

# Waterford Union High School

*Career Planning  
Course Guide*

**2017-18**

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Waterford Union High School  
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Waterford, Wisconsin 53185  
(262) 534-3189  
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# COURSE OFFERINGS 2017 - 2018

## AGRICULTURE

- Agriscience
- Personal Preparation for Careers •
- Natural Resources - ES •
- Veterinary Pet Care •
- Large Animal Veterinary Science •
- Home Gardening & Horticulture•
- Greenhouse Management •
- Landscape Design •
- Biotechnology & Bioenergy•
- Advanced Leadership •
- Summer Research Scholars •
- Agribusiness & Marketing •
- Agribusiness Co-op •

## ART

- Studio Art 360•
- Drawing •
- Ceramics •
- Mixed Media Art •
- Sculpture •
- Digital Photography •\*
- Adv. Digital Photography •
- Art Metals •
- Advanced Drawing •
- Computer Illustration •\*
- Advanced Ceramics •
- Stained Glass •
- Painting •
- Advanced Painting •
- AP Studio Art
- Advanced Stained Glass •
- Individualized Art •

## BUSINESS & INFORMATION TECHNOLOGY

- Information & Technology Literacy •
- Introduction to Business • \*
- Personal Financial Planning •
- Computer Applications for Business•
- Business Law •
- Digital Media •
- Computer Animation •
- Computer Science 1 Visual Basic •
- Computer Science 2 •
- Intro to Networking •#
- Web Design 1 •
- Mobile App Development •
- Accounting 1 •\*
- Marketing •
- IT Essentials •
- Video Game Development •
- Accounting 2
- Workplace Literacy

## DRIVERS EDUCATION

- Drivers Ed •

## ENGLISH

- Honors English 9
- English 9
- Drama •

- Acting •
- Theater Production •
- Theatrical Costume & Makeup (2018-19) •
- Honors English 10
- English 10
- Speech •
- Technical Theater (2017-18) •
- Composition •
- Honors Composition •
- Writing for the Workplace •
- American Literature •
- Honors American Literature •
- Sports Literature & Writing •
- English Literature •
- Multicultural Literature •
- Classics of Horror •
- Humanities •
- Creative Writing •
- AP English Literature
- Critical Thinking •
- College Intro Comm 110 •\*
- College English 101 •\*
- Science Fiction Literature •

## FAMILY & CONSUMER SCIENCE

- Foods 1•
- Foods 2 •
- Nutrition For Sports/Life •
- Apparel Construction 1 •
- Intro to Health Care Careers •
- International Foods •
- Culinary Skills 1 •\*
- Apparel Const. 2-Fashion Design •(2017-18)
- Parenting •
- Food Science •
- Personal & Family Relationships •
- Independent Living Skills •
- Child Development/Asst. Child Care •
- Senior Foods •

## MATHEMATICS

- Algebra 1
- Accelerated Geometry
- Elementary Algebra 1
- Geometry
- Algebra 2 with Trigonometry
- Elementary Algebra 2
- Algebra 2
- Statistics •
- Trigonometry •
- Tech Math 2
- Pre-Calculus
- AP Statistics
- Algebra Programming Applications 1 •
- Algebra Programming Applications 2 •
- AP Calculus AB
- AP Calculus BC
- Calculus 3 •\*
- Linear Algebra •\*

## MUSIC

- Principianti
- Concert Band
- Jazz Band
- Music Technology& Production •
- Intermezzo-Sopranos/Altos
- Intermezzo-Tenors/Bass
- Sulla Cima
- Vocal Jazz
- Intro to Music Theory (2017-18) •
- Symphonic Band
- AP Music Theory (2018-19)
- Orchestra

## PHYSICAL EDUCATION & HEALTH

- Phy Ed 9 •
- Health 1 .25 cr.
- Phy Ed 10 •
- Sports Medicine •
- Phy Ed 11 •
- Health 2 .25 cr.
- Strength & Conditioning •
- Power Lifting •
- Phy Ed 12 •

## READING

- Reading & Learning Strategies
- Learning Applications

## SCIENCE

- Intro Physical Science
- Honors Biology
- Survey Physical Science
- Biology
- Honors Chemistry
- Conceptual Biology
- Integrated Science
- Chemistry
- AP Biology
- Physics
- AP Physics 1 #
- AP Chemistry
- Practical Chemistry
- Chemistry 2 •
- Earth Science •
- AP Environmental Science
- Astronomy •
- Marine Biology •
- Medical Terminology •\*
- Biology 2
- Forensic Science •
- Conceptual Physics

## SOCIAL STUDIES

- Modern US History
- Honors Modern US History
- Wisconsin History •
- Global Studies •
- Modern World History
- AP World History
- American Government •
- AP Government
- AP US History

- Psychology •
- AP Psychology
- Contemporary Social Issues •
- Military History •
- Economics •
- Consumer Economics •
- AP Economics •

## TECHNOLOGY & ENGINEERING EDUCATION

- Exploring Technology •
- Small Engines •
- Basic Drafting •
- Adv. Drafting with CAD•
- CreaTECH #
- Intro to Woods •
- Intro to Metals •
- SAFE Auto Mechanics •
- HOME 2: Construction •
- HOME (Home Owners Maintenance for Everyone)
- Woodworking 1 (block)
- Metals 1 (block)
- Automotive Technology (block)
- Woodworking 2 (block)
- Metals 2 (block)
- Wolverine Works #
- PROJECT LEAD THE WAY Classes**
- Intro to Engineering (IED)
- Principles of Engineering (POE)
- Digital Electronics
- Civil Engineering & Architecture
- Engineering Design&Development(PLTW)

## WORLD LANGUAGES

- Spanish 1
- French 1
- Spanish 2
- French 2
- Spanish 3
- French 3
- Spanish 4
- French 4 •\*
- AP Spanish

## OTHER ELECTIVES

- Yearbook/Newspaper Publication
- ACT Prep Course

## GTC-VANGUARD NETWORK CLASSES

- = one semester class
- \* = Optional Dual Enrollment Credit
- # = new class offering for 2017-18



= Partners In Education

## Credit

Credit is awarded upon the successful completion of a course. One-half credit is awarded for a course that meets one period per day, five days a week for eighteen weeks. One credit is awarded for a course that meets one period per day, five days a week for thirty-six weeks.

## Graduation Requirements

**Credits Required: 24 Credits**

### **Specific Credit Requirements:**

**4 Credits of English:** including English 9, English 10, a Literature elective, Composition or Writing for the Workplace, Speech or Drama, and one semester of an English elective.

**3 Credits of Science**

**3 Credits of Math**

**3 Credits of Social Studies** including:  
9th grade: Honors or Modern U.S. History  
10th grade: AP or Modern World History  
11th grade: American Government .5 cr., AP U.S. History 1 cr. or AP Government 1 cr.  
12th Grade: Consumer Economics .5 cr., Economics .5 cr. or AP Economics, 1 cr.

**1 1/2 Credits of Physical Education:** including P.E. 9, P.E. 10, P.E. 11

**1/2 Credit of Health:** including Health 1 and Health 2

**1/4 or 1/2 Credit of Business & Information Technology:** Information & Technology Literacy

\*\*\*\*\*

**WUHS has courses in both Agriculture and Technology & Engineering Education that have been approved by the Wisconsin DPI to satisfy the 3rd year graduation requirement for math and/or science. Course counting for a math requirement is Digital Electronics in Technology & Engineering Education. Courses counting for a science requirement are Natural Resources and Home Gardening/Horticulture in Agriculture and Principles of Engineering in Technology & Engineering Education. If a student takes a course that counts in both areas and wishes to count it toward a math or science graduation requirement they may only apply the credit to one of the two core areas. Colleges may or may not accept these courses as college entrance**

**requirements in math and/or science. Students should work closely with their school counselor to ensure they are meeting high school graduation requirements and college entrance requirements.**

## Course Load

All freshmen, sophomores and juniors are required to carry a minimum of seven classes per semester. All seniors are required to carry a minimum of six classes per semester or five classes per semester if enrolled in a work experience program.

## Grade Classification

Grade classification is determined by the number of credits earned at the high school level. The following credits must be earned to attain class status:

Sophomore	5 credits minimum
Junior	10.5 credits minimum
Senior	17 credits minimum

## Youth Options Program

The Youth Options program allows all public high school juniors and seniors who meet certain requirements to take postsecondary courses at a U.W. institution, a Wisconsin technical college or one of the state's participating private, not for profit institutions of higher education.

The program opens the door to greater learning opportunities for students who are considering a technical career, students wishing to begin college early, or students who want to prepare to enter the work-force immediately after high school graduation.

The student does not have to pay for a postsecondary course if the school board determines the course may receive high school credit and the course is not comparable to a course offered in the school district. If approved by the school board, the student will receive both high school and postsecondary credit for a successfully completed course. The high school will grant a diploma to a student who has successfully completed high school graduation standards, regardless of whether the requirements were met at the high school or college.

All juniors and seniors in Wisconsin public schools who meet the program requirements are eligible. To qualify for the program, a student must:

Have completed the 10th grade, be in good academic standing and have no record of disciplinary problems.

Apply to the college in the school semester prior to the one in which the student plans to attend the postsecondary course.

Notify the school board of the student's intention of enrolling in a college no later than March 1 for a course to be taken in the fall semester; October 1 for a course to be taken in the spring semester.

Notify the school board if the student is admitted to the college.

Notify the school board if the student is registered to attend a postsecondary course.

A parent or guardian is responsible for satisfactory student attendance and the student's compliance with the compulsory school attendance law. A maximum of 18 credits will be paid for by WUHS. **Students who do not successfully complete the course with a passing grade (based on the college's grading scale) may be required to reimburse WUHS the cost of the course.**

## Course Selection Guidelines

1. Many courses have prerequisites, grade level requirements and other requirements such as minimum performance in a prerequisite class. Students must meet these requirements before they may register for the course.

2. Students should select courses that correspond with their abilities. The school reserves the right to adjust a student's program to meet their ability level or to adjust class size.

3. Physical education may be waived for a part of a year or the entire year due to a medical excuse. **Students who are unable to participate in physical education must have their physician complete a Waterford High School physical education modification form.** This form can be obtained in the Waterford High School Student Services. If at a later date, the physician determines that the student may now be involved in physical education classes, the student is responsible for making up all missed physical education classes so long as there is sufficient time on the student's remaining schedule at WUHS to make each class up by taking no more than one semester of physical education each of his/her remaining semesters. A signed Waterford High School physical education modification form is required for each year of waived physical education classes.

4. Graduation requirements are minimal requirements. Students who will continue their education beyond high school should plan a course of

study that involves a heavy emphasis on classes such as math, science, English, social studies and other elective courses that fit their individual career and post-secondary school preparatory needs.

5. In some instances, transferring students may be unable to graduate with their class because they cannot reach the 24 credit requirement for graduation. In such instances the following procedure will be used:

\* Freshmen transfer students will meet the 24 credit requirement.

\* Sophomore transfer students will meet the 24 credit requirement.

\* First semester junior transfer students will meet the 24 credit requirement.

\* Second semester junior transfer students will earn a minimum of 10.5 credits.

\* First semester senior transfer students will earn a minimum 7 credits.

\* second semester senior transfer students will earn a minimum 3.5 credits.

Any credit that was not earned at the previous high school due to failure will be added to the WUHS total requirements.

The requirements in English, math, social studies, science, physical education, health, and information & technology literacy will remain the same for all students graduating from WUHS regardless of the number of credits the student earned when transferring from another school.

## Schedule Changes

Considerable effort is devoted to developing a master schedule and teachers are hired and assigned classes according to student preregistration sign-up. Therefore class changes cannot always be granted and are often impossible due to schedule conflicts, class availability, and class size limitations. Changes will not be made for the following reasons: to accommodate a different lunch period; to accommodate taking a class with a friend; to accommodate a different study hall location; to accommodate a different study hall hour; to accommodate moving to a lower level class when the student is already at the appropriate ability level commensurate with his/her ability.

## Teacher Changes

The following is the policy for requesting a teacher change:

1. Student has had the teacher previously and failed the course: Approved if possible.
2. Student has had the teacher and would prefer a teacher change AND the numbers move the student from a larger section to a smaller section: Approved if possible.
3. Student has had the teacher and passed and the numbers move him from a smaller to a larger section: Denied.
4. Student has not had the teacher and the numbers move the student from a larger section to a smaller one: Denied/approved on case by case basis.
5. Student has not had the teacher: Denied
6. Student has not had the teacher and the numbers move the student from a smaller section to a larger one: Denied.

## Dropping A Class

The following rules apply to dropping a class:

1. Students who wish to drop a class and add another should do so within the first three days of the semester. Adding a class after the first three days will require a note of acceptance from the teacher in which the student has an interest in joining. There will be no adding of new classes with or without teacher permission beyond the sixth day of a new semester.
2. Any class dropped after the first ten working days of school will receive a semester failure.
3. **Students will not be allowed to drop classes with enrollments of eighteen (18) or less once the master schedule has been set.**

## Permanent Records (Transcript)

A permanent record (transcript) is maintained for each student. This record may carry the student's legal name, address, date of birth, courses, grades and credits earned, cumulative GPA, class rank, and ACT, SAT, and AP test scores.

## Requesting a Transcript (Permanent Record)

Transcripts accompany four year colleges, technical colleges and scholarship applications. Transcripts may also be requested by NCAA, employers, military enlistees and for pretrial/security clearance investigations, etc. An **"official"** transcript is signed and sealed by the high school and sent electronically through Parchment (for Graduates 2010 and beyond) or mailed directly to requestor. Students graduating before 2010 may request one by completing a release form. No transcript will be sent without student or

parental permission unless the transcript is court ordered.

## Subject Evaluation

The following grades are utilized at Waterford High School:

A to A-	Superior
B+ to B-	Above Average
C+ to C-	Average
D+ to D-	Below Average
F	Failure
AUD	Audit
S	Satisfactory
WP	Withdrew Passing
WF	Withdrew Failing
WD	Withdrew
E	Credit For Class Due To Effort Shown
MED	Medical, No Credit Given
INC	Incomplete (student has two weeks to make up work or the grade is changed to an "F").

Most courses at Waterford High School are graded on a four (4) point scale as such:

A	4.00	C	2.00
A-	3.67	C-	1.67
B+	3.33	D+	1.33
B	3.00	D	1.00
B-	2.67	D-	.67
C+	2.33	F	0.00

## **Advanced Placement Courses are graded on a five point (5.0) scale.**

## Audits

Audits are available to students on a limited basis. Students who want to take a class for pure enrichment may request an audit and must understand no grade and no credit is earned. Freshman, sophomores, and juniors must carry a minimum course load of seven classes in addition to the audited class. Seniors must carry a minimum of six classes in addition to the audited class. Audits must be declared within the first two weeks of class, and cannot not be switched into a "for credit class/grade" once the audit is declared. Audit forms must be completed by students within the first 2 weeks of the semester and are available from your School Counselor.

## Honor Roll and Class Rank

Honor roll and class rank are determined by grade point average (GPA). The minimum course load students may carry to gain honor roll recognition is three credits each semester.

To qualify for first honor roll a student must have a GPA above 3.50. To qualify for second honor roll, a student must have a GPA between 3.49 to 3.00. Students with incompletes will not be considered for honor roll recognition until the final grade is issued. Honor rolls are computed at the end of each quarter and semester. Class rank is calculated once a semester after all grades are completed.

## Dual Enrollment Classes

Students taking classes at Waterford High School for dual enrollment (i.e. classes that will result in WUHS and College credit) should be aware these classes may have additional policies. Dual Enrollment classes may be subject to different grading scales, including passing marks. Students may also be required to reimburse WUHS tuition for a class if the student does not earn a passing mark in the course (in accordance with the College's grading policy). WUHS is proud to offer these opportunities to our students. Please contact your school counselor if you have questions regarding specific classes.

## Advanced Standing Classes

Waterford Union High School and Gateway Technical College partner to offer advanced standing credit opportunities to students who attend Gateway Technical College after graduation. Students wishing to learn more about advanced standing opportunities at WUHS should see their school counselor.

## Students Preparing for Four Year College

Students planning to attend a four year college need to be aware of entrance requirements. School counselors are available to assist students in preparing for four year college and should be consulted as needed. A few general guidelines are:

1. The University of Wisconsin system has very specific requirements for admissions, some of which may change from year to year without notice. Up-to-date information on admission standards for each U.W. system university can be determined by consulting a school counselor or by checking college web sites.

Some general guidelines:

\* class rank should be in the top 10% to 50% of the high school graduating class. Each college has specific recommendations in regard to class rank, which may change annually.

\* college bound students need to take the ACT test. Some colleges have specific ACT Test requirements for admissions.

\* students must complete at least the following minimum high school course requirements. Many universities expect applicants to exceed these minimums.

- 17 academic credits are required in which the following are required specifically:
  - 4 credits of English
  - 3 credits of math including algebra 1, geometry, and one credit of an additional math class that requires geometry as a prerequisite (most universities specify that credit of math be Algebra 2 with trig or Algebra 2).
  - 3 credits of science
  - 3 credits of social studies
  - 4 additional credits in above areas, World Language and other areas specified by the individual college.

Some University of Wisconsin colleges require a minimum of two credits of the same World Language or may have other specific requirements in certain discipline area.

2. State private colleges and universities and out-of-state colleges and universities may have different requirements than those listed above for the University of Wisconsin System.

## Students Preparing for Technical College

Technical colleges have an open admission policy which means that they will accept WUHS students into a technical diploma or associate degree program if they have a high school diploma. Some programs, however, require specific high school coursework and additional testing. In many program areas a test is administered to determine if the applicant is adequately prepared to start training immediately or if additional remedial classes are in order. To prepare for technical college, it is recommended that students try to follow the following course guidelines as much as possible:

- 4 credits of English
- 3-4 credits of math
- 3-4 credits of science
- 3-4 credits of social studies

Remainder of schedule should be filled with classes related to other graduation requirements and classes related to the students vocational area of interest.

Most Wisconsin Technical Colleges require entrance testing for their programs. ACT scores can be used at most schools to take the place of these required entrance tests. It is in a student's best interest to do as well as possible on their ACT test in junior year to ensure proper placement at the Technical School level. Waterford High School also offers many Dual Enrollment courses with Gateway Technical College for college credit. These courses are marked with a Gateway symbol in the course description portion of this book.

### **Notice of Nondiscrimination Policy**

The Waterford Union High School Board of Education is committed to providing an equal educational opportunity for all students in the District.

The Board does not discriminate on the basis of race, color, religion, national origin, ancestry, creed, pregnancy, marital status, parental status, sexual orientation, sex (including transgender status, change of sex or gender identity), or physical, mental, emotional or learning disabilities ("Protected Classes") in any of its student programs and activities.

The Board is also committed to equal employment opportunity in its employment policies and practices as they relate to students. The Board's policies pertaining to employment practices can be found in Policy 1422, Policy 3122, and Policy 4122 – Nondiscrimination and Equal Employment Opportunity.

Any inquiries or concerns related to non-discrimination should be addressed to appropriate school district personnel. Should there be rounds for a complaint, a written statement of the complaint shall be prepared by the complainant, and directed to the appropriate individual or position holder listed below.

Discrimination complaint forms can also be obtained from the offices listed below as well as from the office of the superintendent, 507 West Main Street, Waterford, WI 53185.

