industry requirements. Students may also participate in case studies and team projects. Parker High School will offer this course every other year. Offered 2021-2022, 2023-2024, 2025-2026, etc.

This course is also offered under Technology Education.

Analyze the evidence found at a crime scene and help the medical examiner uncover clues left on a body to solve a mystery. Question, diagnose, and propose treatment and care for patients in a family medical practice. Track down the source of a mysterious outbreak at a local hospital. Access and stabilize a patient during an emergency and prepare for medical surge and mobile medical care. Collaborate with professionals in other fields to innovate and design solutions to local and global medical problems. Whether seeking a career in medicine or healthcare or simply looking to for the challenge of real-world problems, students in Principles of Biomedical Science will practice how to think creatively and critically to innovate in science and will gain practical experience with experimental design and the design process. Possible topics include: trace evidence, fingerprinting, blood and blood spatter, drugs, and toxicology, arson and explosions, death investigation, forensic entomology, forensic anthropology, DNA evidence, ballistics and firearms, and forensic psychology.

# **SOCIAL STUDIES**





COURSE TITLE	9 <sup>™</sup> GRADE	10 <sup>TH</sup> GRADE	11 <sup>TH</sup> GRADE	12 <sup>TH</sup> GRADE
AP European History			R	R
AP Human Geography	R	R	R	R
AP Psychology			R	R
AP United States History		R	R	R
AP US Government and Politics			R	R
AP World History: Modern	R	R	R	R
Contemporary Issues (Parker HS Only)			R	R
TC Micro-Economics			R	R
Economics			R	R
Global Studies	R			
Global Studies – Honors	R			
History Through Art I (Parker HS Only)	E	E	E	E
History Through Art II (Parker HS Only)	E	E	E	E
Humanities A (Craig HS Only)			R	R
Humanities B (Craig HS Only)			R	R
Multicultural American History			R	R
TC Psychology			R	R
Psychology			R	R
TC Sociology			R	R
Sociology			R	R
United States History		R	R	R
World Civilizations	R	R	R	R
Young Historians (Parker HS Only)	E	E	E	E

**E** = Elective for Grade Level

**R** = Fulfills Graduation Requirement for Grade Level

**AP** = Advanced Placement

**AS** = Advanced Standing

**EM** = Equivalent Mathematics

**ES** = Equivalent Science **TC** = Transcripted Credit

MSOE = Milwaukee School of Engineering

**PLTW** = Project Lead the Way

#### **AP EUROPEAN HISTORY**

**Grade:** 11, 12 **Credit:** 1.0

Length: Year

**Prerequisites:** None **Course Number:** 603241

603242

This course is a college-level study of Europe from 1450 to the present. It focuses on cultural, economic, political, and social developments. Students will have the opportunity to take the Advanced Placement exam.

#### **AP HUMAN GEOGRAPHY**

**Grade:** 9, 10, 11, 12 **Credit:** 1.0 **Length:** Year

**Prerequisites:** None **Course Number:** 602321

602322

AP Human Geography introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of the Earth's surface. Students will learn the impact humans have, not only on the Earth, but also on each other, including the study of world population issues, border disputes, international conflicts, urban development, environmental consequences, and pandemic disease. Students will study culture, economics, world religions, the origins and diffusion of languages, industrialization, rural land use, city planning, and geographic tools. Students will have the opportunity to take the Advanced Placement exam.

#### **AP PSYCHOLOGY**

Grade: 11, 12 Credit: 1.0 Length: Year

Prerequisites: None

Course Number: 604421

604422

Advanced Placement Psychology is a course that introduces students to the scientific study of behavior and mental processes in humans and animals. Units of study include history, foundations and careers, critical scientific thinking and statistical reasoning, neurobiology, nature, nurture and human diversity, development, sensation and perception, states of consciousness, learning, memory, thinking and language, intelligence, motivation and emotion, theories of personality, psychological disorders and therapy, stress and health, and social psychology. Students will study the entire college curriculum before the Advanced Placement exam in May. The focus of the course is to foster critical thinking and an understanding of human behavior that allows the individual the opportunity to create healthier relationships throughout the lifespan. Students can expect to participate in activities that incorporate community resources and active participation as a means of making direct connections between their studies and relationships. Students will have the opportunity to take the Advanced Placement exam.

#### **AP UNITED STATES HISTORY**

**Grade:** 10, 11, 12

Credit: 1.0 Length: Year

Prerequisites: None

Course Number: 603221

6032

A college-level chronological study of United States history from pre-colonial America to the present. Students will be expected to meet college-level class performance expectations, e.g., extensive reading, writing, class participation, and discussion. Students will have the opportunity to take the Advanced Placement exam.

#### **AP US GOVERNMENT AND POLITICS**

**Grade:** 11, 12 **Credit:** 1.0

Length: Year

Prerequisites: None

Course Number: 604721

604722

This course is designed to prepare students for the Advanced Placement exam in US Government and Politics. The course focuses on the federal government: Congress, Presidency, Judiciary, Bureaucracy, and the constitution and political culture. Students will complete the preparatory work for the Advanced Placement test in US Government & Politics. Students will also complete an in-depth research project with a travel opportunity for students at both Craig and Parker. See individual teacher for details. Students will have the opportunity to take the Advanced Placement exam.

#### AP WORLD HISTORY: MODERN

**Grade:** 9, 10, 11, 12

Credit: 1.0

Length: Year Prerequisites: None

Course Number: 603231

603232

The Advanced Placement World History: Modern course is designed to prepare students for the AP World History: Modern Exam. Students will investigate significant events, individuals, developments, and processes in six historical periods from approximately 1200 C.E. to the present. Students will be expected to read college level texts, as well as develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; making historical comparisons; utilizing reasoning about contextualization, causation, and continuity and change over time; and developing historical arguments. Students will have the opportunity to take the Advanced Placement exam.

#### **CONTEMPORARY ISSUES**

(Parker HS Only)

**Grade:** 11, 12

Credit: 0.5

Length: Semester

Prerequisites: None Course Number: Semester A: 604021

Or Semester B: 604022

This course will ask students to examine and investigate major contemporary issues affecting Americans in the 21st Century. While addressing constitutional foundations and the operations of representative government, current issues along with their political, economic, and social implications will also be stressed. The purpose of the course is to help students become informed voters by improving their knowledge of how the U.S. Government functions as well as current issues.



