



2015-16



## LETTER FROM THE PRINCIPAL

Dear VAHS Parents and Guardians:

Welcome to the 2015-16 Course Prospectus for Verona Area High School. Within this publication you will find pertinent information regarding the credit and course requirements for earning a VAHS diploma. Please make sure you take time to read through the introductory pages so that you have a clear sense of what will be expected each year as your child earns credits toward their diploma. When determining course selection it is important to consider your child's career pathway, abilities, and interests. You can also access this document on-line when you enter our web site ([www.verona.k12.wi.us](http://www.verona.k12.wi.us)), click on high school, then academics and then the Course Prospectus and Applications button.

You and your child's reflection and decision-making in the coming weeks will not only help shape their schedule for next year, but it will significantly impact our decisions regarding staffing, resources, and budget allocation. The courses your child indicates they wish to take drive our fiscal process and help shape the schedule, teacher assignments, and material requisitions. We make every effort to offer sections as per requests, but there will be conflicts. Financial constraint has forced us to reduce the number of courses we can offer in a given term. This means the selection of alternate courses takes on greater weight each year. Each student **must** select four alternate courses. Students should select carefully and base their selection on the reality that it is likely they may be in one, or more, of the alternate courses they choose. We also ask that you and your child determine the need for a study hall. Each year we find increasing numbers of students who choose to take seven courses and then need to drop to add a study hall. Consider the overall schedule of your child and include activities, family time, study needs, and work as you and your child make a decision about a study hall.

In order to help students plan their schedules, students will have several opportunities to learn about the courses available at VAHS. They will be participating in a series of homerooms, during which department videos will be broadcast to explain the courses they offer. These videos are also available on the VAHS website. Students will have worksheets available to them during these homeroom sessions to take notes, highlight courses of interest, and track any questions they have. In addition, students will also be working on a 4-year plan as they look in more detail at high school and college entrance requirements. Students and families, grades 9-12, are also invited to the Course Information Fair to hear more about individual course offerings, ask questions of teachers, and get help from counselors in planning schedules. Students are also welcome to schedule an appointment with their counselor at any point in this process, to discuss course selections and/or 4-year plans further.

Counselors are also hosting Individual Planning Conferences for all freshmen in the fall of each school year, as well as for all juniors in the spring semester of each school year. While these conferences are not focused specifically on scheduling, it is often a part of the conversation.

The scheduling process is one of the most integral activities you can engage in with your child to help shape their learning experience here at Verona Area High School. Take time to discuss options with your child, your grade level counselor, and our teaching staff. Sound choices will provide a strong foundation and concrete path for academic success.

Sincerely,

*Pam Hammen*  
Principal

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## SCHEDULING PROCESS

Verona Area High School counselors support VAHS students to ensure that the students' course requests fulfill scheduling requirements, meet course prerequisites, and are appropriate for the student's post-secondary plan. Course enrollments impact recruitment and assignment of staff, as well as the purchasing of supplies and materials. Due to these facts, it is necessary to establish formal scheduling deadlines and procedures.

### Scheduling Calendar

January/February – Students receive scheduling information, learn detailed information about course offerings, and select courses for the following academic year.

August – Students receive a copy of their schedule.

### Schedule Adjustments

All schedule adjustments must be made with the student's grade-level counselor and may require administrative approval. Space in courses is limited, and schedule adjustments may only be considered if space is available. Adjustments are not typically allowed after the first three days of the semester and usually only for purposes of remediation or to meet graduation and admission requirements. Students who request a schedule change after three days of the semester have passed will be dropped with an "F" (Fail) or a "W" (Withdrawal) depending on the circumstances and reasons for the schedule change.

## VAHS COUNSELORS

Mindy Breunig

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## YAHS GRADUATION REQUIREMENTS

The Board of Education has established that a graduation diploma from Verona Area High School will be awarded to any student who satisfactorily completes the required credits, including the following:

<b>Class of 2016</b>	<b>Class of 2017, 2018, 2019</b>
<b>4.0 English Including:</b> 1.0 - English 9 1.0 - English 10 or 1.0 – AP Lang. & Comp. 1.0 - English 11 <b>or</b> 1.0 - AP Lang. & Comp. 1.0 – Additional English elective(s)	<b>4.0 English Including:</b> 1.0 - English 9 1.0 - English 10 or 1.0 – AP Lang. & Comp. 1.0 - English 11 <b>or</b> 1.0 - AP Lang. & Comp. 1.0 – Additional English elective(s)
<b>3.0 Social Studies Including:</b> 1.0 - U.S. History 1.0 - World Studies 1.0 - Social Studies Elective(s)	<b>3.0 Social Studies Including:</b> 1.0 - U.S. History 1.0 - World Studies 1.0 - Social Studies Elective(s)
<b>2.0 Science Including:</b> 1.0 - Physical Science Class 1.0 - Life Science Class	<b>3.0 Science Including:</b>
<b>2.0 Mathematics</b>	<b>3.0 Mathematics</b>
<b>1.5 Physical Education</b> (.5 must be in Physical Education 9)	<b>1.5 Physical Education</b> (.5 must be in Physical Education 9)
<b>0.5 Health Education</b>	<b>0.5 Health Education</b>
<b>9.5 Additional Credits</b>	<b>8.5 Additional Credits</b>
<b>22.5 CREDITS REQUIRED FOR GRADUATION</b>	<b>23.5 CREDITS REQUIRED FOR GRADUATION</b>

\*\*Students are eligible to participate in Commencement exercises upon completion of graduation requirement credits. Students must have earned all of the necessary 22.5 credits to participate. Additional requirements apply (attendance, disciplinary record, etc.)

### **GRADUATION REQUIREMENTS FOR STUDENTS WITH DISABILITIES**

- A. Successful completion of educational goals as outlined in the Individual Education Plan (IEP) formulated by the student's IEP team.
- B. Each unit or term of work will be assigned a corresponding credit value in keeping with the current credit system.
- C. The number of credits required for graduation will be the same as is required for graduation of a student in a regular program.

## MINIMUM ENROLLMENT REQUIREMENTS

The Board of Education of the Verona Area School District has established minimum requirements for scheduling each student by grade. All students will typically schedule the following:

### Grade 9

#### **6-7 CREDITS**

- 1.0 English 9
- 1.0 U.S. History
- 1.0 Math
- 1.0 Biology (Life Science)
- .5 Physical Education 9
- 1.5-2.5 credits in additional courses

All 9th graders are encouraged to enroll in a study hall each semester. No more than 1 study hall period per semester is routinely allowed.