### **Reporting Procedures**

Students, parents and all other members of the School District community are encouraged to promptly report suspected violations of this policy to a teacher or administrator. Any teacher or administrator who receives such a complaint shall file it with the District's Compliance Officer at his/her first opportunity.

Students who believe they have been denied equal access to District educational opportunities, in a manner inconsistent with this policy may initiate a complaint and the investigation process that is set forth below. Initiating a complaint will not adversely affect the complaining individual's participation in educational or extra-curricular programs unless the complaining individual makes the complaint maliciously or with knowledge that it is false.

### **Compliance Officer(s)**

The Board designates the following individual(s) to serve as the District's 504 CO(s)/ADA Coordinator(s) (hereinafter referred to as the "COs").

Daniel F. Foster, Principal  
(262) 534-3189, Ext. 7504  
100 Field Drive, Waterford, WI 53185  
Email: dfoster@waterforduhs.k12.wi.us

Tami L. Trulock, Associate Principal  
(262) 534-3189, Ext. 7505  
100 Field Drive, Waterford, WI 53185  
Email: ttrulock@waterforduhs.k12.wi.us

118.13 Wis. Stats.

## **ADVANCED PLACEMENT COURSES**

Launched in 1955 as a joint venture between universities and high schools to help make the high school experience more meaningful for students who were preparing for college-level work, the Advanced Placement Program has since expanded to provide more than 1.6 million U.S. high school students annually with access to college-level courses. The rigor and quality found in AP's college-level assessment has been used by many educators to raise standards throughout their schools, while the skills students acquire in AP courses enable them to stand out in college admissions, earn college credit and most important, develop the habits of mind and content knowledge that position them to pursue even deeper, richer studies at the university. Waterford Union High School offers the following AP courses:

COURSE	DEPARTMENT	CREDIT AWARDED	# OF TERMS	PAGE #
AP Biology	Science	1.0 on 5.0 scale	2	70
AP Calculus AB	Math	1.0 on 5.0 scale	2	64
AP Calculus BC	Math	1.0 on 5.0 scale	2	64
AP Chemistry	Science	1.0 on 5.0 scale	2	71
AP Economics	Social Studies	1.0 on 5.0 scale	2	76
AP English Literature	English	1.0 on 5.0 scale	2	59
AP Environmental Science	Science	1.0 on 5.0 scale	2	72
AP Government	Social Studies	1.0 on 5.0 scale	2	74
AP Music Theory	Music	1.0 on 5.0 scale	2	67
AP Physics 1	Science	1.0 on 5.0 scale	2	72
AP Psychology	Social Studies	1.0 on 5.0 scale	2	75
AP Spanish	World Language	1.0 on 5.0 scale	2	84
AP Statistics	Math	1.0 on 5.0 scale	2	64
AP Studio Art	Art	1.0 on 5.0 scale	2	49
AP US History	Social Studies	1.0 on 5.0 scale	2	75
AP World History	Social Studies	1.0 on 5.0 scale	2	74

## **EVEN/ODD YEAR COURSES**

If you are interested in courses offered on even or odd years, please plan your course selections accordingly based upon when these courses are offered.

<b>EVEN YEAR 2018-19</b>	
COURSE	DEPARTMENT
AP Music Theory	Music
Housing & Interior Design	Family and Consumer Science
Theatrical Costume & Makeup	English

<b>ODD YEAR 2017-2018</b>	
COURSE	DEPARTMENT
Apparel & Construction 2	Family and Consumer Science
Intro to Music Theory	Music
Technical Theater	English

# AGRICULTURE

**Some Agriculture classes may count for a student's 3rd year of math or science requirements (as denoted in the course description). Please see page 4 of the course description book for more information.**

## AGR 100 AGRISCIENCE

Agriscience is the flagship course of the Agricultural Sciences Department and is the gateway to all other courses in the program. Agriscience begins with the scientific method with experiments in the greenhouse. Students explore the carbon cycle and the growth of plants while designing experiments on greenhouse plants. Students then investigate cell biology regularly in the laboratory, learning how different cellular processes enable the productivity of the plants and animals we depend upon. During second semester, students investigate genetics and DNA, concluding with genetic engineering, stem cells, and cloning. Students work closely with plants and animals to discover their inner mechanisms through inquiry and independent learning, enabling students to succeed in a wide range of courses and on the ACT Exam. Agriscience not only prepares students to understand rigorous concepts in science, agriculture, medicine, mathematics, ecology, and engineering, but also prepares them for college and for careers after high school.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 9-12
- PREREQUISITES: None

## AGR 101

### PERSONAL PREPARATION FOR CAREERS

In this course, students plan and prepare for their future careers by taking part in extracurricular activities through the National FFA Organization. At the start of the class, students complete a proficiency application detailing their experiences related to a specific career. Next, students bolster their professional communication skills by competing in the FFA Speaking Contests. Students will then take part in a Career Development Event contest through the FFA, gain personal experience in environmental protection, and then complete a research experi-

ment related to their intended career field, concluding with a final project summarizing their career intentions and educational path. Students operate on an independent-study basis, coming to the Agricultural Sciences department during a free period to work individually in each area. To receive course credit, students need to be registered prior to the start of the spring semester and complete all required activities or an equivalent.

CREDIT: .5 (One semester – Spring only)

COURSE STATUS: Elective

GRADE LEVEL: 9-12

PREREQUISITES: Agriscience (may be taken concurrently in the same year)

## AGR 110

### NATURAL RESOURCES - ES\*

Do you enjoy the outdoors? Do you have a passion for the environment? In this class, we learn what we can do to protect and enjoy the natural world while maximizing biodiversity and species richness. Natural Resources is an environmental science course where students learn ecology by regularly working outside in the environment. From assessing the biodiversity of the campus Environmental Center, to performing water chemistry tests on the Fox River, to analyzing climate data from the ice of Antarctica and Lake Mendota, students in Natural Resources perform work and collect information that reflects the threats posed to ecosystems all around the world. Students will explore the main causes of extinction while investigating methods to protect the biodiversity of Earth's fragile ecosystems and ensure that we can continue to enjoy outdoor recreation for generations to come. This is an ideal course for anyone with an interest in the outdoors or the environment.

\*ES = Science Equivalent Course (this course counts for science credit)

- CREDIT: .5 (One semester)
- COURSE STATUS: Elective
- GRADE LEVEL: 9 - 12
- PREREQUISITES: None

## AGR 210

### VETERINARY PET CARE

This is the only class at school with cats and dogs in the classroom! Learn how to keep your pets happy, healthy, and safe with actual classroom animals. You will learn how to perform lifesaving procedures such as CPR and artificial respiration, make diagnoses, and analyze diets and nutrition. You will learn how to bandage an abrasion, stitch a wound, and address any major medical emergency. You will understand

what it takes to effectively care for dogs and cats in any situation. This is an ideal class for anyone who loves caring for animals or who wants to pursue a career in a medical field. This class involves opportunities to work with live dogs and cats as well as various other species, and often involves organ dissection.

- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: Agriscience or Honors Biology

## AGR 220

### LARGE ANIMAL VETERINARY SCIENCE

Large Animal Veterinary Science is your chance to make decisions like a doctor, nurse, or veterinarian while you're still in high school. Students in this course begin with an exploration of health and diseases, analyzing pathogens and learning how to reduce the prevalence of disease through the administration of vaccines, antibiotics, and other health measures. Students then explore the reproductive system of mammals, learning how to enable reproduction through management and hormone therapies while preventing reproductive disease and disorders. Next, students explore mammalian nutrition, connecting the components of the diet of an animal to its health and wellbeing. Students conclude the course by assessing animal welfare, facility design, and finish by conducting physical exams on actual cattle in order to determine the appropriate diagnosis for their condition. Students work closely with living animals to gain real-world skills and dissect organs in order to better understand animal systems from the inside-out. In this class, you will be treated like a veterinary student and you will learn to diagnose and treat actual diseases and disorders. This is an ideal class for anyone who wants a career in a medical, science, or agricultural field. This class can count for college credit for students attending UW-Madison in the fall if they pass the placement exam on campus for Animal Science 101 (see instructor for more details).

- CREDIT: .5 (One semester)
- COURSE STATUS: Elective
- GRADE LEVEL: 10 -12
- PREREQUISITES: Agriscience, or consent of instructor

**\*\*THIS CLASS OFFERED IN 2018-19\*\***

## AGR 230

### HOME GARDENING & HORTICULTURE-ES\*

This class is all about how to successfully grow your own backyard garden. Students begin by exploring soil science and plant anatomy, learning how a seed becomes a full grown plant while exploring how to maximize plant performance

in a garden. As winter turns to spring, students begin working outside to create gardens, plant seeds, and cultivate the growth of delicious vegetables and colorful flowers. Students will gain useful horticultural skills while learning in-depth lessons about botany and plant physiology. At the end of this course, students gain the ability to grow their own food anytime in a backyard garden.\*ES = Science Equivalent Course (this course counts for science credit)

- CREDIT: .5 (One semester)
- COURSE STATUS: Elective
- GRADE LEVEL: 10 -12
- PREREQUISITES: Agriscience or consent of instructor

**\*\*THIS CLASS OFFERED IN 2017-18\*\***

## AGR 240

### GREENHOUSE MANAGEMENT

Students in this course spend most of their time in the greenhouse, learning and applying real-world skills needed to grow flowers and vegetables as well as diagnose pathogens, prevent disease, and maximize horticultural performance. Students leave the course able to manage a greenhouse, maximize plant growth, and obtain careers in a horticultural field.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: Agriscience, or consent of the instructor

## AGR 250

### LANDSCAPE DESIGN

Well-designed landscapes raise property values, improve the beauty of the home, and protect the environment. In this class, you'll learn the principles of design on scale model homes. You'll master hand-drawn landscape plans and drafting before moving on to real-world projects. You'll be given lots of freedom to design projects in teams on and off the school grounds. You will spend much of the semester in the warm spring sunshine turning your designs into real projects in order to create beautiful, well-managed areas.

- CREDIT: .5 (One semester-Spring Only)
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: Agriscience, or consent of the instructor

## AGR 310

### BIOTECHNOLOGY & BIOENERGY

Developed in cooperation with federal researchers and university laboratories, this course teaches students how to develop advanced next-generation fuels including biodiesel, ethanol,

and biogas. Students work weekly in the agricultural laboratory to develop more efficient and sustainable fuels while exploring their impact on engines and on the environment. Students learn first-rate laboratory techniques and engineering skills while creating the actual fuels that they are studying. Later in the semester, students explore genetic engineering with living organisms, exploring how microbes can be engineered to make sustainable fuels as well as antibiotics, cheese, yogurt, root beer, and other products.

- CREDIT: .5 (One semester)
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITE: Agriscience or Consent of Instructor

### AGR 320 ADVANCED LEADERSHIP

Do you ever wish you could be more productive, successful, and admired? Do you want to become a more successful leader, a better person, and a stronger student? Advanced Leadership is a course based on the best seller, The Seven Habits of Highly Effective People. Students discover their personality traits, reflect on their relationships with others, and perfect their ability to prioritize and accomplish goals. Students in this course plan their own field trip and design their own final exam. In this course, the students help make the decisions and by May are in charge of running the class.

- CREDIT: .5 (Spring Only)
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITE: None

### AGR 330 SUMMER RESEARCH SCHOLARS

The Summer Research Scholars course provides an opportunity for students to develop, conduct, evaluate, and present their own scientific research projects for course credit. College-bound students in grades 10-11 propose summer research projects at the start of the spring semester. These projects should be a long-term investigation or multiple smaller related investigations that would occur over the months of June, July, and August. The projects should be based on original ideas and hypotheses about unanswered scientific questions in agriculture, ecology, engineering, or life science. Students accepted for a Summer Research Scholars project meet weekly in summer to plan their work, discuss their progress, report their findings, and evaluate their results. Participating students are responsible for submitting a progress report midway through their projects. At the conclu-

sion of the project, students deliver a multimedia presentation of their results and findings.  
CREDIT: .5 (Summer Only)  
COURSE STATUS: Elective  
GRADE LEVEL: 11-12 (for following fall; must be in grades 10 or 11 when applying in the spring).

PREREQUISITE: Agriscience, Honors Biology and Consent of Instructor

### AGR 410 AGRIBUSINESS & MARKETING

Students in Agribusiness and Marketing learn how to effectively run any kind of business through an in-depth investigation of economics, marketing, and business management. Students first learn how and why people make the decisions that they do, followed by exploring how economics works at a national and international level. Students then move into marketing, investigating how to persuade others to buy their products and services. The class concludes with business management, covering not just how to run a business but also how to pay taxes and invest in a secure financial future. Students not only learn how to succeed in business but also how to succeed in life.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITE: None

### AGR 420 AGRIBUSINESS COOP

Students in Ag Coop are released for 1-2 periods per day to work at an agricultural, environmental, or scientific business. Students learn how to succeed in the workplace and in their future careers by taking part in actual work experience during the class day. Students are evaluated by their employer and the instructor to determine the readiness to succeed in the workplace. Students should speak with the instructor before registering for this course to ensure that they are eligible.

- CREDIT: .5 - 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 12
- PREREQUISITES: Prior agricultural courses and consent of instructor



### ART 101 STUDIO ART 360

If you've ever felt like "I can't make art," Studio Art 360 gives you hands on proof that you CAN! Studio Art 360 explores much of what our

other studio art classes have to offer. You will experiment with sculpture, drawing, ceramics, painting, photography, the digital arts, and print making (to mention a few) as you develop a strong foundation that can be carried forward as you pursue your visual art experience. You'll work in a wide range of materials like drawing pencils, colored pencils, clay, metals, watercolors, and acrylic paints. This introductory class is one where you will find artistic success and perhaps a new passion for the visual arts, regardless of what you may think of your current artistic skills. Visit [goo.gl/FZP7LP](http://goo.gl/FZP7LP) to learn more about STUDIO ART 360!

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 9-12
- PREREQUISITES: None
- COST: \$25 art fee



### ART 120 DRAWING

If you love to get your hands into the work - Drawing is for you. As a drawing artist, you'll start with your current skills and quickly grow visually as you work through still lifes, portraits, graffiti, abstractions, landscapes (and briefly touch on the figure). You'll experiment with a large variety of drawing materials to further develop your drawing skills like pencils, soft and oil pastels, ink, paint, and charcoals. You'll work hard to add these tools to be essential parts of your art toolbox. Developing a stronger understanding of composition and communication through the visual experience is just some of what you'll take away as you put these to use in your artwork and develop your own visual voice. Visit [goo.gl/5iKgcL](http://goo.gl/5iKgcL) to learn more about DRAWING!

- CREDIT: .5 (GATEWAY CREDIT, if approved)
- COURSE STATUS: Elective
- GRADE LEVEL: 9-12
- PREREQUISITES: None
- COST: \$25 art fee



### ART 130 CERAMICS

Ceramics is a course that introduces students to techniques such as pinch, coil, and slab, should be mastered by the end of the semester. All students will experience using the electric wheels each quarter when making pottery. Each student

will glaze their ceramic projects and learn to fire the electric kiln. (Semester 1 Only)

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 9-12
- PREREQUISITES: None
- COST: \$25 art fee

### ART 141 MIXED MEDIA ART

Mixed Media explores mixing traditional art media such as drawing, painting and sculpture together in a contemporary way. Students will explore multicultural art, digital screen printing, cardboard sculpture, textile embellishment, and relief sculptures with found objects. Students will learn to creatively recycle/repurpose materials and make multiples of each object they create.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 9-12
- PREREQUISITES: None
- COST: \$25 art fee

### ART 150 SCULPTURE

Sculpture is a 3-dimensional art course. Students will construct bas relief sculptures & sculptures in the round. Sculptures will be created by transforming personal sketches into 3-D forms. These sculptures will be constructed using wood, clay, wire, plaster, cardboard, and soap stone. (Semester 1 Only)

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE: 9-12
- PREREQUISITES: None
- COST: \$25 art

### ART 210 DIGITAL PHOTOGRAPHY

This course will introduce you to the art of digital photography; shooting with DSLR and compositing in Adobe Photoshop. It was designed to provide the student with an introduction to the art, mechanics, applications, history, and importance of digital photographic media.

- CREDIT: .75
- COURSE STATUS: Optional Dual Enrollment
- GRADE LEVEL: 10 - 12
- PREREQUISITES: None
- COST: \$30 art fee plus cost of photo paper and a SD card





### ART 215

#### ADVANCED DIGITAL PHOTOGRAPHY

This course will further your skills in digital photographic image making and printing. It is designed to provide the student with opportunities to learn more about the Digital SLR Camera, take Photoshop to a new level of mastery, explore RAW files in photography and create special effects with new applications in Photoshop. We will utilize the basics of good photography practices for application to commercial photography and graphic design. **(A digital camera is not required for this course; however, student must purchase a memory card.)**

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: Digital Photography
- COST: \$30 art fee

### ART 220 ART METALS

Art metals is an art course designed to introduce the basic techniques in constructing jewelry using precious metal. Students will have the opportunity to make jewelry by casting, fabricating, etching or glass fusing. Various processes will be explored in constructing rings, pendants, key chains, and neck pieces. Skills such as soldering, filing, cutting, sanding and polishing will be mastered by the end of the semester. Good drawing skills are an asset.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: None
- COST: \$25 art fee and cost of metal

### ART 225 ADVANCED DRAWING

If you thought Drawing was fun, you're just taking your first steps in building your artistic skills. As you pursue Advanced Drawing you'll continue to develop your own artistic voice, observational skills, and push your abilities to new heights in the visual arts. As you choose the materials to experiment with you'll develop your skills in pencil and pen and ink, charcoal and pastels, water soluble crayons and paints, as well as other materials that you come upon. You'll be challenged with large-scale works while making personal choices about how to solve the visual challenges set in front of you. Portraiture, figure drawing (from the clothed model), still lifes, abstractions, and landscapes are among the many approaches to art that you'll explore. Your style, artistic voice, and creative problem solving skills will explode as you

continue to develop your own personal artistic works. Visit [goo.gl/ETFhNM](http://goo.gl/ETFhNM) to learn more that **ADVANCED DRAWING!**

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITE: Drawing
- COST: \$25



### ART 231 COMPUTER ILLUSTRATION

Students will use a variety of illustration and graphic design software for logo design, screen printing, illustration, technical drawing, and page layout. Students will also incorporate drawing skills on the computer with a drawing tablet and scanning methods into their projects. Composition, digital color specification and current graphic design trends will be emphasized.