#### **TC MICRO-ECONOMICS**

**Grade:** 11, 12

Credit: 0.5 **Length:** Semester

Prerequisites: None

Course Number: Semester A: 604121

Or Semester B: 604122

Economics is the study of how individuals and societies decide to use scarce resources to satisfy their unlimited wants. This course is beneficial to students interested in business, personal finance, and political decision making. Concepts that are covered include supply and demand relationships, the different types of market structure, the conditions under which markets may fail, the arguments for and against government intervention, the banking system and fiscal and monetary policy. A basic mathematical background is necessary to understand the models utilized in instruction. This is a college course that will produce a permanent college transcript and grade point average for each student. If you believe that producing a permanent college transcript and grade point is not in your best interest academically at this time, please

Credit, see your counselor before requesting courses. Transcripted credit may be offered if the SDJ has a licensed staff member employed to teach this course.

consider requesting Economics. If you need more information about Transcripted

#### **ECONOMICS**

**Grade:** 11, 12

Credit: 0.5

Length: Semester

Prerequisites: None

Course Number: 601301

601302

Economics is the study of how individuals and societies decide to use scarce resources in order to satisfy their unlimited wants. This course, which is geared to the student interested in acquiring a basic understanding of how our economic system works, is beneficial to students interested in business, personal finance, and political decision making. Concepts that are covered include supply and demand relationships, production, consumption, banking, labor, fiscal and monetary policy, and the impact of international trade on world economics. A basic mathematical background is necessary to understand the models utilized in instruction.

#### **GLOBAL STUDIES**

Grade: 9

Credit: 1.0

Length: Year

**Prerequisites:** None

Course Number: 602121

602122

Students will gain an appreciation for those who live as our neighbors both far and near. Such an understanding is rooted in an investigation of geographic, historic, economic, anthropologic, and the political nature of the world's numerous and diverse cultures. There will be an emphasis on human and physical geography. A regional and topical approach to the investigation of our world is the intent of the course. The course content will include the study of the fundamentals of geography and elements of culture in the investigation of many regions of the world.

#### **GLOBAL STUDIES - HONORS**

Grade: 9

Credit: 1.0

Length: Year Prerequisites: None

Course Number: 602021

602022

This course is designed for students who enjoy the challenge of studying places in the world and developing a deeper understanding of the forces behind today's events. The course deals with analyzing the five themes of geography as applied to a chosen country or region. Especially important will be the fundamentals of economic development, climatology and/or geomorphology, and map and graph skills.

#### HISTORY THROUGH ART I

(Parker HS Only)

**Grades:** 9, 10, 11, 12

Credit: 0.5 Length: Semester

Prerequisites: None

Course Number: Semester A: 648121

Or Semester B: 648122

#### HISTORY THROUGH ART II

(Parker HS Only)

**Grades:** 9, 10, 11, 12

Credit: 0.5

Length: Semester

**Prerequisites:** None

Course Number: Semester A: 648221

Or Semester B: 648222

History Through Art I will allow students to study world history from Prehistory to the Middle Ages through the study of the major paintings, sculptures and architecture of those times. Students will participate in discussions/activities comparing and contrasting both Western and non-Western art. Civilizations, religions and political and social events will be studied as related to the emergence of new forms and movements in art. Students have the option to take this class and History Through Art II as prerequisites to AP Art History.

This course is also offered under Arts.

History Through Art II will allow students to study world history from the Renaissance to the Modern Era through the study of the major paintings, sculptures and architecture of those times. Students will participate in discussions/activities comparing and contrasting both Western and Non-western art. Civilizations, religions and political and social events will be studied as related to the emergence of new forms and movements in art. Students have the option to take this class and History Through Art I as prerequisites to AP Art History.

This course is also offered under Arts.

#### **HUMANITIES A**

(Craig HS Only)

**Grade:** 11, 12

Credit: 0.5

Length: Semester

Prerequisites: None

Course Number: Semester A: 604821

Or Semester B: 604822

This course will teach the concepts of change, honor, beauty, justice, peace and quality. This course is not a prerequisite for Humanities B. This is a study of people utilizing the ideas of psychology, sociology, anthropology, history, economics, art and literature. Humanities are about life and the human perspective. This course does not utilize a textbook. Concepts are covered in a variety of ways including film, group projects, class discussion, guest speakers and primary source documents. Community service is an expectation of the course.

#### **HUMANITIES B**

(Craig HS Only)

**Grade:** 11, 12

Credit: 0.5

Length: Semester

Prerequisites: None

Course Number: Semester A: 604921

Or Semester B: 604922

This course will teach the concepts of think, truth, power, work, death and love. Humanities B can be taken without having taken Humanities A. This is a study of people utilizing the ideas of psychology, sociology, anthropology, history, economics, art and literature. Humanities are about life and the human perspective. This course does not utilize a textbook. Concepts are covered in a variety of ways including film, group projects, class discussion, guest speakers and primary source documents. Community service is an expectation of the course.

#### **MULTICULTURAL AMERICAN HISTORY**

**Grade:** 11, 12

Credit: 0.5

Length: Semester

Prerequisites: None

Course Number: Semester A: 603321

Or Semester B: 603322

This course examines the history of minority groups within the United States. Students will become familiar with the background, culture, contributions, and achievements of African Americans, Asian Americans, Hispanics, and Native Americans. Students will also investigate the prejudice and discrimination that each group has endured. They will discover how a minority group's past affects it's present and future as well. In addition, students will discuss and debate current topics including ethnic stereotypes, affirmative action, immigration, racial profiling, and hate crimes. Students enrolled in the course will consider issues of historical significance which are relevant to the ever-changing world we live in today.



#### **TC PSYCHOLOGY**

Grade: 11, 12 Credit: 0.5 Length: Semester

Prerequisites: None

Course Number: Semester A: 604321

Or Semester B: 604322

This course is designed to provide the individual with a survey of the field of psychology and the related areas of experimentation, personality development, mental health, learning, conformity, physiology, coping and adjustment mechanisms. Investigations into social psychology and societal problems. Upon completion of the course, the students will have gained insight into themselves, and will have enhanced their understanding of the complexity of human behavior.

This is a college course that will produce a permanent college transcript and grade point average for each student. If you believe that producing a permanent college transcript and grade point is not in your best interest academically at this time, please consider requesting Psychology. If you need more information about Transcripted Credit, see your counselor before requesting courses. Transcripted credit may be offered if the SDJ has a licensed staff member employed to teach this course.

#### **PSYCHOLOGY**

**Grade:** 11, 12 **Credit:** 0.5

Length: Semester

Prerequisites: None

**Course Number:** 601431 **601432** 

This course is designed to provide the individual with a survey of the field of psychology and the related areas of experimentation, personality development, mental health, learning, conformity, physiology, coping and adjustment mechanisms. Investigations into social psychology and societal problems. Upon completion of the course, the students will have gained insight into themselves, and will have enhanced their understanding of the complexity of human behavior.