### GRADE 10

#### **6-7 CREDITS**

- 1.0 English 10 or AP Language & Composition
- 1.0 Math
- 1.0 Science (Physical Science)
- 1.0 World Studies
- .5 Physical Education
- 1.5-2.5 credits in additional courses

No more than 1 study hall period per semester is allowed.

### GRADE 11

#### **6-7 CREDITS**

- 1.0 English 11 **or** 1.0 AP English Language & Composition or AP Literature & Composition
- 1.0 Social Studies (can be taken Junior or Senior year)
- 1.0 Math
- 1.0 Science
- .5 Physical Education
- .5 Health
- 1-2 Additional Credits

No more than 1 study hall period per semester is allowed unless a student is in an approved work experience/co-op/release program.

### GRADE 12

#### **5.5-7 CREDITS,**

- 1.0 English electives
- 4.5-6.0 Additional credits or core credits needed to fulfill graduation requirements.

Senior Release can be selected either 1st or 7th hour along with one study hall for one semester only, depending on the student's credit status.

## **EARLY GRADUATION**

Students seeking to graduate a full year early must earn 15 credits by the end of Grade 10; students seeking to graduate a semester early must earn 19 credits by the end of Grade 11. Requests for early graduation are evaluated on an individual basis. Deadlines apply. Students considering early graduation must schedule an appointment with the assigned counselor before May 1 prior to final year of enrollment at VAHS.

## **EARNING CREDITS FROM NON-VAHS PROGRAMS AND INSTITUTIONS WHILE ENROLLED AT VAHS**

### **1. ENROLLING IN POST-SECONDARY COURSEWORK THROUGH YOUTH OPTIONS**

The state-sponsored Youth Options Program offers high school students an opportunity to pursue post-secondary coursework and earn both high school and college credit, tuition-free, if the course meets prescribed criteria. Students most often pursue these advanced courses via the Youth Options Program on the UW-Madison or MATC campuses. VAHS offers one MATC Youth Options class on our campus: Certified Nursing Assistant (CNA) (See page 39 for the description of this course.) A Youth Options application must be filed and approved by the VASD Board of Education. Deadlines are October 1 and March 1 for the respective Spring and Fall semesters. Students interested in the Youth Options program should meet with their counselors well in advance of these deadlines

### **2. ENROLLING IN COLLEGE COURSEWORK AS A SPECIAL OR GUEST STUDENT**

Students do not have to utilize the Youth Options Program to take college courses and apply these credits toward VAHS graduation. Students may enroll as guest or special students to take coursework at their own expense at post-secondary institutions. The course must be approved prior to enrollment if the course is to appear on a VAHS transcript or if the post-secondary course will apply toward VAHS graduation requirements. Students interested in pursuing college coursework while in high school should meet with their counselors.

### **3. ENROLLING IN INDEPENDENTLY PROVIDED HIGH SCHOOL COURSES WHILE ENROLLED AT VAHS**

Occasionally, students may be granted credit toward VAHS graduation for courses taken through independent providers, summer school, virtual schools, and on-line programs. Credits are not routinely granted; consequently, students must meet with their counselors and obtain approval from VAHS administration prior to enrollment in such courses.



## CHOOSING VAHS COURSEWORK FOR POST-SECONDARY STUDY

Although each individual post-secondary institution sets its own requirements for entrance, students interested in attending a four-year college or university are advised to meet the distribution requirements for the University of Wisconsin System. The UW System institutions require a *minimum* of 17 high school credits, distributed as follows:

### **Minimum Core College Preparatory Credits - 17 Credits**

**English** - 4 credits

(emphasis on writing & literature)

**Mathematics** - 3 credits

(usually includes Algebra II or higher)

**Social Science** - 3 credits

(with 1 credit of U.S. History)

**Natural Science** - 3 credits

(all must be laboratory courses)

**World Language** - Through 2nd year of sequence, e.g. through French, German, or Spanish 2

(currently required only for admission to UW-Madison, UW-Eau Claire and Minnesota's public universities; may be necessary for graduation from other universities and colleges, often depending on major.)

**Electives** - 4 credits

(Choose additional credits from the **above** college preparatory areas. Courses in Fine Arts, Computer Science, and other academic areas **may or may not** be accepted as college preparatory credits.) Minnesota Public Universities require 1 year of visual and/or performing arts in addition to the minimum core credits listed above. Students may be admitted with this deficiency.

**Students are reminded that these are minimal requirements. *Typical preparation for some of the more selective colleges and universities, including UW-Madison and the University of Minnesota-Twin Cities, includes credits beyond the minimum in the core academic subject areas.*** Capable students should pursue a course of study challenging enough to ensure suitable options for their aptitudes and abilities. Students who exceed the number of required college preparatory credits have improved chances for college admission and improved likelihood of success in college study. Opting for a program of minimum requirements does not necessarily open doors to colleges or universities, especially when highly selective post-secondary institutions are being considered. Specific requirements vary from institution to institution. Students are responsible for researching specific requirements of individual post-secondary schools.

### **Vocational and 2-Year Institutions**

Typically, students may enroll in technical schools and programs with a high school diploma. However, additional credits are frequently required for particular programs of study.

## ADVANCED PLACEMENT

Advanced Placement(AP) is the most widely recognized and accepted college-level academic program available to high school students in the nation. With qualifying exam scores, students can earn credit, advanced college placement, or both at the majority of colleges in the United States and Canada.

Individual colleges and universities, not the College Board or the AP Program, grant course credit and placement. Students are encouraged to check with the colleges/universities they are interested in for specific credit information. Credit information is available by using the AP Credit Policy Info search at [www.collegeboard.org/ap/creditpolicy](http://www.collegeboard.org/ap/creditpolicy) or <http://uwhelp.wisconsin.edu/testing/ap.aspx> for credit and placement policies at all the colleges of the UW-System.

Most colleges and universities begin granting credit with Exam scores of 3 or higher. In May of 2014, VAHS administered 713 Exams to 415 students in 16 different subject areas.

Research consistently shows that students who are successful in AP high school classes experience greater success in college than students who do not participate in AP. The rich course material, classroom discussions, and demanding assignments in AP classes help students develop the knowledge and critical thinking skills expected of college students. Even colleges and universities who do not accept AP credits recognize the rigor of AP and look for such courses when reviewing students' transcripts during the college admission process.

Students are advised that the content and pace of a high school AP course is the equivalent of what might be expected in a similar college course. Outside-of-class homework, reading, and study are expected in all AP courses; however, the expectation for out-of-class study may vary according to subject.