- CREDIT: .5
- COURSE STATUS: Optional Dual Enrollment
- GRADE LEVEL: 10-12
- PREREQUISITES: None
- COST: \$25 art fee

### ART 235 ADVANCED CERAMICS

Advanced ceramics will provide the potter with more opportunities to study clay in depth. Advance techniques in hand building & wheel throwing will be explored. Horsehair firing will be taught. At the completion of this course, students should have a specialized area of development in ceramics. **(Semester 1 Only)**

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: Ceramics
- COST: \$25 art fee

### ART 240 STAINED GLASS

Stained glass is an art course which explores various techniques involved with glass art. Students will learn the techniques involved with etching and copper foiling. They will master cutting glass, grinding and fitting glass, application of copper foil, soldering, and professional finishing procedures. By the end of the semester, students will be designing patterns for constructing glass projects. Good drawing skills are an asset. **(Semester 2 Only)**

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 9-12
- PREREQUISITES: None
- COST: \$25 art fee plus cost of stained glass

### ART 251 PAINTING

If you're interested in getting your hands into the plastic media of paints, then Painting is the place for you. In Painting you'll explore art making through watercolor, acrylic, oil, and even encaustic (melted wax and pigment) paints. As you explore a variety of media, you'll have the chance to create many artworks that will open the doors to successful and important works of art. Using all you've learned from your past art experiences, you'll create landscapes, still lifes, portraits, and abstract work that will amaze your audience. Looking at contemporary ideas of your own personal experiences, you'll demonstrate how you can use art to help express ideas that other courses can't offer. Skilled in the finer details of painting (or not yet) painting offers a worry free place to explore, investigate, experiment, and discover all that the plastic art of painting has to offer.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: None
- COST: \$25 art fee



### ART 261 ADVANCED PAINTING

Are you looking for the next step in your painting experience? If so, then Advanced Painting is for you. Using your desire to push and pull the medium of your choice further (and based on past experiences), you will continue to explore all that the plastic (or wax) mediums have to offer. Set your personal focus on experimentation and testing your limits of watercolors, acrylics, oils, and encaustics as well as challenging your ideas of mixed media. Advanced Painting gives you the opportunity to continue to further develop your artistic voice and let your personal ideas, concerns, and passions guide you. Advanced Painting allows you to push your experiences in the visual arts to new heights.

**Visit [goo.gl/GTLOLM](http://goo.gl/GTLOLM) to learn more about ADVANCED PAINTING!**

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: Painting
- COST: \$25 art fee



### ART 315 AP STUDIO ART

If you find yourself approaching the pinnacle of your artistic mountain (or you're on the path to it) and you want to commit yourself further to that journey, AP Studio Art is for you. The AP

Studio Art class is based on the understanding that college-level art experiences can be accomplished at the high school in a Drawing, 2D or 3-D design portfolio. In AP Studio Art, you are encouraged to push your creativity and investigation of the formal and conceptual issues and techniques artists face to new levels. AP Studio Art emphasizes the ideas of making art as an ongoing process that involves informed and critical decision making and execution. As an AP artist, you will become an independent thinker who will contribute inventively and critically to your culture through your art. In AP Studio Art you will address three major concerns: 1) a sense of quality in your work; 2) your concentration on a particular visual interest or problem; and 3) the artistic need for breadth of experience in the formal, technical, and expressive means of your work. Visit [www.collegeboard.com](http://www.collegeboard.com) or [goo.gl/UIUrcC](http://goo.gl/UIUrcC) to learn more about AP STUDIO ART!

- CREDIT: 1.00
- COURSE STATUS: Elective
- GRADE: 11-12
- PREREQUISITES: Taken as many 2D art courses as possible-Must have Jr. Status AND consent of the Instructor (Mr. Korb) when signing up for this course. A year long commitment is required for AP Studio Art. Can be taken in multiple years.

- COST: \$25 Art fee per semester



### ART 345 ADVANCED STAINED GLASS

Advanced Stained Glass is an art course that deals with in-depth stained glass methods. In Stained Glass, students worked primarily with the copper foil technique. Students in this class will be working with the lead technique creating panels similar to the Victorian Era. They will be working in copper foil creating advanced 3-dimensional forms such as boxes, lamp shades, or clocks. Students will also have the opportunity to make mosaic garden stones. Good drawing skills are a definite asset because students will be designing all their patterns for projects. **(Semester 2 Only)**

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: Stain Glass
- COST: \$25 fee plus cost of stained glass

**ART 410  
INDIVIDUALIZED ART**

Individualized Art is a course offered for a small number of talented students in art who want to pursue more knowledge in a specific area of art. This is a course for individuals who have successfully completed a large number of art courses in the Waterford High School curriculum. The student and instructor will write the course outline together. This class will allow students opportunities to create art and develop their own art style. Permission must be obtained from the instructor to take this course.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE: 12
- PREREQUISITES: Permission of Instructor
- COST: \$25 art fee plus cost of materials used excessively.

**BUSINESS &  
INFORMATION TECHNOLOGY**

**BUS 100  
INFORMATION & TECHNOLOGY  
LITERACY**

Accelerated course: This course is designed for the self-guided learner who can easily grasp new technology and information related concepts and effectively demonstrate understanding by producing high-quality projects in a fast-paced environment. Freshmen will gain computer and information skills necessary to excel at the high school level. Students will learn the resources available at Waterford High School. They will also learn how to work with the computer equipment and information available to them at Waterford High School.

Major concepts will include word processing skills, spreadsheet skills, Internet skills, presentation skills, computer peripheral use, library resource orientation, information access (print and electronic), basic research techniques and basic information evaluation skills. Finally, they will be introduced to the personnel at the high school who are available to them for assistance throughout their high school careers.

- CREDITS: .25  
COURSE STATUS: Course 100 or 109 is required  
GRADE LEVEL: 9  
PREREQUISITES: None

**BUS 109  
INFORMATION & TECHNOLOGY  
LITERACY**

This course will cover the same concepts as the Business & Information Technology 100 – Infor-

mation & Technology Literacy except that this course will be run over a semester. The benefit of this course is that students will be offered a more in-depth study of course concepts and will have more in-class time to work on and complete quality projects. This course will give freshmen computer and information skills necessary to excel at the high school level. Students will learn the resources available at Waterford High School. They will also learn how to work with the computer equipment and information available to them at Waterford High School. Major concepts will include basic processing skills, spreadsheet skills, Internet skills, presentation skills, computer peripheral use, library resource orientation, information access (print and electronic), basic research techniques and basic information evaluation skills. Finally, they will be introduced to the personnel at the high school who are available to them for assistance throughout their high school careers.

- CREDITS: .50  
COURSE STATUS: Course 100 or 109 is required  
GRADE LEVEL: 9  
PREREQUISITES: None



**BUS 110  
INTRODUCTION TO BUSINESS**

This course helps students develop an understanding of how businesses function in today's society. The free enterprise system, business and marketing terminology, and business organization are the featured topics. In addition, students explore a variety of entry level positions in the business world through a business simulation. This simulation will be conducted during the second quarter.

- CREDIT: .75
- COURSE STATUS: Optional Dual Enrollment
- GRADE LEVEL: 9-11
- PREREQUISITES: None

**BUS 120  
PERSONAL FINANCIAL PLANNING**

This course will help students gain knowledge of banking services, how to use credit wisely, plan savings and investments, select appropriate insurance coverage, and develop techniques for personal and business financial management.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 9-11
- PREREQUISITES: None

**BUS 135  
COMPUTER APPLICATIONS FOR BUSINESS**

Are you interested in learning computer skills to become a more productive student? Do you seek the technical expertise that can open doors to potential job opportunities and higher wages? If you answered yes to any of these questions, Computer Applications for Business is the course for you! This course enables students to learn additional Microsoft Word, Excel, and Power Point features while creating various business documents, spreadsheets, and presentations. Computer Applications for Business also prepares students for the optional Microsoft Office Specialist (MOS) certifications that are globally recognized for demonstrating Microsoft Office skills and meeting the workplace demand for qualified employees.

- CREDIT: .5 (Optional Dual Enrollment)
- COURSE STATUS: Elective
- GRADE: 9-12
- PREREQUISITES: Information Processing recommended

**BUS 210  
BUSINESS LAW**

Business law is a course that covers basic laws and material that is practical and necessary for everyone in everyday living. Rights and responsibilities of minors and adults are compared. During the semester, it reviews the effect that law has on society. Guest speakers are used to cover specific topics related to the study.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: None

**BUS 220  
DIGITAL MEDIA**

This course is designed for students with an interest in computer multimedia. Students will work with the latest technologies available to them to enhance their skills. The goal of this course is to increase student knowledge of the various technology tools and help the students recognize how and when these tools can be applied in a variety of situations. Students will learn computerized presentation skills utilizing editing programs to create multimedia presentations.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: Information and Technology Literacy

**BUS 230  
COMPUTER ANIMATION**

Students will work with various animation and presentation software programs to learn principles and techniques for designing animated Web pages and business presentation. Techniques covered include page layout, use of color and text, work with multiple image types, creating sophisticated animation and transition effects, and building interactive Web-based presentations. A portion of the course will show you how to integrate sound and video and work with character animation, digital storyboards and digital composition.

- CREDIT: .5  
COURSE STATUS: Elective  
GRADE LEVEL: 10-12  
PREREQUISITES: Information and Technology Literacy

**BUS 240  
COMPUTER SCIENCE 1 -  
VISUAL BASIC**

This course is designed to help students gain some understanding of the nature and uses of a computer. It will acquaint students with problem solving aspects of the computer. The course will provide students with the opportunity for developing programming skills while working with the Microsoft Visual Basic language.

- CREDIT: .5 (Gateway Credit if approved)
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: Algebra 1 or Elementary Algebra II

**BUS 242  
COMPUTER SCIENCE 2**

This course will provide students with the opportunity for developing advanced programming skills while working with the current AP Computer Science language. This course will lay the foundation for the AP Computer Science curriculum. It is not an AP level course. Students will gain further knowledge of the nature and uses of computers.

- CREDIT: .5 (Gateway Credit if approved)
- COURSE STATUS: Elective
- GRADE LEVEL: 10 - 12
- PREREQUISITES: Computer Science 1 Visual Basic

**BUS 250  
WEB DESIGN 1**

Students will learn to create web pages and web sites using HTML and CSS. They will learn how to add links and images. They will use tables and layers for better web page design. This

course will also introduce the use of frames to add versatility to their web site. This course will provide students with the basic skill necessary to both create and manage a simple web site.

- CREDIT: .5 (Gateway Credit if you also take Intro to Networking)
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: None

### BUS 251 MOBILE APP DEVELOPMENT

This project-based course will engage students as they learn to produce mobile applications used in smart phones, tablets, and other personal electronics. The students will use software to design, illustrate, and edit graphics that will be used in the production of effective and practical mobile applications. The intent of this course is to provide students with the design knowledge to create these rapidly growing technology products. The project-based course will engage students in one of the hottest trends in business. Students will be able to design and develop their own mobile applications for use on mobile devices.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: None

### BUS 252 VIDEO GAME DEVELOPMENT

Video Game Development provides students with an understanding of the technological and creative aspects of video game design. This curriculum is the complete guide to immersion in the field, from beginning each game build project through completion, integration, and marketing.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: None



### BUS 253 INTRO TO NETWORKING

This course will introduce students to networking. Topics will include the internet, OSI model, wireless, security, logical and physical topologies and hacking. Students will compare different networking models, such as OSI and TCP/IP, use various internet and network protocols, and

create a simple network. Individuals will learn real world skills related to employment.

CREDIT: .5 (Gateway Credit if approved)  
COURSE STATUS: Elective  
GRADE LEVEL: 10-12  
PREREQUISITES: Web Design 1



### BUS 260 ACCOUNTING 1

Accounting 1 enables students to learn the basics of accounting for personal use, beginning office positions, or as a foundation for the future study of accounting. Students will explore the accounting cycle, checking accounts, payroll, and computerized accounting.

- CREDIT: 1.0
- COURSE STATUS: Optional Dual Enrollment
- GRADE LEVEL: 10-12
- PREREQUISITES: None

### BUS 310 MARKETING

Students will learn about business management and various areas of marketing including merchandising, buying, selling, and promotion. Emphasis will be placed on developing the four P's of marketing mix: product, price, place and promotion for many different products and services. Students will participate through discussion, group projects, and field trips.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE: 11-12
- PREREQUISITES: Intro to Business recommended

### BUS 320 IT ESSENTIALS

IT Essentials is an introductory course that presents a foundation toward the pursuit of an IT career. IT Essentials focuses on the relationship between hardware and system software. The course topics include PC's, peripherals, networking, security, troubleshooting, and communication skills. Students develop problem solving, critical thinking, collaboration, and communication skills, to help them succeed in the 21st century workplace.

- CREDIT: .5
- COURSE STATUS: Elective (Optional Dual Enrollment)
- GRADE LEVEL: 11-12
- PREREQUISITES: Information and Technology Literacy

### BUS 360 ACCOUNTING 2

For a more in depth study of accounting theory and principles, Accounting II is for you. Emphasis will be placed on analysis of accounting records, accounting for partnerships and corporations, depreciation, taxes, cost accounting, payroll and budgeting. This class is recommended for students who are looking for entry level office positions or plan to major in business in college.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 11 - 12
- PREREQUISITES: Successful completion of Accounting 1

### WRK 400 WORKPLACE LITERACY

The Workplace Literacy course was designed for students interested in getting high school credit for a school supervised work experience. There are two parts to this course, a full year, one credit class and an out-of-school work experience. Students that register for this class must then fill out an application and interview for acceptance into the course. Schedules will be adjusted for those who do not qualify. \*Notification of acceptance or nonacceptance will be completed prior to the fall semester. \*\*Please plan for two alternate courses when registering.

- CREDIT: 0.5 in class per semester, 0.5 on the job per semester
- COURSE STATUS: Elective
- GRADE LEVEL: 12
- PREREQUISITES: Seniors who meet the following criteria:
  - \*Seniors only
  - \*Good standing (with credit toward graduation and/or a 1.67 gpa)
  - \*Minimum 2 vocational credits
  - \*Recommendation by 2 teachers
  - \*Parent/Guardian consent

## DRIVER EDUCATION

### DRV 201 Driver Education Semester 1 DRV 202

### Driver Education Semester 2

This course meets everyday for one semester. The classroom will consist of 72 hours of instruction including simulation. Students who

failed to acquire a minimum of 5 credits during their freshman year in high school will not be eligible to take this course. It is advised that a student have a strong commitment to learning and actively seek out information in order to do well in this class and to be a safe motorist. Safe driving techniques take priority over the fact of attaining a driver's license. The current price for behind the wheel is \$280. This could increase slightly in the future. Behind-the-Wheel is scheduled separately and may or may not take place during the same semester as the class, depending on the age of the student. **For 1st semester classes, the student must be age 15 by July 20, 2017.**

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 10
- PREREQUISITES: This class is offered to any sophomore, junior or senior. Freshmen might be able to enroll (second semester) only if they:
  1. Earn the required credits - 3.0 by end of first semester
  2. Meet the age requirement - Student must meet age requirement of being 15 by December 10, 2017.
  3. ONLY if there are openings in the class. The oldest freshmen will be considered first. Guidelines from the Department of Motor Vehicles will also be followed regarding student enrollment.

## ENGLISH

### ENG 100 ENGLISH 9

English 9 100 is a full year freshman course designed to teach students basic skills in using the English language, in writing compositions, and in interpreting the various forms of literature. Language study centers around grammar, usage, and vocabulary. Literary study focuses on the short story, the novel, drama, and poetry.

- CREDIT: 1.0
- COURSE STATUS: Required
- GRADE LEVEL: 9
- PREREQUISITES: Placement based on grades in English and language arts in eighth grade and scores on the 8th grade standardized testing. Final placement will be determined by the registration committee.

**ENG 105  
HONORS ENGLISH 9**

Honors English 9 is a full year freshman course that emphasizes the close reading of major literary genres and responding to them through discussion, writing, and projects. Honors English 9 focuses on effective use of the English language through written and verbal communication.

Additionally, it is intended to prepare above average students for future honors and advanced placement classes.

- CREDIT: 1.0
- COURSE STATUS: Required
- GRADE LEVEL: 9
- PREREQUISITES: Students must have achieved a B grade in English and language arts in eighth grade and have scored within the “advanced” range on both the language/writing and reading sections of the 8th grade standardized testing. Final placement will be determined by the registration committee.

**ENG 109  
ENGLISH 9**

English 109 is a course that attempts to emphasize the basics of reading, grammar, and composition as they relate to the language arts curriculum and the high school curriculum in general. This course works closely with the school reading specialist and recommends all eligible students elect to take the reading strategies course.

- CREDIT: 1.0
- COURSE STATUS: Required
- GRADE LEVEL: 9
- PREREQUISITES: Placement based on grades in English and language arts in eighth grade and scores on the 8th grade standardized testing. The course is not intended for students who score in the “proficient” or “advanced” ranges on the 8th grade standardized testing in either the language or reading sections. Final placement will be determined by the registration committee.

**ENG 110  
DRAMA**

This course is an introduction to Theatre with an emphasis on performance in front of an audience. Included is a study of the history of theatre and the production of a play including technical elements of set and costume design. Students will have the opportunity to create a character, work on stage movement, oral inter-

pretation of a character and collaborate with peers. Students will be required to see the plays produced by the English Department, as well as put in hours working in the scene shop. Students may elect to take Drama as the required speech credit for graduation.

- CREDIT: .5
- COURSE STATUS: Required or elective
- GRADE LEVEL: 9 - 12
- PREREQUISITES: None

**ENG 120  
ACTING/ PERFORMANCE SPEECH**

This course provides a niche for the artistically talented student wishing to develop and understand the art of performance. Major concepts to be included in the course are vocal projection, clarity of speech, physical expressiveness, a sense of perspective, emotional availability, a well-developed imagination, the ability to analyze and understand dramatic text, and the ability to emulate or generate emotional and physical conditions. Students will research and present information on a great acting teacher. Students will read six plays from different historical periods analyzing playscripts for elements of a character. In addition students will understand the purpose and participate in improvisation games and present character monologues and scenes for critique. Students may also be required to attend live performances by professional acting companies. (This class counts as an elective credit for graduation, but not as part of the English requirement.)

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 9 - 12
- PREREQUISITES: None

**ENG 130  
THEATER PRODUCTION**

Theater Production is a one semester course focused on acting skills, collaboration, and technical production. Students will produce a play each quarter by portraying characters, creating publicity, gathering costumes and building the set for each production. The students will use critical thinking to solve technical and artistic problems inherent to the creation of each play.

- CREDIT: .5
- COURSE STATUS: Elective (Counts as elective credit for graduation, but not as a part of the English requirement.)
- GRADE LEVEL: 9-12
- PREREQUISITE: Any of following: Costume & Makeup, Technical Theatre, Acting or by audition; may be repeated

**ENG 140  
THEATRICAL COSTUME & MAKEUP**

**\*This class will be offered in the year 2018-19\***  
Theatrical Costume and Makeup is a course designed for the student who shows a special interest in costume and makeup for the theatre. Students will design and create costumes for specific characters, actors and for themselves. The costumes will be displayed as pieces of art at a spring costume ball. The use of makeup in theatre will be explored with specific characters created from research, and students will learn application techniques.

- CREDIT: .5
- COURSE STATUS: Elective (Counts as elective credit for graduation, but not as a part of the English requirement.)
- GRADE LEVEL: 9 -12
- PREREQUISITE: Drama or Acting - may be repeated

**ENG 200  
ENGLISH 10**

English 200 is a full year course which focuses on application of language skills and analysis of literature around a variety of themes. Students will read two classic novels and two classic dramas, and write several essays during the course which will lay a solid foundation for future literature and composition courses.

- CREDIT: 1.0
- COURSE STATUS: Required
- GRADE LEVEL: 10
- PREREQUISITES: English 9 and teacher recommendation

**ENG 205  
HONORS ENGLISH 10**

Honors English 205 is a full year course which will help to develop in students the ability to think clearly, logically, and critically. Emphasizing interpretation of the major literary genres, the course will enhance students' analytical skills. Honors English 10 will also focus on effective use of the English language through written and verbal communication. Moreover, this course will lay the foundation for above average students to succeed in future honors and advanced placement classes.