#### **TC SOCIOLOGY**

**Grade:** 11, 12 **Credit:** 0.5

**Length:** Semester

Prerequisites: None

Course Number: Semester A: 604521

Or Semester B: 604522

Throughout this course, students will develop a sense of connection to society and how that connection impacts and is impacted by social forces. Students will look for social causes to behavior and the behavior of others such as racial, gender, and age discrimination. Special attention will be given to the sociological institutions of education, government, religion and family as they relate to social development. This is a college course that will produce a permanent college transcript and grade point average for each student. If you believe that producing a permanent college transcript and grade point is not in your best interest academically at this time, please consider requesting Sociology. If you need more information about Transcripted Credit, see your counselor before requesting courses. Transcripted credit may be

#### SOCIOLOGY

**Grade:** 11, 12 **Credit:** 0.5

Length: Semester

Prerequisites: None

Course Number: 601421

601422

Throughout this course, students will develop a sense of connection to society and how that connection impacts and is impacted by social forces. Students will look for social causes to behavior and the behavior of others such as racial, gender, and age discrimination. Special attention will be given to the sociological institutions of education, government, religion and family as they relate to social development.

offered if the SDJ has a licensed staff member employed to teach this course.

#### **UNITED STATES HISTORY**

**Grade:** 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: None

Course Number: 603021

Course Number: 00302

603022

This course surveys United States history from the Progressive Era (1900) to the present emphasizing the interconnectedness of events and people. Additional attention is placed on the constitution era and the study of state and local government.

#### WORLD CIVILIZATIONS

**Grade:** 9, 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: None

Course Number: 602521

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602522

This course is a survey of modern world history from approximately 1400 to the modern era. Students will gain a greater understanding of world civilizations as they explore the political, social, economic, cultural, and geographic trends and events of modern world history.

#### **YOUNG HISTORIANS**

(Parker HS Only)

Grade: 9, 10, 11, 12 Credit: 0.5

**Length:** Semester **Prerequisites:** None

Course Number: Semester A: 602011

This course is designed to train students in the craft of historical research and presentation necessary for participation in the National History Day (NHD) competition. The course promotes 21<sup>st</sup> Century skills by utilizing modern research methods and technology to promote the study of history. Students will learn to present their findings in historical papers, museum-style exhibits, original dramatic performances, multimedia documentaries, or interactive websites. **Students choosing to participate in NHD competitions will be responsible for charges and fees.** 

# TECHNOLOGY AND ENGINEERING













### **TECHNOLOGY**

COURSE TITLE	9 <sup>™</sup> GRADE	10 <sup>TH</sup> GRADE	11 <sup>TH</sup> GRADE	12 <sup>TH</sup> GRADE
Advanced Communications & Multi-Media Production (Craig HS Only)			E	E
Aerospace Engineering (PLTW and MSOE) (ES)		R/ES	R/ES	R/ES
Civil Engineering & Architecture (PLTW and MSOE) (Craig HS Only)		E	E	E
Computer Integrated Manufacturing (PLTW and MSOE)		E	E	E
Digital Electronics (PLTW and MSOE) (EM)		R/EM	R/EM	R/EM
Engineering Design & Development (PLTW and MSOE)			E	E
Graphic & Electronic Communication Processes (Craig HS Only)		E	E	E
Graphic & Electronic Communication Systems (Craig HS Only)	E	E	E	E
Graphic & Electronic Communication Technology	E	E	E	E
Introduction to Engineering Design (PLTW and MSOE)	E	E	E	E
Introduction to Mechatronic Systems	E	E	E	E
Principles of Engineering (PLTW and MSOE) (ES)		R/ES	R/ES	R/ES
Robotics, Engineering and Programming	E	E	E	E

**E** = Elective for Grade Level

**R** = Fulfills Graduation Requirement for Grade Level

**AP** = Advanced Placement

**AS** = Advanced Standing

**EM** = Equivalent Mathematics

**ES** = Equivalent Science

**TC** = Transcripted Credit

MSOE = Milwaukee School of Engineering

**PLTW** = Project Lead the Way

# ADVANCED COMMUNICATIONS & MULTI-MEDIA PRODUCTION (Craig HS Only)

Grades: 11, 12 Credit: 1.0

**Length:** Year **Prerequisites:** Graphic & Electronic

Communication Processes
Course Number: 781321

781322

This course is in-depth individual study in the areas of Graphic Arts and Electronic Communication. This course is designed to assist students that have an interest in or are pursuing a career in the Graphic Arts or Electronic Communications field. Each student and the instructor discuss and decide which avenues the student will follow for the year. Each student's plan will be individually based to best assist them after graduation. The areas of study can be with any of the available technology in the class. The length of time and final outcome of each student's topic will be decided jointly by the student and instructor. Students will be allowed to repeat this previously taken higher level course. The student will work on advanced Tech. Ed. projects within the chosen medium area. A special course of study will be developed by the instructor to meet the student's needs in the development of the Tech. Ed. area s/he has chosen. This course option may be repeated for additional credits.



# AEROSPACE ENGINEERING (PLTW, MSOE)

**Grades:** 10, 11, 12 **Credit:** 1.0

**Length:** Year

**Prerequisites:** Geometry **Course Number:** 782121

782122

The major focus of the Aerospace Engineering course is to expose students to the world of aeronautics, flight and engineering. Students will be introduced to the Project Lead the Way activity-based, project-based, and problem-based learning through exploring the world of aerospace engineering. Students should have experience in physics, mathematics and technology education. They will employ engineering and scientific concepts in the solution of aerospace problems. Parker High School will offer this course every other year. Offered, 2022-2023, 2024-2025, 2026-2027, etc.



# CIVIL ENGINEERING & ARCHITECTURE (Craig HS Only)

(PLTW, MSOE)

**Grades:** 10, 11, 12

Credit: 1.0 Length: Year

**Prerequisites:** IED and Geometry

Course Number: 782131

782132

#### This course is also offered under Science.

The major focus of this course is completing long-term projects that involve the development of property sites. As students learn about various aspects of civil engineering and architecture, they apply what they learn to the design and development of a property. The course provides teachers and students freedom to develop the property as a simulation or to students to model the experiences that civil engineers and architects face. Students work in teams, exploring hands-on activities and projects to learn the characteristics of civil engineering and architecture. In addition, students use 3D design software to help them design solutions to solve major course projects. Students learn about documenting their project, solving problems, and communicating their solutions to their peers and members of the professional community of civil engineering and architecture.