For students in grades 10-12 careful thought and consideration is encouraged regarding AP course selections. Freshmen may be admitted with teacher or counselor recommendation and administrative approval. If a freshman is interested in taking an AP course, they would begin this discussion with their counselor.

### **VAHS offers the following AP Courses:**

AP Biology (see description page 56)  
AP Calculus AB (see description page 42)  
AP Calculus BC (see description page 42)  
AP Chemistry (see description page 59)  
AP Computer Science (see description page 27)  
AP Comparative Government & Politics (see description page 64)  
AP English Language & Composition (see description page 30)  
AP English Literature & Composition (see description page 30)  
AP Environmental Science (see description page 56)  
AP Human Geography (see description page 64)  
AP Music Theory (see description page 46)  
AP Physics 1 (see description page 58)  
AP Physics 2 (see description page 58)  
AP Psychology (see description page 63)  
AP Statistics (see description page 42)  
AP US History (see description page 64)  
AP World History (see description page 64)  
AP Online World History (see description page 64)

## LEGEND



**BLENDED LEARNING** is a formal education program in which a student learns at least in part through online delivery of content and instruction with some element of student control over time, place, path or pace. Face-to-face classroom methods are combined with [computer-mediated activities](#).



**DUAL CREDIT** Courses offered for dual credit stem from agreements between high schools, universities and community colleges whereby a high school junior or senior enrolls in a college course and **simultaneously earns college credit and high school credit** for the course. Courses may require an application process to achieve dual credit, see instructor for details. This icon represents courses that are dual credit.



**FLIPPED LEARNING** is a form of [blended learning](#) in which students learn new content online by watching video lectures, usually at home, and what used to be homework (assigned problems) is now done in class with teacher offering more personalized guidance and interaction with students, instead of lecturing. (Many courses include/incorporate technology imbedded learning to some degree.) This icon represents courses that are entirely flipped.



**ONLINE EDUCATION** is a type of distance learning---taking courses without attending a classroom setting. Instead, online students and teachers interact over the Internet. Teachers may meet with students at mutually agreed upon times to set goals and monitor progress. Teachers are also available during “office hours” to assist students as needed.



# AGRICULTURE

## **#742\_2-Vet Science ES**

*Grades: 9,10,11,12*

*Entry-level course, no prerequisite*

*No fees*

*Credit: .5, Semester Course*

This entry-level course is designed for students with an interest in animals and science. Students will work in the animal lab to better explore animal care and management, breeds, nutrition, reproduction, health, housing, anatomy, and veterinary concerns. Laboratory work is supplemented with readings and class discussion. This course provides relevant content for students interested in careers in the Science, Technology, Engineering, & Mathematics as well as the Agriculture, Food, & Natural Resources Career Clusters. This class serves as a prerequisite for #742\_2-Advanced Animal Systems/Vet Science. This course counts as a Science credit for high school graduation.

## **#744\_2-Agricultural Structures/How To**

*Grades: 10,11,12*

*Entry-level course, no prerequisite*

*No fees*

*Credit: .5, Semester Course*

Students learn the basics of using structures and tools as they relate to agricultural tasks. Emphasis is on problem-solving and hands-on techniques. Content includes beginning landscaping, basic forestry, animal products and care, basic aquaculture and horticultural plumbing. Students work in the greenhouse in addition to using current articles and computer applications. Assessment is primarily based on participation. This course is recommended for students interested in careers in Agriculture, Food, & Natural Resources.

## **#745-Soils & Plant Science ES**

*Grades: 9,10,11,12*

*Entry-level course, no prerequisite*

*No fees*

*Credit: .5, Semester Course*

This course takes advantage of the VAHS greenhouse and provides students with an opportunity to work with plants in both the greenhouse and outdoors. Students will gain an understanding of soil types, plant growth, plant reproduction, soil minerals, fertilizers, and environmental concerns. This course is recommended prior to enrolling in #770\_2-Horticulture. This course is recommended for students interested in these career clusters: Agriculture, Food & Natural Resources; Architecture & Construction; and Science, Technology, Engineering & Mathematics. . This course counts as a Science credit for high school graduation.

## **#747\_2 Advanced Animal Systems/Vet Science ES**

*Grades: 10,11,12*

*Prerequisite: #742\_2-Vet Science*

*No fees*

*Credit: .5, Semester Course*

Designed for students who enjoyed the basic animal veterinary science course, this class will explore animal anatomy and veterinary care through the study of text, completion of projects, and work in the animal lab. Students will gain hands-on experience in how to feed, care for, house, and check the health of all types of animals. This course provides relevant content for students interested in careers in the Science, Technology, Engineering, & Mathematics as well as the Agriculture, Food, & Natural Resources Career Clusters. This course counts as a Science credit for high school graduation.

## **#748-Science of Veterinary Medicine**

*Grades: 10,11,12*

*Prerequisite: Basic Vet Science and Advanced Veterinary Science*

*No fees*

This course immerses students in the field of veterinary science. Major topics include veterinary terminology, safety, sanitation, anatomy/physiology, clinical exams, hospital procedures, parasitology, posology, laboratory techniques, nutrition, disease, office management, and animal management. Careers are explored to provide student interested in

pursuing a career(s) in agriculture/animal science the opportunity to understand the wide array of concepts and opportunities relevant to the industry. Students will develop competencies in the skills relevant to the career cluster(s) dealing with animals, biological concepts and veterinary science in general.

#### **#760-Power Mechanics**

*Grades: 10,11,12*

*Entry-level course, no prerequisites*

*Approximate cost: \$5*

*Credit: .5, Semester Course*

This is a hands-on class for students who want to know how power equipment works. Prior knowledge or experience is not necessary. During class, students work on gas engines, taking them apart and re-assembling them to work better than new! In the process students gain knowledge and familiarity with a variety of tools. This class is useful for all students who like working with their hands and is related to careers in the following career clusters: Agriculture, Food & Natural Resources; Architecture & Construction; Transportation, Distribution, & Logistics, and Science, Technology, Engineering & Mathematics. This course serves as a prerequisite for #762-Advanced Power Mechanics.