- CREDIT: 1.0
- COURSE STATUS: Required
- GRADE LEVEL: 10
- PREREQUISITES: Students must be recommended by their ninth grade English teacher(s) for placement in Honors 10 or have earned at least a B- grade in both semesters of ninth grade English.

**ENG 209  
ENGLISH 10**

English 209 is a full year course which continues to build on the basic skills developed in English 109. Reading, grammar and usage skills are emphasized along with the process of developing interesting and informative writing assignments. This course works closely with the school reading program and English 209 students are eligible for assistance in the reading program.

- CREDIT: 1.0
- COURSE STATUS: Required
- GRADE LEVEL: 10
- PREREQUISITES: English 9 and teacher recommendation

**ENG 210  
SPEECH**

Speech is a one-semester course which is one of three courses offered that will fulfill the speech requirement for graduation. The class is open to any student, sophomore through senior year, thus it has a heterogeneous mixture of students. The course is designed and highly recommended for students planning to pursue their education in college or the tech-prep field of study. This course covers the following areas of speech and expects beginner mastery-level accomplishment in each of these content areas: the elements of communication (how communication affects life, the process of communication, and listening); interpersonal communication; preparing for communication (building confidence, preparing for speeches, choosing effective language, delivering speeches); types of public speaking (speaking to inform, speaking to persuade, other kinds of speaking); and debate.

- CREDIT: .5
- COURSE STATUS: Required or elective
- GRADE LEVEL: 10- 12
- PREREQUISITES: None

**ENG 230  
TECHNICAL THEATER**

**This class will be offered the year 2017-18**  
This course is designed for the student who shows a special interest in the technical aspects of theatre. Students will learn set design concepts and work as craftsman creating and implementing a design. Students will also work as lighting and sound designers and work as sound and lighting technicians using all equipment

available. Students will also learn to work as stage managers during productions.

- CREDIT: .5
- COURSE STATUS: Elective (Counts as elective credit for graduation, but not as a part of the English requirement.)
- GRADE LEVEL: 10-12
- PREREQUISITE: Drama or acting; may be repeated

### ENG 300 COMPOSITION

Composition 300 is an English course that meets the writing course requirement for junior-level students. The course consists of a study of diction, sentence structure, the paragraph, longer compositions, and the research paper. The course is designed to prepare students for college-level writing courses by teaching them to apply strategies for generating ideas, drafting, revising, and editing so that they can produce an articulate, readable text. Students enrolling in Composition 300 should have a solid background in basic English, including skills in grammar, usage, mechanics, note taking, and sentence structure. Students are placed in Composition 300 according to teacher recommendation.

- CREDIT: .5
- COURSE STATUS: Required
- GRADE LEVEL: 11
- PREREQUISITES: English 9 & 10 and teacher recommendation



### ENG 305 HONORS COMPOSITION

Honors Composition will help students to communicate their ideas more clearly through written language. In strengthening skills related to written communication, students will develop the ability to think clearly, logically, creatively, and critically about various topics as they write in a myriad of essay forms. Furthermore, this course will enrich the education of above average students and provide a springboard for

further development in prospective honors and advanced placement courses.

- CREDIT: .5
- COURSE STATUS: Required
- GRADE LEVEL: 11-12
- PREREQUISITES: English 9 & 10 & teacher recommendation

### ENG 309 WRITING FOR THE WORKPLACE

Writing for the Workplace is a course that fulfills the composition requirement for juniors. Instruction will focus on writing activities that have a workplace and technology emphasis. Students will also review and refine basic writing skills such as sentence structure, organization, and mechanics.

- CREDIT: .5
- COURSE STATUS: Required
- GRADE LEVEL: 11
- PREREQUISITES: English 9 and 10 and teacher recommendation

### ENG 310 AMERICAN LITERATURE

American Literature 310 is a course that fulfills the literature requirement for the junior and senior years. It includes a chronological survey of the development of our literature and illustrates American culture, heritage and tradition through its literary development. Students will demonstrate their ability to think and read critically through classroom projects, discussion, and activities. This course is intended for students planning to attend college and meets the AP literature requirement for junior year.

- CREDIT: .5
- COURSE STATUS: Required or elective
- GRADE LEVEL: 11-12
- PREREQUISITES: English 9 & 10

### ENG 315 HONORS AMERICAN LITERATURE

Honors American Literature is a one semester course that fulfills the literature requirement for the junior and senior years. It includes a chronological survey of American literature and its development in relation to American history, culture, tradition, and literary movements. The course is intended to develop in students the ability to think and read critically as well as use the English language effectively in both written and oral communication. Moreover, the course will lay the foundation for above average students to succeed in future honors and advanced

placement classes; this course meets the AP Literature requirement for junior year.

- CREDIT: .5
- COURSE STATUS: Required or Elective
- GRADE LEVEL: 11
- PREREQUISITES: English 9 & 10 - students must be recommended by their 10th grade English teacher(s) or have earned at least a B- grade in both semesters of English 10.

### ENG 319 SPORTS LITERATURE & WRITING

Students in this one-semester course will acquaint themselves with various literary selections: poems, stories, essays, plays and biographies. The subject is sports--and the relation of sports to life--as seen from the perspective of some of the finest contemporary writers in the sports realm. Through course activities, both written and oral, students will understand how sports shape lives and cultures as well as come to realize they are all sports participants in the game called "life." (This course does not meet the AP Literature prerequisite for junior year.)

- CREDIT: .5
- COURSE STATUS: Required or Elective
- GRADE LEVEL: 11-12
- PREREQUISITES: Junior standing

### ENG 320 ENGLISH LITERATURE

English Literature is a semester course consisting of a chronological survey of British literature from Anglo-Saxon times to the 20th century. Through classroom discussion, writing activities, and various projects, students will demonstrate their ability to read critically. This course provides strong college preparation and meets the AP Literature prerequisite for junior year.

- CREDIT: .5
- COURSE STATUS: Required or Elective
- GRADE LEVEL: 11-12
- PREREQUISITES: Junior standing and teacher recommendation.

### ENG 330 MULTICULTURAL LITERATURE

Multicultural Literature is a one semester course that emphasizes critical reading of literature and responding to it through discussion, writing, and projects. The course also focuses on effective use of the English language through written and verbal communication. Furthermore, the

basis of study stems from the various cultures the course covers throughout the semester. Cultural heritage and identity, stereotypes, and diverse writing styles based on cultural differences are among the topics that will be explored. This course provides strong college preparation and meets the AP Literature requirement for junior year.

- CREDIT: .5
- COURSE STATUS: Required or Elective
- GRADE LEVEL: 11-12
- PREREQUISITES: Junior standing and teacher recommendation



### ENG 335 COLLEGE INTRO COMM 110

COMM 110 is a beginning college course in principles of oral communication designed to help students increase their effectiveness in public speaking and interpersonal communication through learning current theory and developing skills through actual classroom experiences. This one semester course is one of three that meets the Speech graduation requirement. The major goal of the course is to teach students practical skills that can be used in "real life" speaking situations, and the confidence to use these skills. Students will focus on proper written and oral communication as they work to deliver oral presentations throughout the semester. High school juniors or seniors who meet at least one of these three requirements are eligible to enroll in PIE courses offered at WUHS.

- You are in the upper 25 percent of your class – or
- You have a GPA of at least 3.25 on a 4.0 scale – or
- You have an ACT score of 24 and are in the upper 50 percent of your class

**Students who enroll in a PIE course can earn three college credits (per course) upon achieving a minimum grade of C. Students who wish to seek credit are responsible for paying the University of Wisconsin Whitewater tuition at the 2017-2018, PIE 3 credit tuition rate.**

**Upon successful completion of the class, students will be reimbursed half the tuition cost.**

- CREDIT: .5
- COURSE STATUS: Optional Dual Enrollment
- GRADE LEVEL: 11-12
- PREREQUISITES: Junior standing plus requirements listed above.

### ENG 339

#### CLASSICS OF HORROR

The subject of this class is horror—and the relation of it to life—as seen from the perspective of some of the finest contemporary and classic writers in the genre of horror literature. Students will become more sensitive listeners and critical thinkers as they explore the “dark side” of the literary imagination through the study of masterpieces of horror literature. Various sub genres of horror and the writers’ techniques of developing character and building atmosphere through action and description will be studied. This course does not meet the AP Literature prerequisite for junior year, but it does meet the general literature requirement for juniors and seniors.

- CREDIT: .5
- COURSE STATUS: Required or Elective
- GRADE LEVEL: 11-12
- PREREQUISITES: Junior Standing



### ENG 345

#### COLLEGE ENGLISH 101

English 101 is an introduction to the reading and writing of college-level prose. In the course, students will engage in the study of short stories, novels, and essays and demonstrate learning through the composition of short papers and essay examinations. In this class students will become more familiar with what constitutes good writing and a variety of literary genres. As they refine their interpretive skills, students will also develop as articulate, purposeful writers and thinkers. High school juniors or seniors who meet at least one of these three requirements are eligible to enroll in PIE courses offered at WUHS.

- You are in the upper 25 percent of your class – or
- You have a GPA of at least 3.25 on a 4.0 scale – or
- You have an ACT score of 24 and are in the upper 50 percent of your class

**Students who enroll in a PIE course can earn three college credits (per course) upon achieving a minimum grade of C. Students who wish to seek credit are responsible for paying the University of Wisconsin Whitewater tuition at the 2017-2018, PIE 3 credit tuition rate. Upon successful completion of the class, students will be reimbursed half the tuition cost.**

- CREDIT: .5
- COURSE STATUS: Optional Dual Enrollment
- GRADE LEVEL: 11-12
- PREREQUISITES: Junior standing plus requirements listed above.

### ENG 349

#### HUMANITIES

Humanities is a semester-length course that explores various modes of human expression. Students will study culture, art, literature, film and music through individual and group activities. This course does not meet the general literature requirement for juniors and seniors or the AP Literature prerequisite.

- CREDIT: .5
- COURSE STATUS: Required or Elective
- GRADE LEVEL: 11-12
- PREREQUISITES: Junior standing

### ENG 359

#### CREATIVE WRITING

Creative writing is a one semester course that will develop a student’s writing skills in the various genres of literature including the short story, memoir, poetry, script writing and children’s literature. By studying the effective use of language, students will write creative, well-composed literature. Students who take this course should enjoy writing. (This course does not meet the junior composition requirement.)

- CREDIT: .5
- COURSE STATUS: Required or Elective
- GRADE LEVEL: 11-12
- PREREQUISITE: Passing grades in both semesters of English 9 and 10

### ENG 379

#### SCIENCE FICTION LITERATURE

Science Fiction Literature is a one semester course that provides students with an overview of classic and contemporary science fiction short stories and novels. The course also looks at the historical events and technological achievements through the 20th and 21st centuries and how both writers and technology influenced each other. The goal of the class is to provide students with the knowledge and enthusiasm for science fiction so that, after the class has ended, they will continue to choose their own novels and continue to read on their own. This course does not meet the AP Literature prerequisite for junior year.

- CREDIT: .5
- COURSE STATUS: Required or Elective
- GRADE LEVEL: 11-12
- PREREQUISITES: Junior standing

### ENG 405

#### AP ENGLISH LITERATURE

Advanced Placement English Literature is a full-year course that emphasizes close reading of significant works of literature with analytical and critical response through discussion and writing. This is an advanced class for students with a high level of academic proficiency. It will prepare students to take the AP Exam in English Literature.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 12
- PREREQUISITES: Senior standing and teacher recommendation, Approved junior literature courses include the following: American Literature, Honors American Literature, English Literature, and Multicultural Literature.
- SUMMER PREREQUISITE: During the summer before their senior year, AP students must read two novels and write a critical analysis of each.

### ENG 410

#### CRITICAL THINKING

Critical Thinking is a course that attempts to help students learn basic logic and apply it to real-life situations. It makes use of formal essays, debates, projects, and student initiated assessments. This is an advanced course for students with high academic proficiency and provides strong college preparation.

- CREDIT: .5
- COURSE STATUS: Required or Elective
- GRADE LEVEL: 12
- PREREQUISITES: Senior standing and teacher recommendation

## FAMILY & CONSUMER SCIENCE

**\*\*\*ALL FOOD CLASSES HAVE A COST OF  
\$25 PER CLASS\*\*\***

### FCS 100

#### FOOD & NUTRITION 1

Foods 1 is an elective course for students, freshman through senior. This is an introductory course where students will understand and apply basic food preparation and nutritional principles necessary for further independent life time skills. Basic knowledge and skills in the areas of safety & sanitation, nutrition, baked products, dairy, fruits, grains and eggs are explored.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 9 - 12
- PREREQUISITES: None

### FCS 110

#### FOOD & NUTRITION 2

Foods 2 follows Foods 1 and stresses more complex cooking skills. This course applies the nutritional skills from Foods 1 and covers units in meats, poultry, vegetables, soups, cakes, yeast breads and pastries. This is good preparation for International Foods, and Culinary Skills 1.

- CREDITS: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 9 - 12
- PREREQUISITES: Foods 1

### FCS 120

#### NUTRITION FOR SPORTS/LIFE

Nutrition for Sports/Life informs the student-athlete and health conscious student about the body processes. The course will unveil the misconceptions related to health trends and products. Whether a student is getting ready for a meet, a race, a match, a big game, or a test, this course will help students to reach his or her best level of health and wellness. The class will focus on the body’s response to quality preparation, and the dividends it will pay, not only at the high school level of competition, but throughout a lifetime as well.

- CREDITS: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 9 - 12
- PREREQUISITES: None

### FCS 130

#### APPAREL CONSTRUCTION 1

This class emphasizes basic clothing construction skills. It involves planning, purchasing supplies and completing projects. Fabrics, fibers, patterns, machine operation and basic construction techniques are emphasized. Projects include a simple straight stitched project, and then a project from a manufactured pattern and then choice projects. Approximate cost for semester's supplies is \$50.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 9-12
- PREREQUISITES: None

### FCS 140

#### INTRO TO HEALTH CARE CAREERS

This course is open to students in grades 9-12. It is recommended to those interested in exploring the medical field as well as those interested in being informed consumers. Students will explore employment possibilities, technological skills, education needed to advance, health care trends, legislation, ethics, human behavior, medical terminology, body systems and diseases. Guest speakers and Aurora observations will give students the professional outlook on health care careers.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 9-12
- PREREQUISITES: None

**\*This class will be offered in the year 2018-19\***

### FCS 150

#### HOUSING & INTERIOR DESIGN

Housing and interior design is an elective course for those students interested in a career in the housing field or designing the interior of their own homes. Students will examine social and personal aspects in home selection, architectural details, interior design, trends and principle of art. A study of housing careers will be included. Applications will be demonstrated by completing various design projects.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 9 - 12
- PREREQUISITES: None

### FCS 210

#### INTERNATIONAL FOODS

This course will introduce students to the world of international and regional foods. Students will examine the history, culture and traditions of various countries to gain a better understanding of the origins of ethnic and regional cuisine. Students will prepare and sample a variety of international and regional foods. Cuisines high-

lighted include Europe, Mexico, United States, Africa, Canada and Scandanavian countries.

- CREDITS: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: Foods 1 and Foods 2

**\*This class will be offered in the year 2017-18\***

### FCS 230

#### APPAREL CONSTRUCTION 2 - FASHION DESIGN

This course builds upon the basic skills developed in Apparel Construction 1. Students will study various clothing styles and fashion trends. A report about a famous fashion designer will be required. **All fashion designers need to know how to sew.** Construction of class projects will incorporate the use of special sewing techniques. Topics will include fashion basics, history of fashion, fashion industry, language of fashion, special seams, tucks, pleats, collars, sleeves, cuffs, pockets, waistlines, bias bindings, ruffles, trims, and decorative art. Offered 2nd semester only.

CREDIT: .5  
COURSE STATUS: Elective  
GRADE LEVEL: 10, 11, 12  
PREREQUISITE Apparel Construction 1  
COST: \$40-\$50

### FCS 240

#### PARENTING

This course covers the role of a parent in a child's development. It is also a course designed for those who wish to work with children. It is the first level course, followed by Child Development to obtain an Assistant Child Care Teacher (ACCT) Certification and be able to work in a day care setting at age 17. Students will explore and analyze their own readiness, responsibilities, parenting styles and choices for the role of parenthood. Students will examine each stage of childhood and the parent role during that developmental state (emotional, intellectual, social and physical). Students will analyze the challenges of parenting and project future challenges.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: None - This class gives ACCT license if taken with Child Development.

### FCS 250

#### FOOD SCIENCE

The Food Science course will expose students to careers in the growing field of food science and food technology. In this course, we will look at why food is produced the way it is. We will also look at food analogs, sensory evaluation, fermentation, candy making, why certain

additives are added to the foods we eat and purchase, how foods are preserved, as well as trends in the food industry. This class counts as an elective credit. This class is open to sophomores-seniors.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 10 - 12
- PREREQUISITE: None

### FCS 260

**PERSONAL & FAMILY RELATIONSHIPS**  
This course is designed to help students learn how to build and improve their relationships with others. The course teaches basic skills for living and includes coping, communication, problem solving, and resolving conflict. It examines life changing issues, such as divorce, changes in the family unit, peer pressure, teen pregnancy, dating, marriage, date rape, abuse, and death.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: None

### FCS 310

#### INDEPENDENT LIVING SKILLS

Independent living skills is designed to help students gain a better understanding of the roles and responsibilities they are already experiencing or will soon be experiencing when they live on their own. The course includes decision making, budgeting, selecting, furnishing and maintaining housing, purchasing and preparing nutritious meals, selecting and caring for a wardrobe, and the use of hand and machine sewing. The course is very project oriented.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 11 - 12
- PREREQUISITES: None

### FCS 320

#### CULINARY SKILLS 1

This class is offered through Gateway. Culinary Skills 1 helps students further enhance their culinary skills and prepare them for a culinary career and receives ProStart certification. Skills learned include knife handling skills, uses of food service equipment, safety and sanitation practices, principles of food preparation, calculations for cost, and how to prepare various foods. Menu planning and catering is also practiced throughout the year.

- CREDIT: 1.0
- COURSE STATUS: Optional Dual Enrollment
- GRADE LEVEL: 11 - 12
- PREREQUISITES: Foods 1 & 2

### FCS 340

#### CHILD DEVELOPMENT/ ASSISTANT CHILD CARE TEACHER (ACCT)

This course is designed to introduce students to working with toddlers, and children under 12. A five week nursery school is planned and implemented by the students of this course. Child development, teaching strategies, guidance activities and learning theories will be discussed and applied in the Little Wolverines Nursery School. This is an excellent course for those interested in parenting, working in the child care industry or becoming a teacher. If this course is taken with Parenting, students will become a Certified Assistant Child Care Teacher and will be able to work in a day care setting at age 17.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 11 - 12
- PREREQUISITES: If parenting has been taken, student can get ACCT licensed.

### FCS 410

#### SENIOR FOODS

This class is designed for the student who had little time in his/her elective schedule to experience a foods class. It is geared toward the student who is concerned about nutrition, healthy eating and developing survival skills for college. Senior Foods will help students learn to make wise food choices relating to nutrition and fitness as they sort through today's ever expanding array of food options. The course encourages students to read labels, compare price, calculate nutritional levels and make wise food choices in snacks, convenience foods, restaurant foods and home cooking.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 12
- PREREQUISITES: For students who have **NOT** had a previous food course.