# MS OE

# COMPUTER INTEGRATED MANUFACTURING

(PLTW, MSOE)

**Grades:** 10,11, 12

Credit: 1.0

Length: Year Prerequisites: IED

. rerequisites: 125

Course Number: 784131

784132

Manufactured items are part of everyday life, and in this course, students will be introduced to the high-tech, innovative nature of modern manufacturing. At the same time, students will learn about the manufacturing process, product design, robotics, and automation. Students can earn a virtual manufacturing badge recognized by the National Manufacturing Badge System.





# DIGITAL ELECTRONICS (EM, PLTW, MSOE)

**Grades:** 10, 11, 12

**Credit:** 1.0

Length: Year

**Prerequisites:** IED and Algebra 1

Course Number: 782221

782222

Digital Electronics introduces students to the fundamentals and applications of digital electronics, programmable logic controls, and the application of electronic circuits and devices. Students will design and test digital circuitry through a blend of hands-on and academic activities.

This course is also offered under Mathematics.





#### **ENGINEERING DESIGN & DEVELOPMENT** (PLTW, MSOE)

**Grades: 11, 12** Credit: 1.0

Length: Year

Prerequisites: IED, POE and at least one other PLTW engineering course

Course Number: 782031

782032

The knowledge and skills students acquire throughout PLTW Engineering courses come together in Engineering Design & Development as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards, completing Engineering Design & Development ready to take on a post-secondary program or career.

#### **GRAPHIC & ELECTRONIC**

#### **COMMUNICATION PROCESSES** (Craig HS Only)

**Grades:** 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: Graphic & Electronic **Communication Systems** 

Course Number: 781421

781422

This is a yearlong course which consists of in-depth study of the areas in Graphic and Electronic Communication. The students will choose from a list of related activities. The length of time on any one topic will be determined by the number of topics selected jointly by students and the instructor. Choices include:

· Audio/Video

· Photography

· Screen Printing

· Word Processing · AV Presentations

Drafting

· Graphic Layout · Laser Engraving

**CAD System** Lasers

Scanning

**Desktop Publishing** 

**Computer Graphics** 

Robotics

· I Movie

and others currently being developed.

#### **GRAPHIC & ELECTRONIC COMMUNICATION SYSTEMS** (Craig HS Only)

Grades: 9, 10, 11, 12

Credit: 0.5

Length: Semester

Prerequisites: Graphic & Electronic Communication Technology

Course Number: Semester A: 781221

Or Semester B: 781222

# **GRAPHIC & ELECTRONIC**

Grades: 9, 10, 11, 12

Credit: 0.5

Prerequisites: None

Course Number: Semester A: 781021

Or Semester B: 781022

Students participate in learning activities that focus on audio and visual communication systems. Emphasis is on problem solving and practical application of graphic art and electronic communication principles. Students will expand their knowledge of technology by producing in-depth work related to video and audio production, graphic design, desktop publishing, computer aided design (CAD), screen printing, problem solving, photography, digital scanning, digital laser engraving, animation and solid modeling.

# **COMMUNICATION TECHNOLOGY**

Length: Semester

Communication Technology is the first class in a series of communication courses that focus on graphic arts. This course is basic and exploratory in nature. It involves a hands-on approach to learning with most of the class time spent on problem solving activities. Students will work to develop an individualized portfolio involving the following areas: design and layout - computer graphics, desktop publishing, photography, audio/video production, screen-printing, and lasers. Software that will be used will include Adobe: Photoshop, InDesign, Illustrator, and Microsoft Suite.



## INTRODUCTION TO **ENGINEERING DESIGN** (PLTW, MSOE)

Grades: 9, 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: None

Course Number: 782021

782022

This course is designed to introduce students to the design process and the tools used in product development. Students enrolled in Introduction to Engineering Design will learn through first-hand experience the activities that engineers engage in throughout the design cycle. Development of design briefs, sketching, 3D solid modeling and prototyping will provide the foundation for activities in Introduction to Engineering Design.

#### INTRODUCTION TO MECHATRONIC SYSTEMS

**Grades:** 9, 10, 11, 12

Credit: 0.5

Length: Semester

**Prerequisites:** None

Course Number: Semester A: 582831

Or Semester B: 582832

Learning comes to life as students are introduced to the rapidly evolving world of advanced manufacturing. While applying prior learning in technology, math and science, students gain knowledge, in a hands-on environment, that introduces the fundamentals of mechatronics and advanced manufacturing, including electricity, electric relay control, measurement, mechanical drives, performance metrics, control systems, organization, print reading and safety. Ideal for students interested in careers in industry, engineering, computer science and data analytics pathways.



## PRINCIPLES OF ENGINEERING

(PLTW, MSOE)

**Grades:** 10, 11, 12

Credit: 1.0 Length: Year

Prerequisites: IED

Course Number: 581621

581622

Are you interested in applying your math and science skills through a mix of hands-on and academic activities? Principles of Engineering is a course designed to introduce students to the fundamental skill sets necessary to be a successful engineer. Using technology to design experiments, students will fabricate products which meet specific industry requirements. Students may also participate in case studies and team projects. Parker High School will offer this course every other year. Offer 2021-2022, 2023-2024, 2025-2026, etc.

#### This course is also offered under Science.

# ROBOTICS, ENGINEERING, AND PROGRAMMING

**Grade:** 9, 10, 11, 12

Credit: 1.0

Length: Year

**Prerequisites:** None

Course Number: 681321

681322

Robotics, Engineering, and Programming is an exciting class to allow students to feel comfortable with the new and sometimes very complicated concepts. To build an autonomous robot, students must learn the basic concepts of computer programming, design, electrics, engineering, and mechanics.

## CONSTRUCTION

COURSE TITLE	9 <sup>™</sup> GRADE	10 <sup>™</sup> GRADE	11 <sup>TH</sup> GRADE	12 <sup>TH</sup> GRADE
Advanced Construction Student House Build			E	E
Construction Processes		E	E	E
Construction Systems	E	E	E	E
Construction Technology	E	E	E	E
Introduction to Theater Design and Construction (Craig HS Only)	E	E	E	E

**E** = Elective for Grade Level

AS = Advanced Standing

**R** = Fulfills Graduation Requirement for Grade Level

**EM** = Equivalent Mathematics

**ES** = Equivalent Science

**AP** = Advanced Placement

**TC** = Transcripted Credit

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## ADVANCED CONSTRUCTION STUDENT HOUSE

BUILD

Grade: 11, 12 Credit: 3.0

Length: Year

**Prerequisites:** Teacher Recommendation. Preference given to students who completed construction tech, systems, and processes.