#### **#762-Advanced Power Mechanics**

*Grades: 11,12*

*Prerequisite: Grade of C- or better in #761-Power Mechanics*

*Approximate cost: \$5*

*Credit: .5, Semester Course*

This class is for students who want more - more power and efficiency from their engines, more time to develop mechanical improvements, and more research into advanced engine designs. Units will include advanced machining, alternative fuels and lubricants, and independent research. Because the class is primarily project-based, students must be motivated to work independently and in small groups. Students should enjoy solving problems and have a respect for detail as well as a strong interest in mechanics. Recommended for students interested in engineering and in the following career clusters: Agriculture, Food & Natural Resources; Architecture & Construction; Transportation, Distribution, & Logistics; and Science, Technology, Engineering & Mathematics

#### **#765-Agriculture Mechanics**

*Grades: 9,10,11,12*

*Prerequisite: None*

*Approximate Cost: \$5*

This course connects scientific principles of Agricultural mechanic skills. This course will develop understanding and skills in the traditional areas of agricultural mechanics including the following areas: safety, agricultural metals hot and cold, tool maintenance, Agricultural equipment, Agricultural woodworking, concrete and masonry, agricultural plumbing and surveying

#### **#770\_2-Horticulture ES**

*Grades: 10,11,12*

*Prerequisite: #745-Soils and Plant Science recommended, but not required*

*Approximate cost: \$5*

*Credit: .5, Semester Course*

This course is designed for students who enjoy working with plants in the greenhouse and outdoors. Course content includes plant reproduction techniques, greenhouse management, landscape designs, floral arrangement, and turf management. Students learn how to plant, prune and maintain a variety of species. The class is laboratory based and requires that students work well independently and in small groups. Recommended for all students who enjoy gardening and plants. The class relates directly to careers in Agriculture, Food, & Natural Resources. This course counts as a Science credit for high school graduation.

#### **#780\_2-Natural Resource Management**

*Grades: 10,11,12*

*Prerequisite: None*

*Approximate cost: \$10 if student chooses to secure certification in Hunter Safety, ATV and Snowmobile*

*Credit: .5, Semester Course*

This course is to develop a comprehensive management of forests, wildlife management practices, hunter education, and related natural resources in populated areas, from inner city to the developing urban fringe, to outlying communities. For too long, as urban areas have been developed, the forests of urban areas have been depleted or eliminated. This course will develop a sense of balance to our everyday lives around environmental issues including backyard wildlife to maintaining and improving existing urban forests. Field trips, hands on work including chainsaw and other pruning equipment as well as planting techniques, existing and new design layouts for urban development will be actively a part of

this course.



### **#222-Biotechnology (Dual Credit)**

*Grades: 10,11,12*

*Prerequisite: #220-Biology*

*Approximate cost: \$10 lab fee, \$20 optional field trip*

*Credit: .5, Semester Course, Cross-listed with Science Department for science credit*

Biotechnology promises to change our future! This industry is curing diseases, enhancing reproduction options, extending our lives, creating new energy sources, controlling pollution, and more. Students will have the opportunity to explore and experiment with tissue culture, genetic engineering, food production, medical advances, and crime scene technology. Team-taught with the Science department, this class also qualifies as a laboratory science credit and requires that students have an interest in biology and chemistry. Two advance standing credits are available from Madison College upon completion of this course with a grade of B or higher. This course is recommended for students interested in careers in these career clusters: Agriculture, Food, & Natural Resources and Science, Technology, Engineering & Mathematics. Serves as a prerequisite for #751-Advanced Biotechnology.



### **#222B- Blended Biotechnology (Dual Credit)**

*Grades: 10,11,12*

*Prerequisites: Biology*

*Fees: \$10.00 lab fee, possible field trip expenses*

*Credit: .5, Semester Life Science Course*

*Note: One Dual Credit is available from Madison College upon completion of this course with a C or better at no cost to the student.*

Blended Biotechnology covers the same curriculum as Biotechnology, however part of the course is to be completed online. This course covers the same concepts and skills but the instructional delivery model is different. On average, 2-3 out of 5 days a week, the class will meet in the normal classroom for face-to-face instruction and labs. The other 2-3 days students will either be off-campus or in a designated space doing work. Students that choose this class should be self motivated learners and able to manage their time. The online portion of this class will allow students to individualize their educational needs to an extent not possible in the normal classroom.



### **#223-Advanced Biotechnology (Dual Credit)**

*Grades: 10,11,12*

*Prerequisite: #220-Biology and #750 Biotechnology*

*Approximate cost: \$10 lab fee, \$20 optional field trip*

*Credit: .5, Semester Course, Cross-listed with Science Department for science credit*

This course offers students an opportunity to study the latest research and breakthroughs in the cutting-edge field of biotechnology. This is a laboratory course, and students will research, plan, conduct, and analyze their own experiments. Laboratory work includes studying and practicing tissue culture, gene extraction, genetic engineering, gene sequencing, southern blot, protein identification and extraction. In addition, students will investigate patent laws, ethical questions, and careers in biotechnology. Team-taught with the Science department, this class also qualifies as a laboratory science credit and requires that students have an interest in biology and chemistry. Two advance standing credits are available from Madison College upon completion of this course with a grade of B or higher. This course is recommended for students interested in careers in these career clusters: Agriculture, Food, & Natural Resources and Science, Technology, Engineering & Mathematics.



### **#223B-Blended Advanced Biotechnology (Dual Credit)**

*Grades: 10,11,12*

*Prerequisites: Biology and Biotechnology*

*Fees: \$10 lab fee, possible field trip expenses*

*Credit: .5, Semester Life Science Course*

*Note: One Dual Credit is available from Madison College upon completion of this course with a C or better at no cost to the student.*

Blended Advanced Biotechnology covers the same curriculum as Biotechnology, however part of the course is to be completed online. This course covers the same concepts and skills but the instructional delivery model is different. On average, 2-3 out of 5 days a week, the class will meet in the normal classroom for face-to-face instruction and labs. The other

2-3 days students will either be off-campus or in a designated space doing work. Students that choose this class should be self motivated learners and able to manage their time. The online portion of this class will allow students to individualize their educational needs to an extent not possible in the normal classroom.

### **#767 Agricultural Food Science**

*Grades: 9, 10, 11, 12*

*Prerequisites: none*

*No Fees*

*Credit: .5, Semester Course*

This course will look at all the processes involved in getting food from the field to your table. From cereal, to steak, to even ice cream, we will learn about different agricultural practices involved in food production. This course will include many fun hands on activities including cheese making, assessing meat quality, and even exploring all the processes involved in making a pizza. The course will also look at food safety, developing a business plan, and comparing diversity among global agriculture and food.