## MATHEMATICS

### MTH 100

#### ALGEBRA 1

This course, a foundation for higher math, includes the study of modern concepts and basic properties of real numbers, solving equations, factoring and graphing. It should help develop

thinking and methods needed to solve problems basic to technical vocations.

- CREDIT: 1.0
- COURSE STATUS: Required
- GRADE LEVEL: 9-12
- PREREQUISITES: Placement by registration committee in the freshman year
- COST: TI-30X IIS calculator required & a notes binder from our book store

### **MTH 105 ACCELERATED GEOMETRY**

Geometry is the study of mathematics that applies the principles of Algebra to the physical world. The student develops spatial relationships, inductive and deductive reasoning processes, clarity and precision of language, and further strengthening of basic mathematical skills. Topics covered include logic, parallelism, measurements, polygons, congruency, constructions, and coordinates. A systematic logical approach will be emphasized in the proof of theorems. Geometric investigations and real world applications of geometry will be stressed. Moreover, this course will lay the foundation for above average students to succeed in future honors and advanced placement classes.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 9-12
- PREREQUISITES: Received B+ or higher in Algebra I
- COST: TI-30 calculator required & a notes binder from our book store

### **MTH 109 ELEMENTARY ALGEBRA 1**

This course is designed to teach the modern concepts, the basic properties of the real numbers, and the fundamental structure of elementary algebra. This is equivalent to first semester of a standard algebra course.

- CREDIT: 1.0
- COURSE STATUS: Required
- GRADE LEVEL: 9-12
- PREREQUISITES: Placement by registration committee in the freshman year
- COST: TI-30X Calculator required & a notes binder from our book store

### **MTH 110 GEOMETRY**

Geometry is the study of mathematics that applies the principles of Algebra to the physical world. The student develops spatial relationships, inductive and deductive reasoning processes, clarity and precision of language, and fur-

ther strengthening of basic mathematical skills. Topics covered include logic, parallelism, measurements, polygons, congruency, constructions, and coordinates.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 9-12
- PREREQUISITES: Successful completion of Algebra I
- COST: TI-30X calculator required

### **MTH 159 TECH MATH 1**

Tech Math I is designed to help students develop and refine job-related math skills, as well as give a basic introduction to algebra and geometry. Topics focus on the use of calculator, problem solving techniques, units of measurement, data handling, basic statistics, basic equation solving, and geometric properties of lines and polygons.

- CREDIT: 1.0
- COURSE STATUS: Required
- GRADE LEVEL: 9
- PREREQUISITES: Placement by registration committee in the freshman year
- COST: TI-30X Calculator required

### **MTH 200 ALGEBRA 2 w/TRIGONOMETRY**

This course is designed to further the knowledge of concepts learned in Algebra I and Geometry, by working with the real and complex numbers, logarithms, elementary function, trigonometry and application. The student that takes this course will take Pre-Calculus and eventually Calculus.

- CREDIT: 1.0 (GATEWAY CREDIT - IF AP-PROVED)
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: Recommended 'C' average in Accelerated Geometry or a 'B' average in Geometry
- COST: TI-84 Plus calculator required & a notes binder from our book store

### **MTH 209 ELEMENTARY ALGEBRA 2**

The course is designed to teach the modern concepts, the basic properties of the real numbers, and the fundamental structure of elementary algebra. It expands on what was learned in Elementary Algebra 1 and covers second semester material of a standard algebra course.

- CREDIT: 1.0
- COURSE STATUS: Required
- GRADE LEVEL: 10-12
- PREREQUISITES: Elementary Algebra 1 or

successful completion of three quarters of 8th grade Algebra

- COST: TI-30X Calculator required & a notes binder from our book store

### **MTH 210 ALGEBRA 2**

This course is designed to further the knowledge of concepts learned in Algebra I and Geometry, by working with the real and complex numbers, logarithms, and elementary functions. This course DOES NOT COVER TRIGONOMETRY. YOU WILL NOT BE ABLE TO TAKE PRE-CALCULUS IF THIS COURSE IS TAKEN.

- CREDIT: 1.0 (GATEWAY CREDIT - IF AP-PROVED)
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: Recommended 'C' average in Geometry
- COST: TI-84 Plus calculator required & a notes binder from our book store

### **MTH 220 STATISTICS**

The one semester course will include topics which students need as a background for further statistics study in post-high school work and for interpreting data a student will face in everyday living. An example of some of the topics are gathering data; organizing the collected data; determine the mean, median, and mode; analysis of the data; constructing stem-and-leaf plots, box plots, and scatter plots; hypothesis testing, etc. Some introductory probability will also be included in the course material. The course will be offered first semester.

- CREDIT: 0.5
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: Satisfactorily passed Geometry
- COST: Workbook and a TI-84 Plus calculator required & a notes binder from our book store

### **MTH 230 TRIGONOMETRY**

This course is a semester course that provides a preparation for technical college and university placement tests. It will highlight some of the concepts taught in Algebra II, but it is not necessary to take Algebra II before taking this course. Students will solve right triangles, analyze and graph trigonometric functions, manipulate trigo-

nometric identities and inverses, and use the law of sines and cosines.

- CREDIT: 0.5 (GATEWAY CREDIT - IF AP-PROVED)
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: Recommended "B" average in Geometry or "C" average in Algebra II OR "C" average in Pre-Calculus
- COST: TI-30X IIS or graphing calculator required & a notes binder from our book store

### **MTH 259 TECH MATH 2**

Tech Math II is a continuation of the skills learned in Tech Math I, the optics include a samplings of pre-algebra, algebra, and geometry. The goal of this course is to provide students with a mathematical framework that will provide them with more opportunities in both their future employment and further education.

- CREDIT: 1.0
- COURSE STATUS: Required
- GRADE LEVEL: 10
- PREREQUISITES: May have completed no class higher than Tech Math I
- COST: TI-30X Calculator required

### **MTH 261 ALGEBRA PROGRAMMING APPLICATIONS 1**

This course will use the context of computer gaming to apply mathematical skills including the coordinate plane, domain and range, the order of operations, functions and polygons. Students will utilize numbers, strings, images, Boolean logic and collision detection to build a basic game program. Students will also learn the basic concepts of program design.

- CREDIT: 0.5
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: Algebra 1 or Elementary Algebra 2
- COST: TI-30X calculator required & a notes binder from our book store

### **MTH 300 PRE-CALCULUS**

This course provides a preparation for college courses in calculus, algebra, and analytical geometry. It will clarify, simplify, and unify concepts learned in previous courses in algebra and geometry. It contains the study of advanced relations,



functions, graphs, trigonometry, and an introduction to Calculus.

- CREDIT: 1.0 (GATEWAY CREDIT - IF AP-PROVED)
- COURSE STATUS: Elective
- GRADE LEVEL: 11-12
- PREREQUISITES: Recommended 'C' average in Algebra II with Trig
- COST: TI-84 Plus calculator required & a notes binder from our book store

### MTH 325 AP STATISTICS

This is a year long course designed towards preparing students to take and earn credits on the AP Statistics exam. Some of the course objectives include students learning how to explore data, plan studies, exploring probability through simulation and finally the use statistical inference. Any student planning on going to college and studying in the field of mathematics or business would benefit greatly from this class.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 11-12
- PREREQUISITES: B in Algebra II with Trigonometry or teacher recommendation.
- COST: TI-84 calculator is required & a notes binder from our book store

### MTH 351 ALGEBRA PROGRAMMING APPLICATIONS 2

This course will expand on the skills from Algebra Programming Applications 1. Students will use complex functional relationships, explore randomness and connections to trigonometry. Programs will use event-driven programming, data structures, recursions, lists and algorithms. Game design in this course will be more complex. Students will learn Whole-Program Design, so that their existing programs can be more easily modified to be more sophisticated.

- CREDIT: 0.5
- COURSE STATUS: Elective
- GRADE LEVEL: 11-12
- PREREQUISITES: Geometry & Algebra Programming Applications 1
- COST: TI-30X calculator required & a notes binder from our book store

### MTH 405 AP CALCULUS AB

AP Calculus makes extensive use of geometry and algebra. Major concepts include properties of functions, properties of graphs, limits, con-

tinuity, differential and integral calculus. The derivative has applications in physics, engineering, economics and biology. The integral will be used to calculate volumes, areas of revolution and lengths of curves.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 11-12
- PREREQUISITE: 'B+' average in Pre-Calculus
- COST: TI-84 Plus calculator required & a notes binder from our book store

### MTH 415 AP CALCULUS BC

AP Calculus BC makes extensive use of geometry and algebra. This course will be an extension of AP Calculus AB. The major concepts that will be covered include: properties of functions, graphs, limits, continuity, differential and integral calculus, sequences, improper integrals, infinite series, vectors and parametric functions. The uses of derivatives are applied in physics, engineering, economics and biology. The integral will be used to calculate volumes, area of revolutions, and length of curves.

- Credit: 1.0
- Course Status: Elective
- Grade Level: 11-12
- Prerequisite: A average in Pre-Calculus or AP Calculus AB
- Cost: TI-84 Plus graphing calculator required & a notes binder from our book store



### MTH 416 CALCULUS & ANALYTIC GEOMETRY III

This course will follow AP Calculus BC and makes extensive use of the concepts found in Calculus BC. The major topics will be vectors and parametric equations, vector functions and their derivatives, partial and directional derivatives, multiple integrals, vector analysis, Green's Theorem and Stokes' Theorem. High school juniors or seniors who meet at least one of these three requirements are eligible to enroll in PIE courses offered at WUHS.

- You are in the upper 25 percent of your class – or
- You have a GPA of at least 3.25 on a 4.0 scale – or
- You have an ACT score of 24 and are in the upper 50 percent of your class

**Students who enroll in a PIE course can earn three college credits (per course) upon achieving a minimum grade of C. Students who wish to seek credit are responsible for paying the University of Wisconsin Whitewater tuition at the 2017-2018, PIE 3 credit tuition rate. Upon**

**successful completion of the class, students will be reimbursed half the tuition cost.**

- Credit: 0.75
- Course Status: Optional Dual Enrollment
- Grade level: 12
- Prerequisite: Pass AP Calculus with 3, 4, or 5



### MATH 417 LINEAR ALGEBRA

This course will follow Calculus and Analytic Geometry III and will be an introduction to linear algebra including systems of equations, matrices, determinants, vector spaces and linear transformations and diagonalization. High school juniors or seniors who meet at least one of these three requirements are eligible to enroll in PIE courses offered at WUHS.

- You are in the upper 25 percent of your class – or
- You have a GPA of at least 3.25 on a 4.0 scale – or
- You have an ACT score of 24 and are in the upper 50 percent of your class

**Students who enroll in a PIE course can earn three college credits (per course) upon achieving a minimum grade of C. Students who wish to seek credit are responsible for paying the University of Wisconsin Whitewater tuition at the 2017-2018, PIE 3 credit tuition rate. Upon successful completion of the class, students will be reimbursed half the tuition cost.**

- Credit: 0.75
- Course Status: Optional Dual Enrollment
- Grade Level: 12
- Prerequisite: Pass Calculus and Analytic Geometry III

## MUSIC

**\*\*\*\*Students are limited to 2 choir and 2 band performance classes in a given year. These students must have the approval of the instructors of the ensembles and the administration for any exceptions.\*\*\*\***

### MUS 100 PRINCIPIANTI

*Principianti* is a class for underclassmen sopranos & altos (grades 9-11) choosing to participate in a choral music organization or class. The class will review and evaluate the musical experience each student has had through the first years of

schooling. Class activities will focus on the improvement of skills fundamental to all music and more specifically to vocal music. The class will participate in the performance of all concerts and in large group clinic situations. Performance opportunities will be available each quarter. The only requirement for enrollment in this class is a desire to learn about and enjoy participating in vocal music. This is a full year course.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 9-11
- PREREQUISITES: None

### MUS 103 INTERMEZZO-TENOR/BASS

*Intermezzo* is an elective course in the music department. The class is open to any 9th -12th grader. Tenors/basses and sopranos/altos meet separately, then combine for concerts. The choir encompasses all ranges of voice from bass to soprano. It provides an advanced, in-depth study of the elements of music through choral literature as well as the mastery of the singing voice and of the techniques used in solo and ensemble singing. Students will participate in the performance of all concerts. All styles of music written for mixed voices will be studied.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 9-12, Tenor and Bass
- PREREQUISITES: None

### MUS 150 CONCERT BAND

A performing group open to grades 9-12 for one credit. Students participate in various activities such as marching band, concert group, small ensembles and solo literature. This course is designed as an entry level in preparation for symphonic band. The emphasis of this course is an appreciation of music through exposure to many different performance mediums, musical styles and time periods. Band members will perform in 3-4 home football shows, four concerts, and large group festival. Band students are given the opportunity to volunteer to participate in pep band, solo and ensemble, madrigals and musicals. A \$25.00 cleaning fee for concert black dress is assessed during registration. Students are required to provide black socks/nylons and black shoes for concerts.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 9-12
- PREREQUISITES: None

**MUS 159  
BEGINNING BAND**

This course offers beginning instrumental music opportunities. It is for students who have never played an instrument or have not played in several years. After taking this course, students will be prepared to enter the traditional concert or symphonic band course.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 9-12
- PREREQUISITES: None

**MUS 160  
JAZZ BAND**

Jazz band is an elective course in the music department. Students will listen to, study, and perform music from the jazz idiom, as well as contemporary music including funk, reggae, and rock styles. Study will include jazz performance techniques, history, improvisation, theory, combo performance, and listening skills. Students will be expected to solo on their instrument. Performance requirements include a minimum of three concerts and two festivals per year as well as district festival in the spring.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 9-12
- PREREQUISITES: AUDITION. Students must also be registered for symphonic or concert band with the following exceptions:
  1. Students who play an instrument not normally used in symphonic & concert band (guitar, bass guitar)
    - a. determination to be made by director
  2. Students who also registered for symphonic or concert band but were denied that class due to schedule conflict
    - a. If a choice must and can be made between symphonic band or jazz band, the choice would be for symphonic band.
    - b. If the student is denied symphonic band but could schedule jazz band, they are exempt from the rule.

**MUSIC 155  
ORCHESTRA**

Orchestra is an elective course offered to students in grades 9-12. A variety of string literature will be studied and prepared for concerts. Orchestra students will be taught at Fox River Middle School during the 2017 - 2018 school year. You will be responsible for your own transportation. It is an every other day class.

- CREDIT: .50
- COURSE STATUS: Elective
- GRADE LEVEL: 9-12
- PREREQUISITE: Previous string instrument experience or director's consent.

**MUS 173  
MUSIC TECHNOLOGY & PRODUCTION**

Music and Technology Production deals with cutting edge technology as well as a working knowledge of notation and sequencing software. Topics include basic music fundamentals, computer music (notation, sequencing and accompaniment), multitrack recording, synthesizers and MIDI. Critical listening is also incorporated to identify multiple techniques of music production.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 9-12
- PREREQUISITE: None

**MUS 200  
INTERMEZZO-SOPRANO/ALTO**

*Intermezzo* is an elective course in the music department. The class is open to any 10th, 11th or 12th grade soprano or alto who meets the requirements of an audition and consent of the choir director. Tenors and basses meet separately, then combine for concerts. The choir encompasses all ranges of voice from bass to soprano. It provides an advanced, in-depth study of the elements of music through choral literature as well as the mastery of the singing voice and of the techniques used in solo and ensemble singing. Students will participate in the performance of all concerts. All styles of music written for mixed voices will be studied.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12, Soprano/Alto
- PREREQUISITES: AUDITION ONLY or verbal consent of the instructor

**MUS 210  
SULLA CIMA**

*Sulla Cima* is an elective course in the music department, and is considered the flagship of the choral music program at Waterford Union High School. The class is open to any 10th, 11th or 12th grade student who meets the requirements of an audition and consent of the choir director. The choir encompasses all ranges of voice from bass to soprano. It provides an advanced, in-depth study of the elements of music through choral literature as well as the mastery of the singing voice and of the techniques used in solo and ensemble singing. Students will participate in the performance of all concerts and the large group clinic situation. Other performance op-

portunities will be available each quarter. All styles of music written for four-to sixteen-part mixed voices will be studied.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: AUDITION ONLY

**MUS 230  
VOCAL JAZZ**

Vocal Jazz ensemble is an elective course in the music department. Students will listen to, study, and perform music from the jazz idiom, as well as contemporary music including funk, reggae, and rock styles. Study will include vocal jazz performance techniques, history, improvisation, theory, combo performance, and listening skills. Students will be expected to solo. Performance requirements include 2 primary concerts (winter & spring), participate in the Lawrence University Jazz Festival in November, and a district festival in the spring.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: AUDITION ONLY - Students must also be registered in a traditional choir with the following exceptions:
  1. Students who play an instrument not normally used in Choir (bass, drums, piano)
    - a. determination to be made by director
  2. Students who are seniors who also registered for a Concert Choir or Treble Choir but were denied that class due to schedule conflicts:
    - a. If a choice must and can be made between Concert Choir and Treble Choir or Vocal Jazz, the choice would be for Concert Choir or Treble Choir.
    - b. If the student has previously been a member of Vocal Jazz and is denied Concert Choir or Treble Choir but could schedule Vocal Jazz, they are exempt from this rule.

**"THIS CLASS OFFERED IN 2017-2018"**  
**MUS 240**

**INTRODUCTION TO MUSIC THEORY**

Introduction to Music Theory is designed to prepare students for the AP Music Theory course. This course is open to any student interested in learning the basic principles of writing and analyzing music.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: One year of music study and/or consent of instructor. Students considering AP Music Theory, or a possible music major/minor in college should consider enrolling in this course.

**MUS 250  
SYMPHONIC BAND**

A performing group open to grades 10-12 for one credit. Students participate in various activities such as marching band, concert group, small ensembles and solo literature. The emphasis of this course is an appreciation of music through exposure to many different performance mediums, musical styles and time periods. This group concentrates on high-level literature and performance. Band members will perform in 3-4 home football shows, four concerts, and large group festival. Band students are given the opportunity to volunteer to participate in pep band, solo and ensemble, madrigals and musicals. A \$25.00 cleaning fee for concert black dress is assessed during registration. Students are required to provide black socks/nylons and black shoes for concerts.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: Audition only

**\*\*THIS CLASS OFFERED IN 2018-19\*\***  
**MUS 345**

**AP MUSIC THEORY**

AP Music Theory is open to any student interested in learning the principles of writing and analyzing music. The ultimate goal of this AP Music Theory course is to develop the student's ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score. The course will accomplish this through a progression of lessons and activities that will first cement the student's understanding of the rudiments of musical language (i.e. notation, intervals, rhythm, and meter) and then develop his or her critical and creative awareness of musical forms and structures through score analysis, harmonic realization, and composition exercises. Though a wide variety of music will be used in this course, primary emphasis will be placed on common practice techniques of the Western music tradition. It is highly recommended students interested in AP Music Theory take Intro to Music Theory, though not required.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 11-12
- PREREQUISITES: Must be receiving a Cum GPA of 3.0; previously had two years of music study; must also be considering a possible music major/minor in college and/or consent of instructor

## PHYSICAL EDUCATION

### PHY 100 PHY ED 9

This course provides activities designed to contribute to the physical well-being of students; to develop an awareness of coordination, balance, force, motion and body movement; to provide students with activities that deal with self-confidence. Some units of study include: tennis, soccer, weight training, in-line skating, lacrosse, badminton, traverse wall, volleyball, broomball, archery, and physical fitness testing.