Course Number: 783321

783322

This course combines classroom instruction with practical application in a residential home construction project. Students will be "on-site" completing the construction of a home through a partnership with the South-Central Wisconsin Builders Association and the School District of Janesville. Students will learn concrete, framing, insulation techniques, energy saving procedures, green building techniques, electrical, interior and exterior finishes and will be involved with every aspect of a home construction project. Students will have opportunities to work side by side with professionals in the building trades in a "hands on" setting. Upon completion of the house, it will be put on the market and sold. Students will be required to transport themselves to and from the jobsite daily. Students will be allowed to repeat this previously taken higher level course. The student will work on advanced Tech. Ed. projects within the chosen medium area. A special course of study will be developed by the instructor to meet the student's needs in the development of the Tech. Ed. area s/he has chosen. *This course option may be repeated for additional credits*.

## CONSTRUCTION PROCESSES

**Grades:** 10, 11, 12 **Credit:** 1.0

**Length:** Year

**Prerequisites:** Construction Systems

Course Number: 783221

783222

A yearlong course which consists of an in-depth study in the areas of woodworking, carpentry and architecture. Group and individual work activities will consist of material estimating, floor plan design, framing techniques, interior and exterior material application, energy conservation techniques, and career opportunities. Students will design a project which will include a bill of materials and a plan. Students will complete projects utilizing the construction techniques learned in class.

#### **CONSTRUCTION SYSTEMS**

## **Grades:** 9, 10, 11, 12

Credit: 0.5

Length: Semester

**Prerequisites:** Construction Technology **Course Number:** Semester A: 783121

Or Semester B: 783122

This course introduces students to the broad area of carpentry, with an emphasis on residential construction. This may include wall framing, roof rafters, brick laying, plumbing, and electrical. Students will create projects reinforcing the skills learned in construction technology.

#### **CONSTRUCTION TECHNOLOGY**

**Grades:** 9, 10, 11, 12

Credit: 0.5

Length: Semester

**Prerequisites:** None

Course Number: Semester A: 783021

Or Semester B: 783022

This course provides students with a general introduction to construction and woodworking. This course is basic and exploratory in nature. It involves a hands-on approach to learning. Students will operate hand and power tools used in the construction and woodworking industries. Students will construct products dealing with architecture, residential construction, woodworking, and mass production.

# INTRODUCTION TO THEATER DESIGN AND CONSTRUCTION(Craig HS Only)

**Grade:** 9, 10, 11, 12

**Jrade:** 9, 10, 11, 12

Credit: 0.5 Length: Semester

Prerequisites: None

Course Number: Semester A: 783521

Introduction to Theater Design and Construction will expose students to set design and construction as well as theatrical lighting and sound in this hands-on class. Students will be making the sets and props for the current musical/theatrical productions as well as working with sounds and lighting for the shows. This course may be taken multiple academic years for credit.

This course is also offered under Music.

## MANUFACTURING

COURSE TITLE	9 <sup>TH</sup> GRADE	10 <sup>TH</sup> GRADE	11 <sup>TH</sup> GRADE	12 <sup>TH</sup> GRADE
Advanced Manufacturing			E	E
Machine Metals		E	E	E
Manufacturing Systems	E	E	E	E
Manufacturing Technology	E	E	E	E
TC Welding		E	E	E
TC Welding Fabrication		E	E	E

**E** = Elective for Grade Level **EM** = Equivalent Mathematics

TC = Transcripted Credit

**AS** = Advanced Standing

R = Fulfills Graduation Requirement for Grade Level

AP = Advanced Placement

**ES** = Equivalent Science

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#### ADVANCED MANUFACTURING

**Grades:** 11, 12

Credit: 1.0 Length: Year

Prerequisites: Machine Metals or Welding

Fabrication

Course Number: 784521

784522

Students will plan, design and develop independent projects using the entire lab and instructional resources. This course is geared to meet the needs of the individual student. Students are required to develop advanced skills in machine operation and welding to solve more difficult problems while working to meet industry standards. Advanced projects will be made using multiple machines in the manufacturing lab. These machines could include: Lathes, Milling Machines, Computer Numerical Control (CNC) machines and Welders. The students can then assemble the parts produced into a useful product. The student will work on advanced Tech. Ed. projects within the chosen medium area. A special course of study will be developed by the instructor to meet the student's needs in the development of the Tech. Ed. area s/he has chosen. This course option may be repeated for additional credits.



#### **MACHINE METALS**

**Grades:** 10, 11, 12 **Credit:** 0.5

Length: Semester

**Prerequisites:** Manufacturing Systems **Course Number:** Semester A: 784221

Or Semester B: 784222

Machine Metals covers the procedures involved in converting metal stock into a variety of shapes and sizes. These procedures include the use of metal lathes, milling machines, surface grinders and drilling to specification on a blueprint. Students will be introduced to the functions of a CNC machine. The students can then assemble the parts produced into a useful product.

#### MANUFACTURING SYSTEMS

**Grades:** 9, 10, 11, 12

Credit: 0.5

Length: Semester

**Prerequisites:** Manufacturing Technology **Course Number:** Semester A: 784121

Or Semester B: 784122

Students will build goods and products from raw materials. Students will read blueprints and use precision measurement tools to accurately form the materials needed to create a finished good or product. Students will work with hand tools, understand decimal equivalents and tap and die charts and will apply themselves to machining of metal, welding, and sheet metal.

#### MANUFACTURING TECHNOLOGY

**Grades:** 9, 10, 11, 12

Credit: 0.5

Length: Semester

Prerequisites: None

Course Number: Semester A: 784021

Or Semester B: 784022

TC WELDING

**Grades:** 10, 11, 12

Credit: 0.5

**Length:** Semester

**Prerequisites:** Manufacturing Systems

Course Number: Semester A: 784321

Or Semester B: 784322

This class provides students with a general introduction to material processing of manufactured goods and products. Students will work with hand tools and operate basic machine tools used in the machining industry. Students will also learn to use precision measurement tools, hand tools, and operate machine tools such as lathes and milling machines. Students will gain experience with stick welding, and sheet metal development in this course. Students will construct several projects using blueprints and a combination of hand and machine tools. Students will learn SMAW welding processes, and develop a project from sheet metal.

This course is an introduction that provides a foundation of hands on learning by applying knowledge related to the welding process. Welding is an efficient, dependable, flexible, and economical means of fabrication. Students will study the principles and practices of SMAW, GTAW, GMAW, FCAW, Oxyacetylene cutting operations, and Plasma Arc Cutting. This will be achieved through lecture, demonstrations, and in lab practice.

This is a college course that will produce a permanent college transcript and grade point average for each student. If you believe that producing a permanent college transcript and grade point is not in your best interest academically at this time, please consider requesting a non-transcripted credit (TC) course. If you need more information about Transcripted Credit, see your counselor before requesting courses. Transcripted credit may be offered if the SDJ has a licensed staff member employed to teach this course.