### **Agribusiness Workplace Apprenticeship**

*Grades 11, 12*

*Prerequisite: Application Required*

The Agribusiness Workplace Apprenticeship is for students interested in careers in agricultural commodities and services. Students in the Agribusiness Workplace program learn and practice skills that prepare them for diverse post-secondary opportunities. Students in Youth Apprentice must complete two semesters of coursework yearly that focus on veterinary science, animal care, wildlife management, soil and plant science, or business. Students must also complete 450 hours per year of paid work experience in the industry. Students accepted into the program are also offered the option of taking evening Veterinary Technician courses at Madison College for dual credit. Youth Apprenticeship applications are available from the School to Careers Coordinator, Ms. Moschkau, in Student Services. Applications are due March 1.

### **Veterinary Technician Assistant Youth Apprenticeship**

*Grades 11, 12*

*Prerequisite: Application Required*

The Veterinary Technician Assistant Apprenticeship is for students interested in careers in veterinary or animal care services. Students in the Veterinary Technician Assistant program learn and practice skills that prepare them for diverse post-secondary opportunities. Students in Youth Apprentice must complete two semesters of coursework yearly that focus on veterinary science and animal care. Students must also complete 450 hours per year of paid work experience in the industry. Students accepted into the program are also offered the option of taking evening Veterinary Technician courses at Madison College for dual credit. Youth Apprenticeship applications are available from the School to Careers Coordinator, Ms. Moschkau, in Student Services. Applications are due March 1.



## ALTERNATIVE EDUCATION

### **GAP (Graduation Alternative Pathways)**

The GAP Program is a non-credit earning alternative education program designed for Verona Area High School students who wish to earn their diploma through non-traditional methods of academic study and career exploration. To qualify students must be *at least 17 years old, in second semester of their Junior Year, and must be 3 or more credits deficient* as compared to same grade peers. Students are referred by the principal, associate principal, or a student services staff member. Students will have a Personalized Learning Plan and complete GED preparation or a Proficiency Based program on the VAHS campus. The GED 2014 tests (Language Arts, Math, Science, Social Studies) are taken at Madison College. Students must have a state-issued identification card prior to enrolling in the program. A meeting, which includes the student, parent, guidance counselor, administrator, and GAP instructor, will be held to determine if placement in GAP is appropriate. Students must attend GAP ninety percent of their scheduled hours to remain in the program. Interested students should contact their guidance counselor.





### **#962-Art Foundations**

*Grades: 9,10,11,12*

*Entry-level course, no prerequisite*

*Approximate cost: \$15*

*Credit: .5, Semester Course*

This is a studio art class for students who want to explore and develop their artistic skills using various media and techniques. No previous art experience necessary! Students will use an array of art forms, including painting, drawing, printmaking, mosaic, mixed media, and sculpture. Subject areas may include: still life, perspective, the human face, nature, color theory, art movements, and design. Students will develop an art vocabulary by which to discuss and critique artwork. This class serves as a prerequisite for Painting, Drawing, Computer Art & Design and Photography. While this class is recommended for students interested in careers in the arts, teaching, professional design, and audio/video technology and communications, involvement in the arts equips students for success in a broader range of settings as well.

### **#963-Photography I**

*Prerequisite: Art Foundations OR consent of instructor with presentation of a portfolio*

*Credit: .5, Semester Course*

*Approximate Cost & Required Materials: \$25 lab fee*

Photography is a semester-long class for students who want to develop their design skills in effective image making. This course is recommended for students who want to expand their expertise in photography for everyday enjoyment or as a career. Students of all ability and experience levels are welcome. We will explore camera operation, photo composition, lighting, creative manipulation (using editing software), and presentation of high-quality digital images. In addition, we will have the opportunity to investigate artists who have come before us as we interpret, analyze, and reflect on works of art in the field of photography. The class encourages student initiative and creativity and requires trustworthiness and problem-solving skills. This course is recommended for students interested in careers in the Arts, Audio/Video Technology and Communications Career Cluster. While this class is recommended for students interested in careers in the arts, teaching, professional design, and audio/video technology and communications, involvement in the arts equips students for success in a broader range of settings as well.

### **#963\_2Photography 2**

*Prerequisite: Photography 1*

*Credit: .5, Semester Course*

*Approximate Cost & Required Materials: \$25 lab fee*

Photography 2 is a semester-long class for students who have already taken Photography 1 and want to further develop their design skills in effective image making. This course is recommended for students who want to expand their expertise in photography for everyday enjoyment or as a career. We will delve deep into the technical workings of camera operation, a range of lenses, dynamic photo composition, experimental lighting, creative manipulation (using editing software), and presentation of high-quality digital images. In addition, we will have the opportunity to investigate and emulate contemporary artists in the current photographic world. The class encourages student initiative and creativity and requires trustworthiness and problem-solving skills. This course is recommended for students interested in careers in the Arts, Audio/Video Technology and Communications Career Cluster. While this class is recommended for students interested in careers in the arts, teaching, professional design, and audio/video technology and communications, involvement in the arts equips students for success in a broader range of settings as well.

### **#965-Ceramics**

*Grades: 9,10,11,12*

*Entry-level course, no prerequisite*

*Approximate cost: \$25*

*Credit: .5, Semester Course*

This class welcomes students to the clay world where both hand-built and wheel-thrown forms are created and glazed. Students will learn a variety of ceramic techniques including hand building and using ceramic tools such as the clay extruder, slab roller, and potter's wheel. Students also learn to use electric and gas fire glazing techniques. No prior experience with clay is required, but students should have a willingness to take risks, work hard, and solve problems. Course includes a final research project and participation in ceramic critiques in addition to a variety of clay projects. While this class is recommended for students interested in careers in the arts, teaching, professional design, and audio/video technology and communications, involvement in the arts equips students for success in a broader range of settings as well.

### **#966-Ceramics 2**

*Grades: 9,10,11,12*

*Prerequisite: #965-Ceramics*

*Approximate cost: \$25*

*Credit: .5, Semester Course*

Students will extend and develop their ceramics skills acquired in Ceramics 1, including further practice and instruction in the wheel as a sculpture tool and advanced hand-building techniques. Projects will incorporate advanced and varied firing processes as well as glaze development and application. The class emphasizes ceramics as an art form and requires students to use an art vocabulary and knowledge of design principles for discussion and critiquing. Students should bring an enthusiasm for ceramics and a willingness to take risks and work hard. While this class is recommended for students interested in careers in the arts, teaching, professional design, and audio/video technology and communications, involvement in the arts equips students for success in a broader range of settings as well.