- CREDIT: .5
- COURSE STATUS: Required
- GRADE LEVEL: 9
- COST: In-line skating fee - \$5

### PHY 110 HEALTH 1

This introductory course is made up of four units: I-Health and Wellness, focusing on the six major health components (mental, physical, emotional, spiritual, environmental, and social). II-Nutrition and Fitness, consisting of calorie counting, body composition, eating disorders, and F.I.T.T. Principle. III-Human Growth and Development which covers topics from adolescence and sexuality to pregnancy and STIs. IV-Tobacco, Alcohol and Other Drugs which pinpoints use and abuse of tobacco, alcohol, and other drugs. This class meets every day for one quarter.

- CREDIT: .25
- COURSE STATUS: Required
- GRADE LEVEL: 9
- PREREQUISITES: None

### PHY 200 PHY ED 10

This course provides a diverse range of experiences that amplify a wide range of individual differences; to teach students to assess and challenge their individual capabilities; to participate in activities that allow for leadership, cooperation, initiative, responsibility, etc. Some units of study include: flag football, social dance, basketball, floor hockey, weight training, eclipse ball, softball, in-line skating, ultimate frisbee and physical fitness testing.

- CREDIT: .5
- COURSE STATUS: Required
- GRADE LEVEL: 10
- PREREQUISITES: Physical Education 9
- COST: In-line Skating fee - \$5

### PHY 220 SPORTS MEDICINE

This course is an introductory class for students interested in sport science. This class introduces: anatomy, physiology, effects of exercise on the body, assessment and management of athletic injury, emergency preparedness, and taping/wrapping of injuries. The students will be required to complete a project on a career related to sports as well as field hours observing the athletic teams.

- CREDIT: .5 credit
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: None

### PHY 300 PHY ED 11

This course provides opportunities designed to contribute to the physical and mental well being of the students; to develop an interest to participate in lifetime leisure and fitness activities; to teach students the need to utilize leisure time by participation in recreational and fitness activities. Some units of study include: bocce ball, croquet, disc golf, tennis, volleyball, ballroom dance, weight training, badminton, in-line skating, softball (slow pitch), and adult kickball.

- CREDIT: .5
- COURSE STATUS: Required
- GRADE LEVEL: 11
- PREREQUISITES: Physical Education 9 & 10
- COST: In-line Skating fee - \$5

### PHY 310 HEALTH 2

This course offers students up-to-date information on additional topics students need to know to make sound decisions about health. The six components of health are expanded to include an emphasis on positive choices for healthy lifestyles. CPR certification is also offered. An HIV/AIDS section is included as an integral part of Health education. The course meets every day for one quarter.

- CREDIT: .25
- COURSE STATUS: Required
- GRADE LEVEL: 11
- PREREQUISITES: Health I

### PHY 320 STRENGTH & CONDITIONING

This class will consist of a combination of classroom instruction and physical activity focusing on improving an individual's well being.

The student will learn all aspects of the weight room, how to develop a strength and conditioning program for themselves, learn about basic nutritional guidelines, and about the latest fads in the fitness world.

- CREDIT: .5 credit
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: None

### PHY 330 POWER LIFTING

This course is offered to those individuals who wish to improve, and vary their weight lifting skills. In the class the students will learn Olympic style lifts that work the whole body, along with methods for developing strength and staying fit. This class will also do research to create their own personalized work out.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: None

### PHY 400 PHY ED 12

This course affords the opportunity for students to continue to learn about and participate in lifetime leisure and fitness activities. It also allows the student to further their personal knowledge of a particular activity to a greater degree. Some of the units are horseshoes, fishing, pickleball, table tennis, ultimate frisbee, golf, bowling, and many more. A current fishing license is a requirement.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 12
- PREREQUISITES: Physical Education 9,10 &11
- COST: A \$35 fee will be collected at registration. This fee will cover all activities in class with the exception of fishing. License cost for fishing will vary according to age and experience of the student.

## READING

### REA 109

#### READING & LEARNING STRATEGIES

Semester one covers organizational skills, communication skills, study reading, listening, remembering, mapping and note taking strategies, paragraph comprehension techniques and test taking skills. Second semester concentration includes the vocabulary improvement strategies of

context clues, prefixes and root words. Higher level comprehension skills of inference and critical reading are taught and applied. Some class time is devoted to applying reading and study skills to classroom reading assignments. Frequent progress checks are made on content area work. Parents are expected to become involved in the program by having weekly contact with the reading specialist.

- CREDIT: 1.0 (Full Year)
- COURSE STATUS: Elective
- GRADE LEVEL: 9
- PREREQUISITES: Must meet guideline requirements. Participants will be selected by counselor and/or teacher only.



### REA 209

#### LEARNING APPLICATIONS

Students will continue to develop reading and study skill strategies. Emphasis will be placed on time management, goal-setting, and collective strategies for planning, evaluating, monitoring, and regulating their classroom reading assignments. Parents are expected to become involved in the program by having weekly contact with the teacher.

- CREDIT: 1.0 (Full Year)
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: **Must have successfully completed Reading Strategies.** Participants will be selected by counselor and/or teacher only.

## SCIENCE

### SCI 100

#### INTRO TO PHYSICAL SCIENCE

This course is designed to meet the physical science needs of the freshman who intends to continue into advanced science courses. They are introduced to the concepts of chemistry, physics, earth science, laboratory techniques, and problem solving.

- CREDIT: 1.0
- COURSE STATUS: Required
- GRADE LEVEL: 9
- PREREQUISITES: Placement by registration committee in the freshman year; student needs to be enrolled at least in Elementary Algebra 1

### SCI 105 HONORS BIOLOGY

This course is designed for gifted and talented freshmen who intend to continue into advanced science courses. Introductory biological concepts with laboratory emphasis are discussed. The pace is accelerated and exceptionally talented math and science students will be invited to take this course. Standardized test scores and teacher recommendation will be used for placement. Class size is limited to 3 sections.

- CREDIT: 1.0
- COURSE STATUS: Required
- GRADE LEVEL: 9
- PREREQUISITES: Teacher recommended/Instructor Consent and recommended to be enrolled in geometry.

### SCI 109 SURVEY PHYSICAL SCIENCE

A course designed to meet the physical science needs of the ninth grade student with little or no previous exposure to physical science. The class teaches the basic principles and concepts of chemistry and physics.

- CREDIT: 1.0
- COURSE STATUS: Required
- GRADE LEVEL: 9
- PREREQUISITES: Placement by registration committee in the freshman year

### SCI 200 BIOLOGY

Biology is the study of living things. It is the scientific extension of the human tendency to feel connected to and curious about all forms of life. This course will give students an understanding and appreciation of the vast diversity of living organisms, their remarkable adaptations to their environments, and their evolutionary and ecological relationships. Special emphasis is placed on the basic unity of life and the fundamental similarities of the challenges that have been faced and solved by all living organisms. This course will prepare students for higher education.

- CREDIT: 1.0
- COURSE STATUS: Required
- GRADE LEVEL: 10
- PREREQUISITES: Intro to Physical Science & recommended to be enrolled in or completed geometry (or consent of IPS teacher)

### SCI 205 HONORS CHEMISTRY

This course is intended for gifted science students who intend to pursue advanced science courses their junior and/or senior years. Introductory chemical concepts such as chemical

composition and changes will be examined. Students will also be challenged to think at the particulate level and describe complex chemical systems. This will allow them to use their critical thinking and problem solving skills to better show their understanding of abstract ideas. Students will show understanding through laboratory activities and scientific writing.

- Credit: 1.0
- Course Status: Elective
- Grade Level: 10-11
- Prerequisites: Biology (A) or Honors Biology ("B" or better), enrolled in Algebra 2 w/Trig.

### SCI 208 CONCEPTUAL BIOLOGY

This course is designed to promote the understanding and appreciation of the fundamental life processes and their application to life. It is for the student who does not intend to take chemistry or physics but may intend to take practical chemistry or conceptual physics.

- CREDIT: 1.0
- COURSE STATUS: Required
- GRADE LEVEL: 10
- PREREQUISITES: Placement by Science Department

### SCI 210 CHEMISTRY

Chemistry is the study of the composition and the changes of matter. In the laboratory, students learn careful observation and evaluation of data.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: Physical Science and Biology (with a recommended grade of "C" or higher) or Honors Biology; recommended to be enrolled in or completed Algebra 2 (or consent of biology teacher)
- COST: Goggles- \$5; Lab notebook \$2; calculator- \$15

### SCI 305 AP BIOLOGY

AP Biology is designed to be the equivalent of a college introductory biology course usually taken by biology majors during their first year. After showing themselves to be qualified on the AP Biology Exam, some students, as college freshmen, are permitted to undertake upper-level courses in biology or to register for courses

for which biology is a prerequisite. Other students may have fulfilled a basic requirement for a lab science course and will be able to undertake other courses to pursue their majors. For students not electing to take the AP exam, the course will provide exposure to college level material and provide a conceptual framework for future collegiate science courses.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 11&12
- PREREQUISITES: "B" average in Biology, & Chemistry; plus taken Algebra 2

### SCI 310 PHYSICS

Physics is the science concerned with the study of interactions between matter and energy and of energy and its transformations. Students who plan to enter any type of technical field will find this course helpful. A science-math background is recommended.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 11-12
- PREREQUISITES: Physical Science, & Chemistry (recommended "C" or better per course) or Chemistry concurrently; recommended completed Algebra II w/Trig with a "C" or better.(or consent of chemistry teacher).
- COST: 4GB or more Flash Drive; notebook \$10

### SCI 311 CHEMISTRY 2

A continuation of Chemistry, it deals more with the quantitative aspects of Chemistry. This course is designed for the student who plans to take further science courses at the college level. Individual lab oriented.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 11-12
- PREREQUISITES: Biology or Honors Biology, Recommended "B" average in Chemistry, completion of Algebra II with recommended "B" average.
- COST: Lab Notebook \$2

### SCI 315 AP CHEMISTRY

Advanced Placement (AP) Chemistry is the equivalent to a freshman college chemistry course with respect to the subject matter covered and the laboratory experiments performed. The course is designed to prepare students for the College Board Advanced Placement Exam. Through the teaching of the concepts and frequent problem solving activities the students

will have a better understanding of the application of chemistry. Laboratory work, writing skills, and practice AP exam questions will be stressed. Topics to be covered include: Structure of matter, States of matter; Stoichiometric relationships, Reactions; Descriptive Chemistry. There will be an emphasis on Equilibrium, Kinetics, and Thermodynamics. To promote the proper educational atmosphere necessary for this class, students should only sign up if they have a very serious intent to take the AP exam. A summer assignment is given.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 11-12
- PREREQUISITES: Students must have completed Chemistry, completed Algebra 2 with Trig. (recommendation of "B" or better in those courses)
- COSTS: Lab Notebook \$16

### SCI 319 PRACTICAL CHEMISTRY

This class deals with some general chemistry ideas and then goes on to deal with chemistry in the home, environmental chemistry, and the everyday use of chemistry. Labs are used to show these ideas.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 11-12
- PREREQUISITES: Intro to Physical Science or Survey of Physical Science, and Conceptual Biology or Biology

### SCI 329 INTEGRATED SCIENCE

Integrated Science encompasses earth science, ecology and anatomy. This class is designed to provide students with an understanding of earth's environment and the species found within it. You will study topics that will be applicable to everyday life as a citizen in southeast Wisconsin.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 11-12
- PREREQUISITES: Intro to Physical Science or Survey of Physical Science, and Conceptual Biology or Biology

### SCI 330 EARTH SCIENCE

Earth Science is a class designed to provide the student with an understanding of the nature of the earth's environment. How the forces of nature have changed the earth, and what effects Man has had on earth. Mapping, meteorology, astronomy, and geology will be studied, with

examples from Southeast Wisconsin used wherever possible.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 11&12
- PREREQUISITES: Survey of Physical Science, or Introduction to Physical Science, and Biology or Conceptual Biology.

### SCI 335

#### AP ENVIRONMENTAL SCIENCE

This is a challenging course designed to maximize student preparation for collegiate-level ecology courses. In this class, students will consider all aspects of environmental issues and will gain a deeper understanding of ecology, environmental protection, and the natural world. Through hands-on lab experiments and in-depth discussions, students will come to appreciate the threats that affect the environment and will better understand the actions that can be taken to protect the natural systems that make our lives possible.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 11-12
- PREREQUISITES: Biology and Algebra 2;

### SCI 340

#### ASTRONOMY

Astronomy is the study of the universe. Astronomy provides the student with a means of exploring one's place and role in the universe. This course will provide a detailed survey of the following areas: systems in space, the Earth's daily and annual motions, the Earth/moon system, the solar system, the sun, the stars and sunlight, the evolution of stars, space technology and the Earth's environment from space, the structure of the universe, and the various models regarding the evolution and origin of the universe. Emphasis will be placed on laboratory and observational activities that are integral to the course. Some of the required observational activities will occur at night. Conceptual as well as analytical methods of studying the sky and solar system will be presented.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 11 & 12
- PREREQUISITES: Introduction to Physical Science & Biology



### SCI 345

#### AP PHYSICS 1

AP Physics 1 outlines the material covered in a college level introductory physics course and gives students the proper tools to successfully

take the College Board AP Physics 1 exam. Students will be given a more detailed, algebra based, understanding of classical physics principles in motion, forces, and energy which form our understanding in modern technology. Students will also understand electrostatic forces, and electric energy including circuits.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 11-12
- PREREQUISITES: Physics or Teacher Recommendation, and Pre-Calculus

### SCI 350

#### MARINE BIOLOGY

Marine Biology is a semester course that will concentrate on the physical, chemical, geological and biological aspects of marine environments. After completing this course, students will have a basic understanding of the interrelationships that occur in the world's oceans. This will be a lab based course that will use various resources such as the internet, distance learning lab, and guest speakers to bring clarity to the mystery of the oceans.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 11-12
- PREREQUISITES: Biology or Life Science



### SCI 360

#### MEDICAL TERMINOLOGY

This course is an in-depth study of medical terminology conducted by a body system approach. Prefixes, suffixes and root words are covered. This course also provides an overview of human anatomy. This course will provide students with an introduction to concepts and terms used in a variety of health care professions.

- CREDIT: .75 high school; 3.0 college credits
- COURSE STATUS: Optional Dual Enrollment
- GRADE LEVEL: 11-12 with a cumulative gpa of 2.5
- PREREQUISITES: Recommended "B" average in Biology & Chemistry or Chemistry concurrently with a cumulative GPA of 2.5.

### SCI 400

#### BIOLOGY 2

This course is designed for seniors that have demonstrated high achievements in biology and chemistry. Students who elect to take this course are planning to take science courses at the college level. The first semester of this course will examine human anatomy and physiology. The second semester includes units on microbiology,

cellular energetics, genetics, biochemistry, and contemporary topics in biology. Also included in the second semester is an independent study unit where emphasis is placed on individual student research/investigation. This course will prepare students for higher education..

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 12
- PREREQUISITES: Recommended "B" average in Biology and Chemistry

### SCI 410

#### FORENSIC SCIENCE

Forensic Science is a course designed to give students experiences with the equipment and people involved in the investigation and prosecution of those found breaking the law. Forensic Science integrates scientific processes with the reading, reasoning, writing, and laboratory skills used in modern criminal investigations. From the first indications of a crime to the final stages of prosecution, the investigative, analytical, and communication skills of various occupations will be examined. Topics of study include functions of the forensic scientist, crime scenes, types of physical evidence, fiber analysis, drug identification, toxicology, arson investigations, fingerprinting, ballistic evidence, and handwriting and voice analysis. The course focus will be on problem solving, designing experiments, testing and making conclusions based on empirical evidence. Writing will be an integral part of the course with students being expected to communicate laboratory reports, results, conclusions and analyze case studies.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 11-12
- PREREQUISITES: Practical Chemistry/Chemistry-Recommended B or better in these classes
- COST: Criminal Science Workbook \$10; lab notebook \$2

### SCI 419

#### CONCEPTUAL PHYSICS

This course is designed to teach physics by concepts rather than by formulas. Topics covered will be motion, waves, electricity, magnetism, nuclear physics, heat, light, sound, optics and modern physics.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 12
- PREREQUISITES: Chemistry or Practical Chemistry and Algebra I or Elementary Algebra II (recommended "C" or better per course)
- COST: 2GB or more Flash Drive

## SOCIAL STUDIES

### SOC 100

#### MODERN U.S. HISTORY

Modern U.S. History is a continuation of the study of U.S. History, which was begun in the 8th grade. By dividing the study of U.S. History into two years, a greater amount of depth can be reached when studying each part of U.S. History. By spending more time on each topic, students will hopefully achieve a greater understanding of U. S. History. Modern U.S. History briefly reviews topics from 8th grade, and then focuses in more closely on topics beginning with the Progressive Era around the year 1900.

- CREDIT: 1.0
- COURSE STATUS: Required
- GRADE LEVEL: 9
- PREREQUISITES: None

### SOC 105

#### HONORS MODERN U.S. HISTORY

This course is for those freshmen who believe they are on the path to taking advanced placement courses in their future high school years. It is designed to provide greater challenges and more in-depth coverage of content which will help prepare these students for college-level material. More of an emphasis will be placed on analytical and writing skills. It is a continuation of the study of U.S. History begun in 8th grade, and thus begins following Reconstruction following the Civil War.

- CREDIT: 1.0
- COURSE STATUS: Elective (Those who take this course as a freshman are exempt from taking the required Modern U.S. History.)
- GRADE LEVEL: 9
- PREREQUISITE: Recommended minimum of a B average and teacher recommendations.

### SOC 120

#### WISCONSIN HISTORY

Wisconsin History is a one semester elective course designed to make students aware of their historical and cultural heritage and their rights and responsibilities as citizens of the State of Wisconsin. Emphasis is placed upon Wisconsin's history, geography, customs, traditions, laws, and government.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 9-12

**SOC 130  
GLOBAL ISSUES**

This is an elective course open to all students in grades 9-12. The course content will be covered in two different ways. First, it will provide a study of the following regions: Africa, Asia, Latin America, the Middle East, and Eastern Europe and Russia. This portion of the class will teach students about various areas of the world and explain how culture influences behaviors, attitudes, and life styles within them. It will also provide discussion of issues of importance to these regions and the underlying historical causes behind them. Second, the course will cover issues of importance throughout the world. Topics covered may include genocide, overpopulation and food shortage, disease epidemics like AIDS, terrorism, the globalization of the world economy, reliance on fossil fuels, global warming and other environmental issues, and the spread of nuclear weapons to more nations.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 9-12

**SOC 200  
MODERN WORLD HISTORY**

Modern World History is a survey course. The course focuses upon the events, concepts, and forces that shaped the world. The focus will be on topics beginning with the Industrial Revolution in Europe, and ending with a detailed study of the whole world today.