#### TC WELDING FABRICATION

**Grades:** 10, 11, 12 **Credit:** 0.5

Length: Semester
Prerequisites: Welding

Course Number: Semester A: 784421

Or Semester B: 784422

Students will continue their exploration and skill building through activities that involve welding processes from the first level course. Students will learn welding math, interpret drawings, sketches and welding symbols. Students will participate in a mass production welding project, which will further acquaint them with different machines in the shop. Students will then make their own independent project (with Instructors permission for safety purposes).

This is a college course that will produce a permanent college transcript and grade point average for each student. If you believe that producing a permanent college transcript and grade point is not in your best interest academically at this time, please consider requesting a non-transcripted credit (TC) course. If you need more information about Transcripted Credit, see your counselor before requesting courses. Transcripted credit may be offered if the SDJ has a licensed staff member employed to teach this course.

## **TRANSPORTATION**

COURSE TITLE	9 <sup>™</sup> GRADE	10 <sup>TH</sup> GRADE	11 <sup>TH</sup> GRADE	12 <sup>TH</sup> GRADE
AS Advanced Automotive			E	E
AS Automotive Processes		E	E	E
Automotive Systems	E	E	E	E
Transportation Technology	E	E	E	E

**E** = Elective for Grade Level

**TC** = Transcripted Credit

AS = Advanced Standing

R = Fulfills Graduation Requirement for Grade Level

**EM** = Equivalent Mathematics

**ES** = Equivalent Science

**AP** = Advanced Placement

MSOE = Milwaukee School of Engineering

**PLTW** = Project Lead the Way



#### AS ADVANCED AUTOMOTIVE

**Grade:** 11, 12

Credit: 1.0

Length: Year

Prerequisites: Automotive Processes

Course Number: 785321

785322

This course focuses on the detailed operation and service of the following automotive systems: total electrical system, emissions, engine diagnosis, mechanical repair, steering and suspension, brakes and drive train. Students will also experience and build skills in the auto body field, including prep –bondo (mudding) to paint.

Note: A contract project is required (4-9weeks) as a part of the class. It is signed by

a student/teacher and must be completed to obtain a grade. Students will work on advanced Tech. Ed. projects within the chosen medium area. A special course of study will be developed by the instructor to meet the student's needs in the development of the Tech. Ed. area s/he has chosen. This course option may be repeated for additional credits.



#### **AS AUTOMOTIVE PROCESSES**

Grades: 10, 11, 12

Credit: 1.0

**Length:** Year

Prerequisites: Automotive Systems

Course Number: 785221

785222

This course will expand on previous areas of instruction in the automotive field. It is the second course that deals entirely with the automobile. Students will learn and perform services that deal with engine processes, electrical systems, suspension systems, brake systems, axles and transmissions, and intro auto body.

#### **AUTOMOTIVE SYSTEMS**

**Grades:** 9, 10, 11, 12

Credit: 0.5

Length: Semester

**Prerequisites:** Transportation Technology

Course Number: Semester A: 785121

Or Semester B: 785122

This first automotive course focuses on cars. Students will learn about and work on all the systems within the vehicle ignition, fuel, cooling, lubrication, exhaust, brakes, suspension, and wheels and tires. Students will disassemble and reassemble engine components and perform basic service and maintenance checks. Students will also be able to perform many of the hands-on performances on their own vehicles!

#### TRANSPORTATION TECHNOLOGY

Course Number: Semester A: 785021

**Grades:** 9, 10, 11, 12

Credit: 0.5

Length: Semester

**Prerequisites:** None

Or Semester B: 785022

Students will work on and learn about vehicles and engines used for land, air, and water transportation industries. Students will design, build and operate several different kinds of vehicles, which may include (steam powered boats, mousetrap drag car, boomerangs, etc.) Students will also disassemble, diagnose, repair, and reassemble a small 4-stroke gasoline engine.

## INDUSTRIAL COOP EDUCATION

COURSE TITLE	9 <sup>TH</sup> GRADE	10 <sup>TH</sup> GRADE	11 <sup>TH</sup> GRADE	12 <sup>TH</sup> GRADE
ndustrial COOP/Education (I.C.E.) – (Parker HS Only)			E	E
ndustrial COOP/Education (I.C.E.) – Job Site (Parker HS Only)			E	E

**E** = Elective for Grade Level

R = Fulfills Graduation Requirement for Grade Level

**AP** = Advanced Placement

AS = Advanced Standing

**EM** = Equivalent Mathematics

**ES** = Equivalent Science

**TC** = Transcripted Credit

**MSOE** = Milwaukee School of Engineering

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# INDUSTRIAL COOP/EDUCATION (I.C.E.) – CLASSROOM

(Parker HS Only)

Grade: 11, 12

Credit: 1.0

Length: Year

**Prerequisites:** Two courses in Technology Education and Instructor Consent. Application and interview required.

Course Number: 787121

787122

The I.C.E. classroom phase is a course intended to go hand in hand with the I.C.E. work phase of the program. The classroom phase deals with all aspects of the world of work students will someday encounter. In the classroom, students will learn: job seeking skills, employer/co-worker relations, ways to obtain job promotions, how to research various careers, and other important aspects of how to get a job, keep it, and become successful in a career.

## ${\bf INDUSTRIAL\ COOP/EDUCATION\ (I.C.e.)-JOB}$

(Parker HS Only)

(Parker HS Only)

**Grade:** 11, 12

Credit: 1.0

Length: Year

**Prerequisites:** Concurrent enrollment in I.C.E. Classroom and Instructor Consent. Application

Required

Course Number: 787221

787222

In this course, the student works in a job related to his/her career objective. The student is trained and evaluated by the employer. Students receive one credit for work experience. Students signing up for Industrial COOP work must also sign up for the I.C.E. classroom phase. Students will be released early from school each day for on-the-job training, and work at their selected job site approximately 15-20 hours per week

COOP requirements include: weekly work logs and quarterly employer completed evaluations.