### **#9671-Ceramics-Advanced Study**

*Grades: 10,11,12*

*Prerequisite: #966-Ceramics 2*

*Approximate cost: \$25*

*Credit: .5, Semester Course*

Designed for students with a passion for the ceramic arts, this course presents an opportunity for the self-motivated artist to advance his or her design and technical skills. Students learn how to make clay and glazes, load kilns, and participate in alternative kilns such as wood, salt, and pit firings. Students are required to complete projects, participate in critiques, and complete a final research project in addition to mentoring Ceramic 1 and 2 learners. This class may be repeated for credit. While this class is recommended for students interested in careers in the arts, teaching, professional design, and audio/video technology and communications, involvement in the arts equips students for success in a broader range of settings as well.

### **#971-Sculpture/Welding**

*Grades: 9,10,11,12*

*Prerequisite: Entry-level course, no prerequisite*

*Approximate cost: \$25*

*Credit: .5, Semester Course*

Cross-listed with Technology Education, this sculpture class teaches the fundamentals of 3-D design and introduces students to welding and basic woodworking skills. This is a class for students who enjoy hands-on craft and appreciate good design. Use of woodworking power tools and a variety of welding techniques are taught, including arc, acetylene, and mig. Students will also explore art and craft in America as it relates to wood and metal working. This course is recommended for students interested in the arts, teaching, and professional design, as well as these career clusters: Architecture & Construction and Arts, A/V Technology & Communications. While this class is recommended for students interested in careers in the arts, teaching, professional design, and audio/video technology and communications, involvement in the arts equips students for success in a broader range of settings as well.

### **#972-Computer Art & Design 1**

*Grades: 9,10,11,12*

*Prerequisite: #962-Art Foundations or #625-Desktop Publishing(now called Digital Visual Communication)*

*Approximate cost: \$20*

*Credit: .5, Semester Course*

Computer Art & Design 1 is primarily process- and project-based and is designed to develop and enhance skills in using software, computers, scanners, wacom tablets, and digital cameras. A variety of software is used, including Illustrator CS6, Photoshop CS6, InDesign CS6, and Photo Booth. Course content covers typography, bookmaking/binding, cover designs, art styles, social issue awareness, ethics of graphic design, and other projects of student choice. While this class is recommended for students interested in careers in the arts, teaching, professional design, and audio/video technology and communications, involvement in the arts equips students for success in a broader range of settings as well.

### **#973-Computer Art & Design 2**

*Grades: 10,11,12*

*Prerequisite: #972-Computer Art & Design 1*

*Approximate cost: \$25*

*Credit: .5, Semester Course*

Primarily a process- and project-based course, Computer Art & Design 2 is for students who wish to further develop their computer and design skills using various software applications, including Illustrator CS6, Photoshop CS6, InDesign CS6, and Photo Booth. Course content covers photographic portraiture, signage, abstract artwork, typography, calendar making/binding, cover designs, art styles, ethics of graphic design, and other projects of student choice. Students must be independent, trustworthy, and willing to take initiative. While this class is recommended for students interested in careers in

the arts, teaching, professional design, and audio/video technology and communications, involvement in the arts equips students for success in a broader range of settings as well.

### **#973\_2-Computer Art & Design-Advanced Study**

*Grades: 10,11,12*

*Prerequisite: #973-Computer Art & Design 2*

*Approximate cost: \$25*

*Credit: .5, Semester Course*

This is an advanced graphic design course for students who are highly motivated, self-disciplined, and enthusiastic about completing numerous independent projects using a variety of Adobe Creative Suite CS6 software and art styles. Students learn how to identify problems, create solutions, and manage time and technology while working in a community setting. Students build upon their expertise in using various software applications, apply previously developed art skills to produce sophisticated graphic designs, and assist with CAD 1 and 2 students in various capacities. While this class is recommended for students interested in careers in the arts, teaching, professional design, and audio/video technology and communications, involvement in the arts equips students for success in a broader range of settings as well.

### **#974-Drawing**

*Grades: 9,10,11,12*

*Prerequisite: #962-Art Foundations*

*Approximate cost: \$15*

*Credit: .5, Semester Course*

Students of all ability levels who want to further develop their drawing skills with various techniques and media are welcome in this course. Students will create artwork based on drawing from life, observation, photographs, and imagination. A variety of art materials are used, including graphite, colored pencil, charcoal, conté crayon, oil pastel, chalk pastel, ink, and mixed media. The course is project-based and highly recommended for students who are enrolled in or plan to enroll in painting. While this class is recommended for students interested in careers in the arts, teaching, professional design, and audio/video technology and communications, involvement in the arts equips students for success in a broader range of settings as well.

### **#974\_2- Drawing 2**

*Grades: 10,11,12*

*Prerequisite: #974-Drawing 1*

*Approximate Cost: \$15*

*Credit: .5, Semester Course*

Offered for students who wish to enhance their drawing techniques and expand their drawing experiences in a variety of media, including graphite, colored pencil, charcoal, conté crayon, oil pastel, chalk pastel, watercolor pencil, calligraphic ink, and mixed media. Subject matter may include: still life, perspective, the human face and body, nature, art styles, and independent projects of choice. While this class is recommended for students interested in careers in the arts, teaching, professional design, and audio/video technology and communications, involvement in the arts equips students for success in a broader range of settings as well.

### **#975-Painting 1**

*Grades: 9,10,11,12*

*Prerequisite: #962-Art Foundations*

*Approximate cost: \$25*

*Credit: .5, Semester Course*

Students will create artwork based on painting from life, observation, and imagination. A variety of art materials are used, including graphite, charcoal, calligraphic ink, acrylic paint, watercolor paint, watercolor pencil, and mixed media. Students of all ability levels are welcome. Because this is a project- and process-based course, students must successfully manage time and materials in a community setting. While this class is recommended for students interested in careers in the arts, teaching, professional design, and audio/video technology and communications, involvement in the arts equips students for success in a broader range of settings as well.

### **#975\_2-Painting 2**

*Grades: 10,11,12*

*Prerequisite: #975 Painting 1*

*Approximate cost: \$25*

*Credit: .5, Semester Course*

Offered for students who wish to enhance their painting techniques and expand their painting experiences in a variety of media including graphite, charcoal, calligraphic ink, acrylic paint, watercolor paint, watercolor pencil, water-based oil paint, and mixed media. Subject matter may include: still life, perspective, the human face, nature, art styles, and independent projects of choice. While this class is recommended for students interested in careers in the arts, teaching, professional design, and

audio/video technology and communications, involvement in the arts equips students for success in a broader range of settings as well.