- CREDIT: 1.0
- COURSE STATUS: Required (Modern World History or AP World History)
- GRADE LEVEL: 10
- PREREQUISITES: None

**SOC 205  
AP WORLD HISTORY**

Advanced Placement World History is a course designed to prepare students for intermediate and advanced college courses by making demands upon them equivalent to those of a full year introductory course at the college level. Open to 10th grade students and above that have demonstrated a high level of interest in history courses as well as the ability to do above average work in the social sciences. To be eligible to receive college credit, the student must successfully pass the formal AP exam at the conclusion of the course. A fee is involved to take the exam. The test is not required to receive just high school credit. A summer reading project, due on the

first full class day, is a requirement to be accepted into the course. Due to the level of difficulty this course is graded on a 5.0 scale.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: Completion of Modern U.S. History with a recommended A average or successful completion of Honors Modern US History, and completion of the summer reading assignments

**SOC 300  
AMERICAN GOVERNMENT**

The intent of this course is to familiarize students with their federal, state and local governments. The organization of these governments is studied and the individual's rights and responsibilities relating to them are explored. A brief history of our government serves as an introduction to the course. Other political issues will also be examined.

- CREDIT: .5
- COURSE STATUS: Required (Am. Government AP US History, or AP Government)
- GRADE LEVEL: 11

**SOC 305  
AP GOVERNMENT**

AP Government will give students an analytical perspective on government and politics in the United States and the rest of the world. One semester will focus on U.S. government and politics, and the other semester will focus on Comparative government. There is a separate AP exam for each topic. Passage of either of these exams taken near the end of the course can lead to college credit. In studying these topics students will learn the general concepts related to each, as well as analyze specific examples. This course aims to illustrate the rich diversity of political life with its different institutions, different processes, and different policy outcomes. Due to the difficulty of the course, it is graded on a 5.0 scale.

- CREDIT: 1.0
- COURSE STATUS: Elective (Those who elect to take this course as a junior will be exempt from being required to take American Government during their junior year.)
- GRADE LEVEL: 11-12
- PREREQUISITES: Completion of Modern US History and Modern World History (or their AP or Honors equivalents) with a recommended A average (or B average in AP) and a summer assignment.

**SOC 315  
AP US HISTORY**

Advanced Placement U.S. History is a course designed to prepare students for intermediate and advanced college courses by making demands upon them equivalent to those of a full year introductory course at the college level. Open to 11th & 12th grade students that have demonstrated a high level of interest in history courses as well as the ability to do above average work in the social sciences. To be eligible to receive college credit, the student must successfully pass the formal AP exam at the conclusion of the course. A fee is involved to take the exam. The test is not required to receive just high school credit. A summer reading project, due on the first full class day, is a requirement to be accepted into the course. Due to the level of difficulty this course is graded on a 5.0 scale.

- CREDIT: 1.0
- COURSE STATUS: Elective (Those who elect to take this course as a junior will be exempt from being required to take American Government during their junior year.)
- GRADE LEVEL: 11-12
- PREREQUISITES: Completion of Modern World History or AP World History, and completion of the summer reading assignments.

**SOC 320  
PSYCHOLOGY**

The goal of this course is to increase the understanding of psychology, its methods, theory and research. The course will explore the psychological facts, principles, and phenomena associated with each of the major subfields of psychology. The course is broken down into 7 units listed below which reflect a division of the major areas of psychology. It is hoped that knowledge of psychological inquiry will provide perceptions of the world around us, insights into one's own and other's behavior, and an appreciation of the complexity of human behavior.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 11-12
- PREREQUISITES: None

**SOC 325  
AP PSYCHOLOGY**

AP Psychology is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice. Open to 11th and 12th

graders that have demonstrated a high level of interest in psychology, as well as the ability to do above average work in the social sciences. To be eligible to receive college credit, the student must successfully pass the formal AP exam at the conclusion of the course. A fee is involved to take the exam. The AP exam is not a required part of the high school course. Due to the level of difficulty of the course, it is graded on a 5.0 scale.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 11-12
- PREREQUISITES: None

**SOC 330  
CONTEMPORARY SOCIAL ISSUES**

This course is an introduction to the study of culture, social institutions, socialization, and social problems and issues relevant today. Aside from learning basics of sociology, students will do a great deal of discussing and writing about the topics that are covered. Specific topics for the course may change year to year as their importance may go up or down in relation to current events. Both sides of issues will be explored and presented.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 11-12

**SOC 340  
MILITARY HISTORY**

This course will entail an overview of the history of warfare and its influence on human history and human political, social, and cultural institutions. An emphasis would be placed on student driven learning thru individual and group research projects and classroom presentations. Topics will likely include changes in technology, conflicts and historical battles, propaganda, social and economic impact of conflict, and current regional conflicts.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 11-12
- PREREQUISITES: None

**SOC 410  
ECONOMICS**

This is an introductory course for the student who desires a more in-depth investigation of the theories and principles of economics. Emphasis is placed on economics terminology, supply and demand concepts, monetary and fiscal policy, and the relationship between government and the free enterprise market economy. Basic con-

cepts in personal financial literacy will also be covered. This class will help students prepare for college-level macro and micro-economics as well as their role as a consumer in the marketplace.

- CREDIT: .5
- COURSE STATUS: Required (AP Economics, Economics, or Consumer Economics)
- GRADE LEVEL: 12
- PREREQUISITES: Senior status and recommended "B" average in both Modern World History and Modern US History

### SOC 415 AP ECONOMICS

The purpose of the AP Economics course is to give students a thorough understanding of the principles of microeconomics and macroeconomics. Course work in macroeconomics provides understanding of the principles of economics that apply to an economic system as a whole. Such a course places emphasis on the study of national income and price determination, and also develops your familiarity with economic performance measures, economic growth, and international economics. Through the study of microeconomics, students will understand the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the larger economic system. It places emphasis on the nature and functions of product markets, and includes the study of factor markets and of the role of government in promoting greater efficiency and equity in the economy. To be eligible to receive college credit, the student must successfully pass the formal A.P. exam at the conclusion of the course. A fee is involved to take the exam. The A.P. exam is not a required part of the high school course. Due to the level of difficulty of the course, it is graded on a 5.0 scale.

- CREDIT: 1.0
- COURSE STATUS: Required (AP Economics, Economics, or Consumer Economics)
- GRADE LEVEL: 12
- PREREQUISITES: Senior status, and recommended "A or B" average in both Modern World History and Modern US History

### SOC 419 CONSUMER ECONOMICS

This course is designed to teach students to be intelligent consumers in a market economy. Em-

phasis is placed upon career planning, money management, money and financial institutions, credit and its wise use, savings and investment, consumer rights and responsibilities, housing, insurance, and taxation. Guest speakers may be utilized. The main emphasis of the course is practical application of economic principles.

- CREDIT: .5
- COURSE STATUS: Required (AP Economics, Economics, or Consumer Economics)
- GRADE LEVEL: 12
- PREREQUISITES: Senior status

## TECHNOLOGY & ENGINEERING EDUCATION

**\*\*All students in technology & engineering education lab classes are required to purchase and wear safety glasses available through our library (\$3 each). There also is a \$25 lab fee for each technical education class.\*\***

**Some Technology & Engineering Education classes may count for a student's 3rd year of math or science requirements (as denoted in the course description). Please see page 4 of the course description book for more information.**

### TEC 100 EXPLORING TECHNOLOGY

This is a semester course that is primarily for the freshman student. The aim of this class is to experience four areas of technology education offered here at WUHS. Students will study drafting, woodworking, construction, and engines/electricity. Students will learn the safe operation of hand tools and power equipment in each area as well as the proper methods for planning and producing projects. While in class, students will use teamwork and problem solving skills while participating in hands-on activities. A study of industry and business linked to each of the areas will complement the class activities and projects. This class offers an excellent opportunity for students to sample the technology education areas offered at Waterford Union High School.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 9-10
- PREREQUISITES: None
- COST: \$25 Lab fee

### TEC 110 SMALL ENGINES

This class is a combination of book work and shop work. The first half of the class will consist of theory as well as the disassembly and reassembly of a small Briggs & Stratton gasoline engine. The second half will also contain theory but will instead give students a chance to rebuild, maintain, or do tune ups on a small gas engine that the student provides. A willingness to learn and an enthusiastic attitude is essential in order to do well in this class. Tools and procedures used in industry will be explained and applied whenever applicable.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 9-12
- PREREQUISITES: None
- COST: \$25 Shop fee plus additional expenses for gasket sets, rings, seals, etc. ranging from \$10 to \$30.

### TEC 130 BASIC DRAFTING

Drafting is a universal graphical language, used in engineering, industry, business, sales, marketing, and many common career paths. Basic Drafting is a semester course that will develop a student's ability to interpret the ideas of others, while learning to express oneself in an understandable manner. Students enrolled in this course will develop sketching, drawing, designing, and problem-solving skills necessary in post-secondary education, as well as the workforce. The class is project-based, with a great deal of class time being devoted to the creation of drawings used for the manufacturing of parts or in home construction. An introduction to computer aided drafting (AutoCAD software) will be a focus, with students learning about orthographic projections, dimensioning, pictorials, and section views. The class will conclude with a brief introduction to Inventor, a 3D CAD solid modeling program.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 9-12
- PREREQUISITES: None
- COST: \$25 lab fee



### TEC 212 CreaTECH

This is a project-based course that will introduce students to the newest technology being used to complete creative projects. Through a variety of self-selected projects, students will learn how

to use the laser engraver, CNC Router, CNC Plasma, and 3-D printing technologies. Using a variety of materials and techniques common to creative projects, such as the miter saw, router, MIG welding, brazing, and CAD technology, students will be introduced to a few basic skills that will prove beneficial in their project work here, and in the future. Student experience with these new technologies, coupled with a base group of traditional processes that have been utilized for years, will prove to be a great complementary course to any artistic student's repertoire of usable skills, or any student looking to exercise that creative drive in a professional manner. This is the perfect fit for that student with the tight schedule in search of a creative release. Enroll, and experience the class where art meets the 21st century. No prior knowledge, experience, or prerequisites. Come be creative!

CREDIT: .5  
COURSE STATUS : Elective  
GRADE LEVEL: 10 - 12  
PREREQUISITES: None

COST: \$25 lab fee (plus the cost of project materials which vary by student)

### TEC 235 ADVANCED DRAFTING W/CAD

Advanced Drafting with CAD builds upon the skills learned in Basic Drafting, and takes them to the next level. The course will be split between work in Inventor, a 3D solid modeling program, and Revit, a 3D architectural BIM program. Students will receive experience in the mechanical drafting areas of auxiliary views, advanced section views, threads and fasteners, and advanced 3D modeling concepts. Using Revit, students will learn the basics of home design and planning, including room planning & design and structural & foundation systems in both residential and commercial structures. The course will conclude with a significant project, which will be differentiated based upon the interest of each individual student, in either the mechanical or architectural areas of interest.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: Basic Drafting
- COST: Lab fee - \$25

### TEC 250 INTRO TO WOODS

This is an exploratory class in woodworking covering both hand tools, machines, and general techniques. Emphasis is placed on safety, workmanship, organization, planning, and solving problems. This is very much a hands-on class

that is not just for those students headed towards a cabinetmaking or carpentry career. A class for those having little or no experience with wood, but who would like to give it a try. You may be surprised at how talented you really are. With a little polish, you could be the “diamond in the rough”. The laser engraver and CNC router will be introduced as viable tools for project completion. Projects will range from required to self-selected. Materials used must be paid for by the students which could be up to \$40.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: None
- COST: Lab fee \$25

### TEC 260 INTRO TO METALS

This course provides students with an introduction to the properties of industrial material, production of standard stock, and the transformation of standard stock into finished products. The content is presented through activity-based methodologies. The goal is to provide a broad picture of materials and processes through hands on experience, lecture, and demonstration. Materials used must be paid for by the students which could be up to \$40.

- CREDIT: .5 (GATEWAY CREDIT - IF AP-PROVED)
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: None
- COST: Lab fee - \$25; Safety glasses - \$3;

### TEC 310 AUTO MECHANICS: SURVIVAL AUTO MECHANICS FOR EVERYONE

This is a semester course that will provide students with a good basic understanding of the operation and maintenance of systems in a modern automobile. Students will learn how various systems of a modern automobile operate together, and if they are not all functioning properly they will affect the overall operation of the vehicle. Students will also learn about automotive terminology, tools, safety, and careers. The course is intended to develop student un-

derstanding of their automobiles and how to be an efficient consumer when it comes to owning and operating an automobile today.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 11-12
- PREREQUISITES: None
- COST: \$25 shop fee

### TEC 330 HOME 2: CONSTRUCTION

This course is designed to continue in the Home Maintenance series, picking up, and moving forward with the skills learned in the first HOME class. Students will receive basic instruction for career paths in the various fields of architecture, engineering, carpentry, interior design, and electricity, to name a few. This is an overview course that touches on design styles, reading blueprints, framing, many areas of carpentry and the related trades, with labs focusing on masonry, electrical wiring, tile, and roofing. The class content is organized to be primarily a hands-on environment, with a good mix of demonstration and practical applications. Project work in the first half of the class stresses light construction technique and is premised around the design and construction of a scale, “stick” model house, designed and built in groups of two or three. This has historically been a student favorite! Application in the 2nd half begins with full size framing, electrical, tile, and masonry labs, culminating with a real-world project in the community. Students generally build some form of shed, garage, or other structure as a means to practice skills learned throughout the course. Time will be spent working both in the lab and at the job site to complete project work. If you intend to take up a career somehow related to residential architecture, or the trades, or even if you plan to own a home, this class is for you.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 11-12
- PREREQUISITES: Suggested prior enrollment in H.O.M.E. course
- COST: \$25 lab fee

### TEC 340 H.O.M.E: Home Owner’s Maintenance for Everyone

H.O.M.E. is designed to aid the future homeowner. That’s YOU!! This course supplies information to any home dweller or even those maintaining an apartment. It is a lab-based,

hands-on, activity rich class that will give students the opportunity to try some “around the house” jobs that arise when living in any dwelling. No stress; no homework; no skills required, but be ready to get involved. Try it here, when it doesn’t cost you anything, and save hundreds or thousands of dollars later on your own home. Male or Female, the importance of this class should not be undervalued. Imagine the money you can save if you can fix that hole in the wall yourself, or replace that lockset or door knob. How about painting or texturing a room, troubleshooting plumbing, or installing a new door? We’ll tackle simple and moderate jobs well within the capabilities of the high school student or the average homeowner, and “size-up” jobs to determine whether to do it yourself or contract to have it done.

- CREDIT: .5
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: None
- COST: Lab fee \$25

### TEC 350 WOODWORKING 1

Basically a course in lab work working almost entirely on machines. It is recommended (not required) that all students have some prior knowledge and experience in this area, usually attained through enrollment in Intro to Woods. Safe and proper operation of machines is stressed by demonstrations and safety tests on all equipment used. Many areas of furniture type construction are covered. Three projects will be completed in a semester’s time. Project variation is encouraged, normally with some guidelines as to specifications. This is a two-period, semester block class, which allows for more efficient use of class work time. All materials used in this class must be paid for by the student, generally ranging from \$50 to \$150 per semester. Get up, move around, have fun, and learn something in the process.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 11-12 (10 with instructor consent)
- PREREQUISITES: Recommended to take Introduction to Woods
- COST: Lab fee - \$25

### TEC 360 METALS 1

#### METALWORKING & MANUFACTURING

This course provides students with a continued advancement of their overall metalworking skills. The student will work in the basic areas of metalworking: machining, welding, foundry, sheet metal, as well as other manufacturing processes. Students will be introduced to more operations and advancement on machines and projects. Welding processes covered in the course include oxyacetylene, SMAW, and GMAW. Students will be required to become efficient in the various welding processes, and may have an opportunity to build a project requiring welding processes and fabrication. The content of the course is presented through lecture, hands on applications, and demonstration. This is a two-period, semester block class, which allows for more efficient use of class work time.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 11-12 (10 with instructor approval)
- PREREQUISITES: Recommended to take Intro to Metals, and Basic Drafting
- COST: Lab fee - \$25;
- PROJECT COST: \$5-\$100 (costs will vary per each individual student)

### TEC 410 AUTOMOTIVE TECHNOLOGY

This is an advanced automotive course for the students interested in enhancing knowledge in automotive technology. It will emphasize all of the automotive systems and the need for maintaining the vehicle to assure top performance. Students will gain hands on experience as well as learn the theory and operation of all of the automobile systems. In order to take this class students must have a strong interest in automotive servicing, be of senior status and have passed “Safe Auto Mechanics” with at least a C-. This is a 2 period, semester block class. This will allow for more efficient use of class work time. Materials and parts needed to service automobiles will be at the student’s expense.

- PREREQUISITES: Safe Auto Mechanics with a recommended grade of at least a C-
- COST: \$25 shop fee
- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 12
- PREREQUISITES: Safe Auto Mechanics with a recommended grade of at least a C-



### TEC 450 WOODWORKING 2

This is an advanced class for those who have proven themselves to be serious and capable of advanced learning in woodworking techniques and problem solving. The first half is spent on skills mastery, enhancing cabinetmaking skills and techniques in preparation for an advanced cabinet project. The second half is spent on custom cabinetry, in the design and construction of a student-selected major project. The "sky is the limit" with this project. Gun cabinets, roll top desks, grandfather clocks, computer work stations, beds, poker tables, and other various types of furniture have historically been common for this final exhibition of excellence. Less expensive projects fit here as well, depending on your budget. The building of cabinets or furniture to specifications will be stressed. First quarter project costs generally range from \$20 to \$50. Second quarter project costs vary by student, wood species, and complexity of the project. **This is a two-period, semester block class**, which allows for more efficient use of class work time.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 12 (11 with instructor consent)
- PREREQUISITES: Recommended "C" or better grade in Woods 1 and/or consent of instructor
- COST: Lab fee - \$25

### TEC 460 METALS 2 ADVANCED METAL WORKING & CAREERS

This course is for students who have proven themselves in Metals I and are serious in continuing and improving upon their metalworking skills, and also have an interest in a possible metalworking career. Students will continue to improve upon their metalworking skills by working in the five metalworking areas: welding, machining, sheet metal, forging, and foundry. The major emphasis in the course will be in the welding and machining areas. Students are expected to be able to plan and build a welding project utilizing basic welding skills developed in the Intro and Metals 1 courses. Metalworking careers will also be covered with visitation

to metalworking facilities. The content of the course will be through lecture, and hands on applications. **This is a two-period, semester block class**, which allows for more efficient use of class work time.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 12 (11 with instructor consent)
- PREREQUISITES: Metals 1 - a recommended minimum grade of "C-" or consent of instructor
- COST: Lab fee - \$25; Safety glasses - \$3;
- PROJECT COST: \$5-\$100 (costs will vary per each individual student)



### TEC 490 WOLVERINE WORKS

This capstone course has been designed as a paid co-op experience serving both the students, as real job experiences, and the community, providing a cost-effective service to complete custom jobs that exist in a wide range of categories. Students will operate a student-run business out of the high school's Technology & Engineering Department, focusing on all aspects of today's manufacturing industry. Students will draw on skills learned in any previous T&EE courses sequences, as they work to complete tasks brought in for consideration by customers. The students will be responsible for product development & engineering, quoting jobs, ordering material, manufacturing individual parts and complete products, quality control, shipping & receiving, customer service, keeping track of hours, and accounting...virtually all aspects of running a business. The Wolverine Works program will generate funds to help further our T&EE department, but will also pay a percentage of the profits back to the students for their efforts.