# WORLD LANGUAGE

COURSE TITLE	9 <sup>™</sup> GRADE	10 <sup>TH</sup> GRADE	11 <sup>TH</sup> GRADE	12 <sup>TH</sup> GRADE
AP Chinese Language and Culture				E
AP French Language and Culture				E
AP Spanish Language and Culture				E
AP Spanish Literature and Culture				E
Chinese Language and Culture I	E	E	E	E
Chinese Language and Culture II	E	E	E	E
Chinese Language and Culture III	E	E	E	E
Chinese Language and Culture IV – Honors		E	E	E
Chinese Language and Culture V – Honors			E	E
French Language and Culture I	E	E	E	E
French Language and Culture II	E	E	E	E
French Language and Culture III		E	E	E
French Language and Culture IV – Honors			E	E
French Language and Culture V – Honors				E
Spanish Language and Culture I	E	E	E	E
Spanish Language and Culture II	E	E	E	E
Spanish Language and Culture III		E	E	E
Spanish Language and Culture IV - Honors			Е	Е
Spanish Language and Culture V - Honors				Е
Spanish for Heritage Speakers I – Honors	E	E	E	Е
Spanish for Heritage Speakers II – Honors		E	Е	Е

**E** = Elective for Grade Level

**AS** = Advanced Standing

**R** = Fulfills Graduation Requirement for Grade Level

**EM** = Equivalent Mathematics

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#### AP CHINESE LANGUAGE AND CULTURE

Grade: 12 Credit: 1

Length: Year

Prerequisites: Chinese Language and Culture

V-Honors

Course Number: 740621 & 740622

The AP Chinese Language and Culture course emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP Chinese Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Chinese. The AP Chinese Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions)

#### AP FRENCH LANGUAGE AND CULTURE

Grade: 12

Credit: 1.0

Length: Year

**Prerequisites:** French Language and Culture IV

Course Number: 741721

741722

The AP French Language and Culture course emphasizes communication by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. To best facilitate the study of language and culture, the course is taught almost exclusively in French.

The AP French Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions). Students will have the opportunity to take the Advanced Placement exam.

#### AP SPANISH LANGUAGE AND CULTURE

Grade: 12

Credit: 1.0

Length: Year

**Prerequisites:** Spanish Language and Culture IV, V, or AP Spanish Literature and Culture

Course Number: 742921

742922

The AP Spanish Language and Culture course is a rigorous course that is taught predominantly in Spanish and approximately equivalent to a 5<sup>th</sup> or 6<sup>th</sup> semester university course. The course requires students to improve their proficiency across the three modes of communication (interpretive, interpersonal, and presentational). The course focuses on the integration of authentic resources including online print, audio, and audiovisual resources, as well as traditional print resources that include literature, essays, and magazine and newspaper articles with the goal of providing a rich, diverse learning experience. Students communicate using advanced vocabulary and linguistic structures as they build proficiency in all modes of communication. Students will have the opportunity to take the Advanced Placement exam.

#### AP SPANISH LITERATURE AND CULTURE

Grade: 12

Credit: 1.0

Length: Year

**Prerequisites:** Spanish Language and Culture

IV, V, or AP Spanish Language

Course Number: 742931

742932

The AP Spanish Literature and Culture course uses a thematic approach to introduce students to representative texts (short stories, novels, poetry, plays, and essays) from Peninsular Spanish, Latin American, and U. S. Hispanic literature. Students develop proficiencies across the three modes of communication (interpretive, interpersonal, and presentational) in the range of Intermediate High to Advance Mid of the American Council on the Teaching of Foreign Languages' (ACTFL) Proficiency Guidelines. Through careful examination of the required readings and other texts, students work to hone their critical reading and analytical writing skills. Literature is explored within the contexts of its time and place, and students gain insights on the many voices, historical periods, and cultures represented in the required readings and other texts. The course also includes a strong focus on cultural, artistic, and linguistic connections and comparisons, which is supported by the exploration of various media (art, music, film, articles, and literary criticism).

#### **CHINESE LANGUAGE AND CULTURE I**

Grades: 9, 10, 11, 12

Credit: 1.0

Length: Year

Lengui. Tea

Prerequisites: None

Course Number: 740121

740122

In Chinese I, students use culture to express themselves on a variety of topics in Chinese. Authentic cultural resources will be used to introduce and practice reading, writing, listening, and speaking at a novice level (memorized words and phrases and simple sentences). The five themes are: Greetings & Introduction, Myself, My Day at School, Food is Culture, and Go Shopping. Participation in Chinese cultural celebrations and use of online media platforms are used to encourage communication in Chinese.

#### **CHINESE LANGUAGE AND CULTURE II**

**Grades:** 9, 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: Chinese I

Course Number: 740221

Chinese II expands on Chinese I themes making comparisons between students' own lives and the lives of adolescents in China and other Chinese speaking Countries. The five themes are: My Friends, Choices on Clothes, My Day Out of School, Let's Cook, and Where Do You Want to Travel? Students are immersed in culture through authentic cultural resources. They will begin transitioning from novice to intermediate language (naturally adding detail to simple sentences). Music, film, literature, Chinese celebrations and online media platforms continue to be used to encourage communication in Chinese. Students who have completed 7th and 8th grade Chinese should sign up for Chinese II.

#### **CHINESE LANGUAGE AND CULTURE III**

Grades: 9, 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: Chinese II

Course Number: 740321

740322

Chinese Language and Culture III is a course which continues instruction in Mandarin Chinese language and culture. Students will continue developing oral fluency and literacy skills in Chinese. The use of pinyin (Chinese words written in the English alphabet) will continue to be phased out. Interactive strategies and technology will be a regularly integrated component of learning.

#### CHINESE LANGUAGE AND CULTURE IV -**HONORS**

**Grade:** 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: Chinese III Course Number: 740421

740422

This intermediate level Chinese course continues to develop students' communication skills and cultural competency through a thematic curriculum that includes learning about the Chinese-speaking world through Making Appointments, Homes and Households, Jobs, Holidays, and Travel. These themes help move students toward more authentic communication with native speakers. Music, film, literature, authentic celebrations, and online media platforms continue to be used to encourage communication. Students who have completed 3rd to 8th grade Chinese should sign up for Chinese III.

### CHINESE LANGUAGE AND CULTURE V -

**HONORS** 

**Grade:** 11, 12 Credit: 1.0

Length: Year

Prerequisites: Chinese IV - Honors

Course Number: 740521

740522

This intermediate level Chinese course continues to develop students' communication skills and cultural competency through a thematic curriculum that focuses on Entertainment, Weddings and Funerals, History and Art, Living and Maintaining a Healthy Lifestyle, and Travel. These themes help move students toward more authentic communication with native speakers. Music, film, literature, authentic celebrations, and online media platforms continue to be used to encourage communication.

#### FRENCH LANGUAGE AND CULTURE I

Grades: 9, 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: None

Course Number: 741121

741122

In French I, students use culture to express themselves on a variety of topics in French. Authentic cultural resources will be used to introduce and practice reading, writing, listening, and speaking at a novice level (memorized words and phrases and simple sentences). Some topics include everyday life, school, pastimes, and people. Music, film, literature, francophone celebrations and online media platforms are used to encourage communication.