### **#976-Introduction to Video Production**

*Grades: 9,10,11,12*

*Entry level course, no prerequisite*

*Approximate cost: \$20*

*Credit: .5, Semester Course*

This project-based course is open to all students interested in the various aspects of video production and filmmaking, including scripting, acting, directing, filming, and editing. No prior experience is necessary. Students work collaboratively to produce projects that may include commercials, movie trailers, animated short films, news broadcasts, and mid-length feature films. Students learn to use studio-quality video editing software, digital camcorders, and sound/lighting equipment. The class encourages student initiative and creativity and requires trustworthiness and problem-solving skills. This course is recommended for students interested in careers in the Arts, Audio/Video Technology and Communications Career Cluster and serves as a prerequisite to VCAT News and/or Advanced Video Production. While this class is recommended for students interested in careers in the arts, teaching, professional design, and audio/video technology and communications, involvement in the arts equips students for success in a broader range of settings as well.

### **#978-Creative Film Studies & Production**

*Grades: 9,10,11,12*

*Entry level course, no prerequisite*

*Approximate cost: \$20*

*Credit: .5, Semester Course*

This class is designed for all students who love movies and are curious about the craft of filmmaking. No prior experience with cameras or digital editing techniques is required. Activities are project-based and accompanied with study on the evolution of cinema, various film genres, famous directors, film production roles, film criticism, and award-winning screenplays. Students will use Hollywood-standard video editing software, digital camcorders, and sound/lighting equipment to produce their own independent films. The class encourages creative problem-solving skills, collaboration, and interest in digital media. This course is recommended for students interested in careers in the Arts, Audio/Video Technology and Communications Career Cluster and serves as a prerequisite to VCAT News and/or Advanced Video Production. While this class is recommended for students interested in careers in the arts, teaching, professional design, and audio/video technology and communications, involvement in the arts equips students for success in a broader range of settings as well.

### **#980-Advanced Video Production**

*Grades: 9,10,11,12*

*Prerequisite: #976 Intro. to Video Production and #978 Creative Film Studies & Production*

*Approximate cost: \$20*

*Credit: .5, Semester Course*

This class is entirely project based and designed for responsible, mature, and independent students with the passion, motivation, self-discipline, and technical skill to produce a portfolio of independent films. Together with the instructor, students design their own curriculum and contract to complete their own independent portfolio of projects. Students will enhance their expertise with professional video editing software, digital camcorders, microphones, and lighting systems. This class can be retaken for credit. This course is recommended for students interested in these career pathways: Arts, Audio/Video Technology and Communications and Information Technology. While this class is recommended for students interested in careers in the arts, teaching, professional design, and audio/video technology and communications, involvement in the arts equips students for success in a broader range of settings as well.

### **#981-VCAT News Production**

*Grades: 9,10,11,12*

*Prerequisite: Students must earn a C or better in #976-Introduction to Video Production or #978-Creative Film Studies*

*Approximate cost: \$20*

*Credit: .5, Semester Course*

The majority of this class is project-based and requires the timely production of twice-weekly VCAT broadcasts in addition to other projects. Students will develop informational video segments about events affecting the VCAT viewing audience. In addition to VAHS news stories and events, students will prepare public service announcements, introductory segments, special features, and credits. Students will explore tools and techniques of television and film production, master video editing software, and collaborate as a member of a production team. All students who are independent, trustworthy, and willing to take initiative and risks are welcome. This course is recommended for students interested in these career pathways: Arts, Audio/Video Technology and Communications and Information Technology. While this class is recommended for students interested in careers in the arts, teaching, professional design, and audio/video technology and communications, involvement in the arts equips students for success in a broader range of settings as well.

### **#981\_2-Advanced VCAT News Production**

*Grades: 10,11,12*

*Prerequisite: Students must earn a C or better in #981-VCAT News Production*

*Approximate cost: \$20*

*Credit: 0.5, Semester Course*

Students in this course are highly interested in video production, motivated to initiate and complete projects independently, and eager to assume leadership on a video production team. The class is project-based and produces twice-weekly VCAT broadcasts. Advanced students will provide leadership and be responsible for producing and editing various segments and episodes of these broadcasts. In addition, advanced students will have the opportunity to use video as an art-making tool on projects that enhance their directing, editing, and production skills. This class can be retaken for credit. This course is recommended for students interested in these career pathways: Arts, Audio/Video Technology and Communications and Information Technology. While this class is recommended for students interested in careers in the arts, teaching, professional design, and audio/video technology and communications, involvement in the arts equips students for success in a broader range of settings as well.

### **#985-Advanced Art Studies**

*Grades: 10,11,12*

*Prerequisite: #962-Art Foundations, #974-Drawing, #975-Painting 1, **and** #974\_2- Drawing 2 or #974\_2-Painting 2*