This is a semester-long, two-period course that allows for a bit of flexible scheduling. All enrolled students will be scheduled in a common class period daily, but will then be able to schedule the second period in an available slot. Students would also be able to make use of before school, after school, and study hall time to complete project work, with hours worked being a part of the student pay formula. Note: Course could be taken in consecutive semesters depending on student interest. Students that

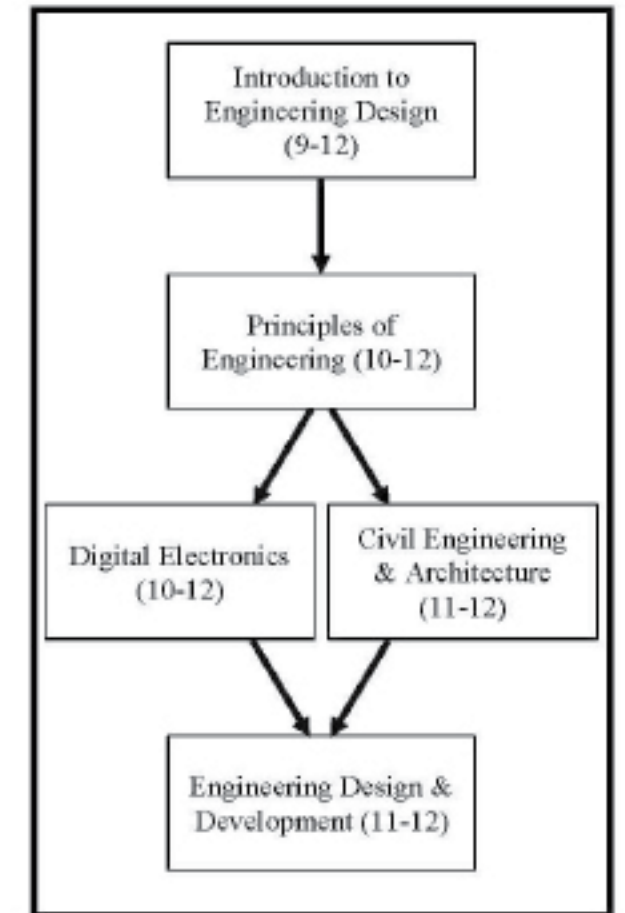
register for this class must fill out an application and interview for acceptance into the course.  
CREDIT: 1.0 (with profit sharing [\$])  
COURSE STATUS : Elective  
GRADE LEVEL: 12  
PREREQUISITES: Successful completion of at least two 200 level courses, or one 300 or 400 level T&EE course (automotive courses do not qualify). An interview process will be used to determine if a student would benefit from the program, and has the required skills aptitude.  
COST: \$25 lab fee



The Technology & Engineering Department is excited to offer an assortment of Project Lead the Way (PLTW) classes, which are rigorous, college-level courses meant for highly motivated students interested in Engineering and Design. PLTW Engineering is about applying engineering, science, math, and technology through a project-based, hands-on approach to solve complex, open-ended problems in a real-world context. Students focus on the process of defining and solving a problem, not on getting the "right" answer. They learn how to apply STEM knowledge, skills, and habits of mind to make the world a better place through innovation.

**Students are able to earn college credit for many PLTW courses--ask for more details.**

**Although some courses may be taken independently, the recommended pathway is as follows:**



### TEC 150 INTRODUCTION TO ENGINEERING DESIGN (PLTW)

In this course, students learn about the design process through a variety of large projects. A significant portion of the class is spent learning the basics and then developing advanced skills in Inventor, a 3D CAD solid modeling design software used to help design solutions to solve proposed problems. After completing this course, students will be prepared to design very complex parts in Inventor, and utilize this important program for engineers as a tool in their postsecondary education. Students will learn how to document their work and communicate solutions to peers and members of the professional community. A focus of this course is to expose students to the design

process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards and technical documentation.

- CREDIT: 1
- COURSE STATUS: Elective
- GRADE LEVEL: 9-12
- PREREQUISITES: Algebra 1
- COST: \$25 Lab fee

### TEC 270

#### PRINCIPLES OF ENGINEERING (PLTW)

This survey course of engineering exposes students to some of the major concepts they will encounter in a postsecondary engineering course of study. Students will be exposed to a number of different areas related to engineering, including statics, thermodynamics, electronics, fluid power, robotics, and programming. Robotic systems will be utilized to help employ engineering and scientific concepts in the solution of many significant engineering design problems. Students develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges. Students also learn how to document their work and communicate their solutions to peers and members of the professional community.

- CREDIT: 1 (could also be a science elective credit)
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: Algebra 1; IED (TEC 150) recommended
- COST: \$25 Lab fee

### TEC 380

#### DIGITAL ELECTRONICS (PLTW)

This course is the study of electronic circuits that are used to process and control digital signals. Digital electronics is the foundation of all modern electronic devices such as cellular phones, MP3 players, laptop computers, digital cameras, and high-definition televisions. The major focus of this course is to expose students to the design process of circuit design through combinational and sequential logic design, teamwork, communi-

cation methods, engineering standards, and technical documentation.

- CREDIT: 1 (could also be a math elective credit)
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITES: POE (TEC 270);
- COST: \$25 Lab fee

### TEC 390

#### CIVIL ENGINEERING & ARCHITECTURE (PLTW)

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 from structural analysis to storm water management and soil analysis, 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 for 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 Revit, a 3D architectural BIM design program 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.

- CREDIT: 1
- COURSE STATUS: Elective
- GRADE LEVEL: 11-12
- PREREQUISITES: POE (TEC 270); IED (TEC 150) recommended
- COST: \$25 Lab fee

### TEC 420

#### ENGINEERING DESIGN & DEVELOPMENT (PLTW)

This capstone course allows students to design a solution to a technical problem of their choosing. They have the chance to eliminate

one of the "Don't you hate it when..." statements of the world. This is an engineering research course in which students will work in teams to research, design, test, and construct a solution to an open-ended engineering problem. The product development life cycle and a design process are used to guide and help the team to reach a solution to the problem. The team presents and defends their solution to a panel of outside reviewers at the conclusion of the course. The EDD course allows students to apply all the skills and knowledge learned in previous Project Lead the Way courses. The use of 3D design software helps students design solutions to the problem their team has chosen. This course also engages students in time management and teamwork skills, a valuable asset to students in the future.

- CREDIT: 1
- COURSE STATUS: Elective
- GRADE LEVEL: 11-12
- PREREQUISITES: IED (TEC 150) and POE (TEC 270); DE (TEC 380)
- COST: \$25 Lab

## WORLD LANGUAGES

EARN FREE COLLEGE CREDITS for each level of World Language completed in High School. See instructor for details.

### WLA 110 SPANISH I

The student is introduced to the Spanish language through basic vocabulary and grammar. Practice is given in all aspects of the language: listening, reading, speaking, and writing.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 9 - 12
- PREREQUISITES: None
- COST: Binder \$10

### WLA 120 FRENCH I

Speaking and listening are emphasized in French I. The student gets much oral practice, builds a vocabulary and begins to write in French. Units include meeting/greeting others,

restaurants, describing self and others, home/family, and shopping.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 9 - 12
- PREREQUISITES: None
- COST: Workbook \$15

### WLA 210 SPANISH II

Spanish II is a continued development of speaking, reading, writing, and listening skills. There is also a greater emphasis on vocabulary expansion and cultural topics.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 9 - 12
- PREREQUISITES: Spanish I (Recommended grade of C)
- COST: Binder \$10

### WLA 220 FRENCH II

French II continues the speaking and listening practice begun in French I. More written practice is included. The introduction to French culture started in French I continues.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 9 - 12
- PREREQUISITES: French I or French in grades 7 & 8 (Recommended grade of C in previous levels)
- COST: Workbook \$15

### WLA 310 SPANISH III

This course is a continued, intensive development of speaking, writing, listening and reading skills with a greater emphasis on increased development of grammatical and communicative skills in preparation for advancement into the higher levels.

- CREDIT: 1.0
- GRADE LEVEL: 10 - 12
- PREREQUISITES: Spanish II (Recommended grade of C)
- COST: Binder \$10

### WLA 320 FRENCH III

The main goal is to increase knowledge of French culture and literature. Composition work continues. Short stories, an extensive unit on art and continued grammar work are also included.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 10 - 12
- PREREQUISITES: French II (Recommended grade of C)

**WLA 410  
SPANISH IV**

This course prepares the student for intensive grammar study and further development of communicative skills. Authentic materials are used to introduce vocabulary and grammar such as videos, music, and graded Spanish texts.

- CREDIT: 1.0
- GRADE LEVEL: 10 - 12
- PREREQUISITES: Spanish III (Recommended grade of C)
- COST: Workbook \$16



**WLA 420  
FRENCH IV**

French IV includes an intensive grammar review, a novel, and film study. High school juniors or seniors who meet at least one of these three requirements are eligible to enroll in PIE courses offered at WUHS.

- You are in the upper 25 percent of your class – or
- You have a GPA of at least 3.25 on a 4.0 scale – or
- You have an ACT score of 24 and are in the upper 50 percent of your class

**Students who enroll in a PIE course can earn three college credits (per course) upon achieving a minimum grade of C. Students who wish to seek credit are responsible for paying the University of Wisconsin Whitewater tuition at the 2017-2018, PIE 3 credit tuition rate. Upon successful completion of the class, students will be reimbursed half the tuition cost.**

- CREDIT: 1.0
- COURSE STATUS: Optional Dual Enrollment (pending number of students enrolled)
- GRADE LEVEL: 11 - 12
- PREREQUISITES: French III (Recommended grade of C)
- COST: Workbook \$15

**WLA 425  
AP SPANISH**

This course completes the sequence of the Spanish Language Program and offers an alternative to the regular sequence for the gifted student. Basic Spanish literature is introduced and prepares the student for the Spanish AP exam which is optional.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 12
- PREREQUISITES: Spanish IV (Recommended grade of B and teacher recommendation.)
- COST: Textbook \$32

## OTHER ELECTIVES

**YRB 200**

**YEARBOOK/NEWSPAPER PUBLICATION**

Yearbook/Newspaper provides fast paced, real world publishing experience to the students by creating Waterford Union High School's yearbook, *The Emerald*, as well as the school newspaper *The Emerald Express*. Students create page layouts for a variety of school clubs, classes, activities and organizations. Individual pages are created through Jostens Yearbook Avenue software. Jostens Publishing provides templates that help make pages easier to execute. Digital photography is introduced and basic photographic techniques are discussed to help create exciting and memorable images to help "tell the story" of the school year. Additional computer programs are also used to edit and finalize the book. Students develop creative writing techniques through information gathering, interviews and reporting on the happenings of the school as well as writing captions for the photographs. The *Emerald Express* offers much of the same, with a very entertaining yet informative 2<sup>nd</sup> semester newspaper.

- CREDIT: 1.0
- COURSE STATUS: Elective
- GRADE LEVEL: 10-12
- PREREQUISITE: It is suggested that students have had at least one computer course and have satisfactory writing skills. Suggested computer courses are (but are not limited to) Digital Media and Computers for Professionals.

**ACT 300  
ACT PREP COURSE**

The ACT test is a national test that measures a student's college readiness. This course will help students improve their general test-taking skills. The course will provide an introduction/review to the standards taught on the ACT test. In addition, strategies, tips, time-management techniques, practice and study materials will be reviewed. This course will run 2<sup>nd</sup> quarter allowing students to take this class before the ACT in the spring of their junior year.

- CREDIT: .25; Pass/Fail grade
- COURSE STATUS: Elective
- GRADE LEVEL: 11
- PREREQUISITE: None

## COURSES OFFERED THROUGH GTC - VANGUARD NETWORK

The following courses are offered through the long distance learning center. These classes are taught through interactive TV which means the instructor may be at another site. If offsite, the student and instructor view each other on television screens and communicate using microphones.

**These classes may have additional policies. Dual Enrollment classes may be subject to different grading scales, including passing marks. Students may also be required to reimburse WUHS tuition for a class if the student does not earn a passing mark in the course (in accordance with the College's grading policy).**

**DSL 201  
AMERICAN SIGN LANGUAGE 1**

This is an introductory year long course for the individual who has no previous experience with sign language. The course emphasis is on basic signing skills.

- CREDIT: 1.0 high school; 4.0 college credits
- GRADE LEVEL: 10-12
- PREREQUISITES: 3.0 cumulative GPA or administrative approval

**DSL 213  
MANDARIN CHINESE 1**

This year long course is a basic study of the Chinese language. Students will learn comprehensive skills in listening, speaking, reading, writing, translating and typing Chinese characters on the computer. Cultural awareness is promoted through readings, videos, food and projects. A textbook, workbook, and dictionary will be required for this course.

- CREDIT: 1.0
- GRADE LEVEL: 10-12
- PREREQUISITES: 3.0 cumulative GPA or administrative approval

**DSL 300  
COLLEGE LEVEL PSYCHOLOGY**

This course introduces students to some of the major theories and topics of psychology including the physiological basis of behavior, personality and learning theories, memory, state of

consciousness, stresses, research methods, intelligence, human development, psychopathology and social behavior.

- CREDIT: 0.75 high school; 3.0 college credits
- GRADE LEVEL: 11-12
- PREREQUISITES: 3.0 cumulative GPA or administrative approval

**DSL 301  
COLLEGE LEVEL DEVELOPMENTAL  
PSYCHOLOGY**

A developmental psychology course which examines human social, emotional, intellectual and physical development from birth until death.

- CREDIT: 0.75 high school; 3.0 college credits
- GRADE LEVEL: 11-12
- PREREQUISITES: College Level Psychology, AP Psychology & 3.0 cumulative GPA or administrative approval

**DSL 302  
COLLEGE LEVEL SOCIOLOGY**

This course examines interpersonal relationships of humans and groups and the consequent structure of society. It details the various social processes and concepts which shape human behavior, analyzing such phenomena as organizations, deviance, race and ethnic relations, population, urbanization, social change, and the family are studied.

- CREDIT: .75 high school; 3.0 college credits
- GRADE LEVEL: 11-12
- PREREQUISITES: 3.0 cumulative GPA or administrative approval

**DSL 330  
INTRO PROGRAMMING & DATABASE**

This semester class will introduce students to the structures, logic, and controls of programming techniques and database applications. Students will be able to develop a program that will utilize a database.

- CREDIT: 1.0 high school; 4.0 college credits
- GRADE LEVEL: 10-12
- PREREQUISITES: 3.0 cumulative GPA or administrative approval

**YOP 307  
EMERGENCY MEDICAL TECHNICIAN**

The EMT diploma program includes 180 hours (144 face to face) of entry-level training in emergency medicine. Students develop skills and knowledge needed to assess and manage all

types of injuries and acute illnesses while providing safe and rapid transport to a medical facility. EMTs can drive an ambulance, open and maintain a patient's airway, ventilate patients, perform CPR and other basic lifesaving skills. Completion of the program will allow the individual to test and credential through the National Registry of EMTs. The course uses a combination of lecture, lab (hands on), and alternative learning methods in addition to performance of actual Emergency Department hospital training.

- CREDIT: 1.25 high school; 5.00 college credits
- GRADE LEVEL: 12
- PREREQUISITES: 3.0 cumulative GPA or administrative approval

### OTHER PROGRAMS OFFERED AT WATERFORD UNION HIGH SCHOOL

#### GPS EDUCATION PARTNERS

The GPS Education Partners program is designed to jump-start technical careers through individualized training and real-world application. Students who participate in the GPS program benefit from a change in school environment and enjoy a more hands-on, fully immersive educational experience, located within a manufacturing setting. Students experience a comprehensive curriculum and a paid youth apprenticeship at a local business that is safe, structured, and managed by a business mentor. Upon completion of the GPS program, students earn their full high school diploma and industry certifications. They also have the opportunity to earn college credits. In addition, students develop character, leadership and employability skills through their experiences in the classroom, on the work floor and performing service learning. Graduates of the GPS program are prepared to begin a technical career as well as a post-secondary degree. Students interested in exploring GPS Education Partners should contact their counselor or GPS Education Partners enrollment office at [enrollmentoffice@gpsed.org](mailto:enrollmentoffice@gpsed.org) for more information.

#### ADULT HIGH SCHOOL PROGRAM

Waterford Union High School partners with Gateway Technical College to offer an Adult High School diploma for students who find themselves credit deficient as they approach their graduation date. These students must take at least one Adult High School class from Gateway Technical College. The Adult High School diploma requires fewer elective

credits than a WUHS diploma (total of 17 credits for graduation). Adult High School graduates may not walk in the Waterford Union High School graduation ceremony. Students who graduate with an Adult High School diploma are invited to attend a Gateway Technical College graduation ceremony at the completion of their requirements for graduation. Interested students should contact their WUHS school counselor for more information.

#### ALTERNATIVE HIGH SCHOOL PROGRAM

Waterford Union High School partners with Burlington High School to offer the Southern Lakes Alternative High School to WUHS students who may benefit from an alternative setting to complete their high school career. Students who attend Southern Lakes Alternative High School do so on a shortened schedule. The SLAHS provides a quality education through the use of technology, broad-based curricula, diverse teaching strategies, community involvement and varied performance assessments of student achievement.

Students graduate with a diploma from Southern Lakes Alternative High School and attend a graduation ceremony for SLAHS students. Interested students should contact their WUHS school counselor for more information.

#### OTHER EDUCATIONAL OPTIONS

**Odyssey - Online Courses** - Waterford High School now has online courses available for credit recovery during the summer or school year. Most required classes are available for credit recovery. Contact your guidance counselor or if you have failed a course and are interested in making up that credit using an online course.

**Alternative Placements - Special Education and At Risk** - Waterford Union High School offers off-site/alternative placements to special education students when deemed necessary by the student's individual education planning team.

**CNC Boot Camp** - The High School CNC Boot Camp is the first step toward a career as a CNC computer programmer, plant manager, laser cutting machine operator, robotics machine operator or machine maintenance technician. This program is offered to students who are at least 17 years old and enrolled in their senior year of high school. CNC Boot Camp is a funded program and may not be available every year.

## HOW TO EXPLORE CAREERS AND COLLEGES ON LINE

#### Career Cruising

(username and password available in Student Services)

<http://public.careercruising.com/us/en>

#### ACT Profile

<http://act.org/profile/>

#### College & Career Ready

<http://www.collegeandcareerready.org/>

#### University of Wisconsin Schools

<http://uwhelp.wisconsin.edu/>

#### Wisconsin Technical Colleges

<http://www.wtcsystem.edu/>

#### Wisconsin Private Colleges & Universities

<http://www.wisconsinprivatecolleges.org/>

#### College Navigator

<http://nces.ed.gov/collegenavigator/>

#### College Portraits

<http://www.collegeportraits.org/>

#### Know How 2 Go Wisconsin

<http://knowhow2gowisconsin.org/>

#### Wisconsin Career Pathways

<https://www.wicareerpathways.org/>

#### Exploring Military

[www.militarycareers.com](http://www.militarycareers.com)

#### Exploring Apprenticeships

[www.milwbuildingtrades.org](http://www.milwbuildingtrades.org)  
[www.dwd.state.wi.us/apprenticeship](http://www.dwd.state.wi.us/apprenticeship)

#### Scheduling a UW College Visit

Go to the following website: [www.uwhelp.wisconsin.edu](http://www.uwhelp.wisconsin.edu)

Click "STUDENTS"

Click "FRESHMAN"

Click "Campus Tours"