French II expands on French I themes making comparisons between students' own lives and the lives of adolescents from francophone countries. There is an emphasis

transitioning from novice to intermediate language (naturally adding detail to simple

on fashion, food, family life and their communities. Students are immersed in

sentences). Music, film, literature, francophone celebrations and online media

platforms continue to be used to encourage communication. Students who have

francophone culture through authentic cultural resources. They will begin

completed 7th and 8th grade French should sign up for French II.

## FRENCH LANGUAGE AND CULTURE II

Grades: 9, 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: French Language and Culture I

Course Number: 741221

741222

#### FRENCH LANGUAGE AND CULTURE III

**Grades:** 10, 11, 12

Length: Year

Prerequisites: French Language and Culture II

Course Number: 741321 & 741322

Credit: 1.0

This intermediate level French course continues to develop students' communication skills and cultural competency through four main themes: la routine quotidienne, les grandes vacances, l'art de la francophonie, and l'histoire de la moyenne age. These themes help move students toward more authentic communication with native speakers. Music, film, literature, authentic celebrations, and online media platforms continue to be used to encourage communication.

FRENCH LANGUAGE AND CULTURE IV -**HONORS** 

**Grades: 11, 12** 

Credit: 1.0 Length: Year

Prerequisites: French Language and Culture III

Course Number: 741421

741422

This intermediate level French course continues to develop students' communication skills and cultural competency through the themes of la santé and l'environnement. These themes help move students toward more authentic communication with native speakers. Students explore themes in French literature with the novel Le Petit Prince. Music, film, literature, authentic celebrations, and online media platforms continue to be used to encourage communication. Students can choose to continue to French V -Honors or AP French. Students attending a university may be eligible for retroactive credits based upon demonstrated proficiency in the language..

FRENCH LANGUAGE AND CULTURE V -

**HONORS** Grade: 12

Credit: 1.0

Length: Year

Prerequisites: French Language and Culture IV

Course Number: 741521

741522

This course explores France and francophone influence in the world. French V is supplemented by authentic francophone music, film, literature, celebrations, and online media platforms that encourage communication. This course also expands on some earlier themes, including everyday life in the French-speaking world. This class will meet the needs of students who plan to use French for travel, career opportunities and further study. Students attending a university may be eligible for retroactive credits based upon demonstrated proficiency in the language.

**SPANISH LANGUAGE AND CULTURE I** 

Grades: 9, 10, 11, 12

Credit: 1.0 Length: Year

Prerequisites: None

Course Number: 742121

742122

In Spanish I, students use culture to express themselves on a variety of topics in Spanish. Authentic cultural resources will be used to introduce and practice reading, writing, listening, and speaking at a novice level (memorized words and phrases and simple sentences). The four themes are: Identities, School life, My family is your family, Food is culture. Music, film, literature, Spanish celebrations, and online media platforms are used to encourage communication.

**SPANISH LANGUAGE AND CULTURE II** 

Grades: 9, 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: Spanish Language and Culture I

Course Number: 742221

742222

Spanish II expands on Spanish I themes making comparisons between students' own lives and the lives of adolescents from Spanish-speaking countries. There is an emphasis on fashion, food, family life and their communities. Students are immersed in culture through authentic cultural resources. They will begin transitioning from novice to intermediate language (naturally adding detail to simple sentences). Music, film, literature, Spanish celebrations and online media platforms continue to be used to encourage communication. Students who have completed 7th and 8th grade Spanish should sign up for Spanish II.

**SPANISH LANGUAGE AND CULTURE III** 

**Grades:** 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: Spanish Language and Culture II

Course Number: 742321

742322

This intermediate level Spanish course continues to develop students' communication skills and cultural competency through a thematic curriculum that includes learning about the Spanish-speaking world through communities, food, social life and travel. These themes help move students toward more authentic communication with native speakers. Music, film, literature, authentic celebrations, and online media platforms continue to be used to encourage communication.

SPANISH LANGUAGE AND CULTURE IV -**HONORS** 

Grades: 11, 12

Credit: 1.0

Length: Year

Prerequisites: Spanish Language and Culture

Course Number: 742421

742422

This intermediate level Spanish course continues to develop students' communication skills and cultural competency through a thematic curriculum that focuses on self expression, technology and living and maintaining a healthy lifestyle. These themes help move students toward more authentic communication with native speakers. Music, film, literature, authentic celebrations, and online media platforms continue to be used to encourage communication. Students can choose to continue to Spanish V Language and Culture - Honors, AP Spanish Language and/or AP Spanish Literature. Students attending a university may be eligible for retroactive credits based upon demonstrated proficiency in the language.

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# SPANISH LANGUAGE AND CULTURE V – HONORS

Grade: 12 Credit: 1.0

Length: Year

Prerequisites: Spanish Language and Culture

IV

Course Number: 742521

742522

This course explores Spanish influence in the world through a thematic curriculum that includes current events, art, global citizenship, health and technology. Spanish V is supplemented by authentic Spanish music, film, literature, celebrations, and online media platforms that encourage communication. This course also expands on some earlier themes, including everyday life in the Spanish-speaking world. This class will meet the needs of students who plan to use Spanish for travel, career opportunities and further study. Students attending a university may be eligible for retroactive credits based upon demonstrated proficiency in the language.

## SPANISH FOR HERITAGE SPEAKERS I –

HONORS

**Grade:** 9, 10, 11, 12 **Credit:** 1.0

Length: Year

**Prerequisites:** Spanish is spoken in the student's home. Student speaks Spanish fluently, in addition to reading and writing

basic Spanish.

Course Number: 742621

742622

This honors course for Heritage learners offers highly differentiated instruction to develop reading, writing, listening and speaking skills through the lens of interculturality. Students strengthen communication skills and cultural competency through four main themes: Un mundo hecho por comunidades, En la cocina de mi abuela, La vida social, Un viaje al extranjero. Music, film, literature, authentic celebrations, and online media platforms are used to develop competencies. Students will conference with the teacher to decide which higher level course is best to advance to the following year.

# SPANISH FOR HERITAGE SPEAKERS II – HONORS

**Grade:** 10, 11, 12

Credit: 1.0

Length: Year

Prerequisites: Spanish for Heritage Speakers I

Course Number: 742721

742722

This honors course for second year Heritage learners offers highly differentiated instruction to further development in reading, writing, listening and speaking skills through the lens of interculturality. Students strengthen communication skills and cultural competency through five main themes: Los jóvenes de hoy, #Ciudadanía digital, Una vida sana y equilibrada, Una comunidad sostenible, El mundo laboral. Students will conference with the teacher to decide which higher level course is best to advance to the following year. These include Spanish IV Honors Language and Culture, , Spanish V Honors Language and Culture, AP Spanish Language and Culture and AP Spanish Literature and Culture.