*Approximate cost: \$20*

*Credit: .5, Semester Course*

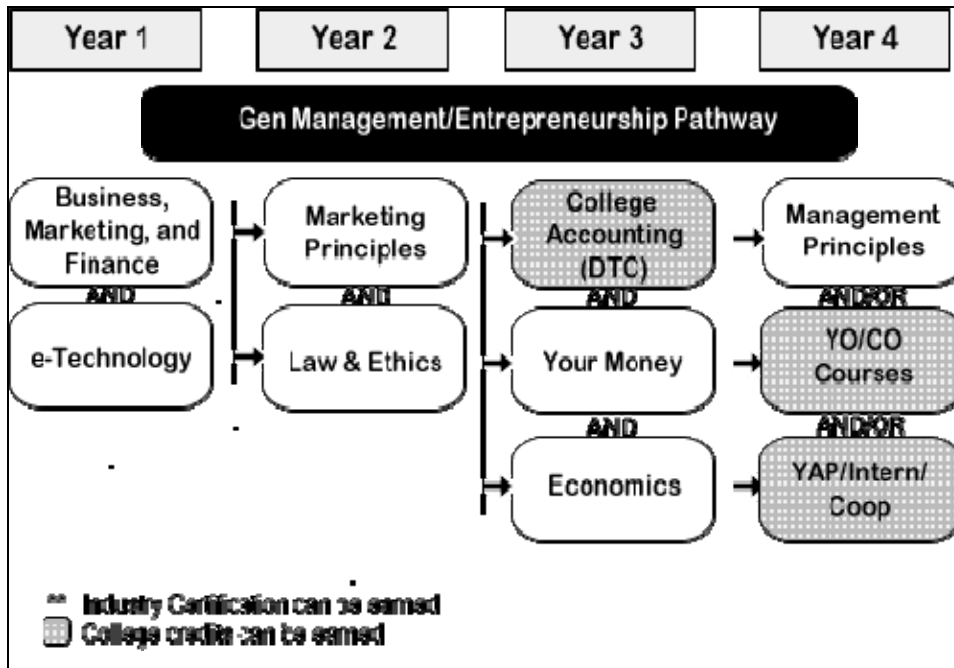
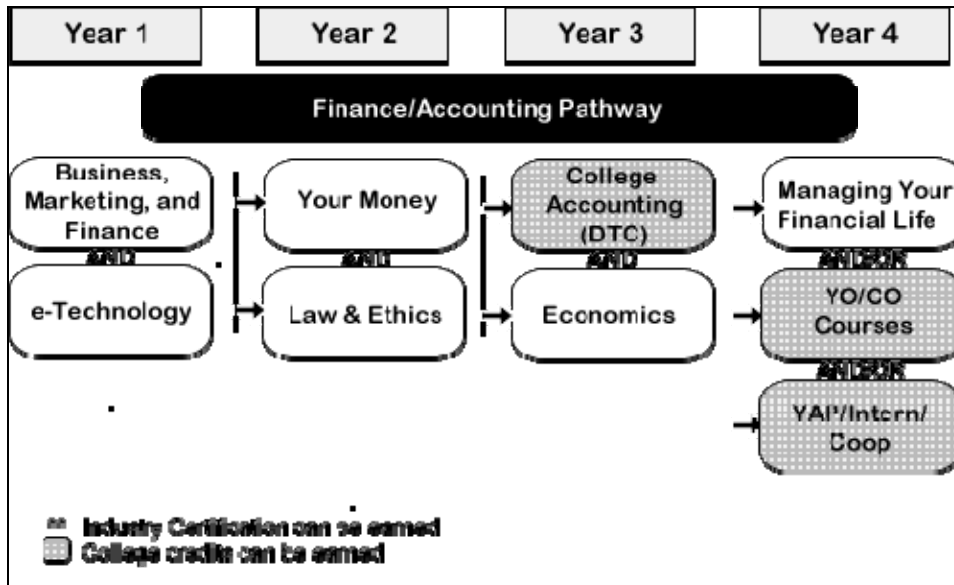
Advanced Art Studies presents the serious art student the opportunity to work independently and enhance knowledge and skills developed in previous art coursework. Students should be highly motivated, self-disciplined, and enthusiastic about completing numerous independent projects using a variety of art media and styles. Students learn how to identify problems, create solutions, and manage time and materials. Students will also be involved in a variety of individual and group critiques, as well as participate in and assist with the first semester showcase and/or senior show in the Sugar River Gallery. While this class is recommended for students interested in careers in the arts, teaching, professional design, and audio/video technology and communications, involvement in the arts equips students for success in a broader range of settings as well.

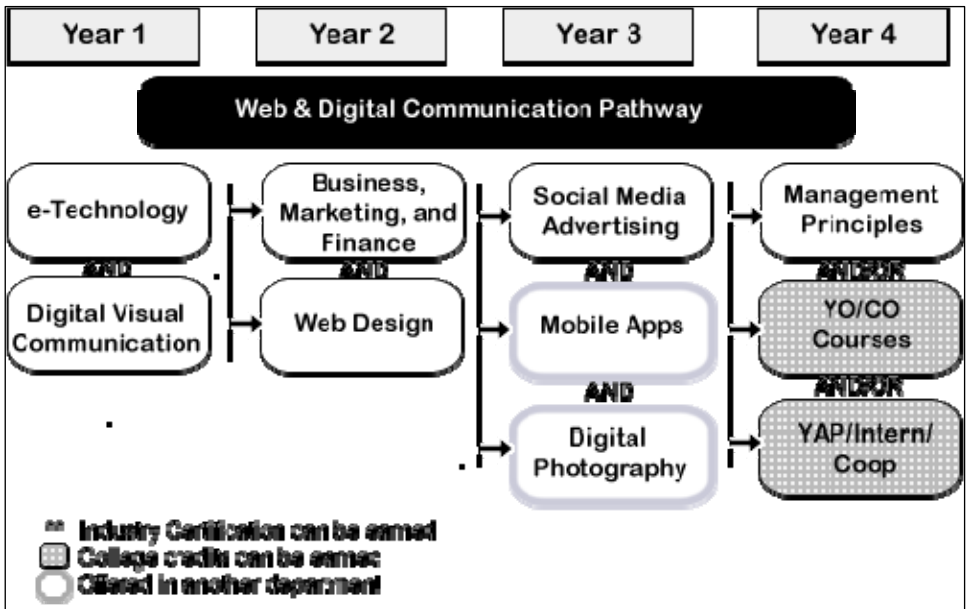
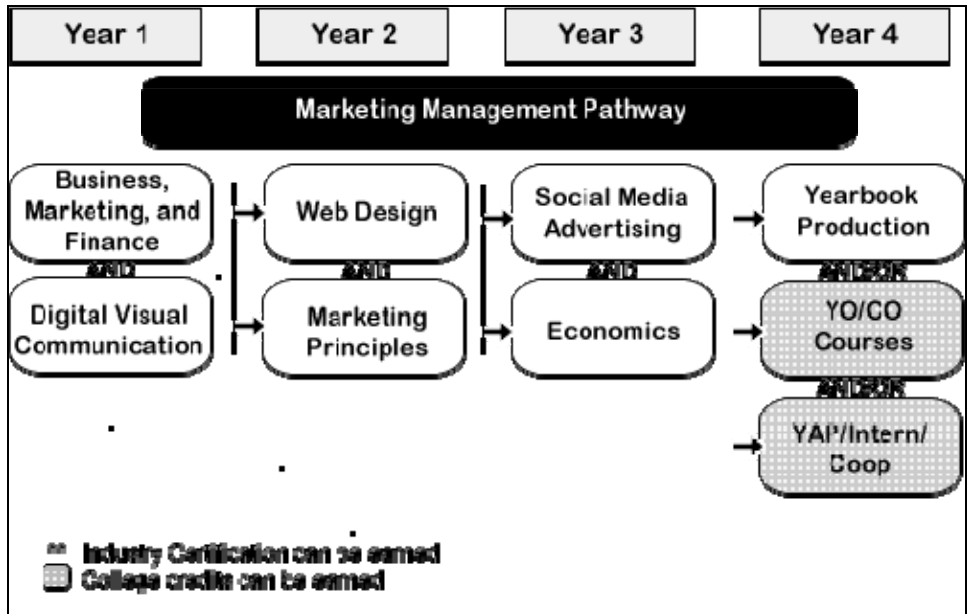
# Business

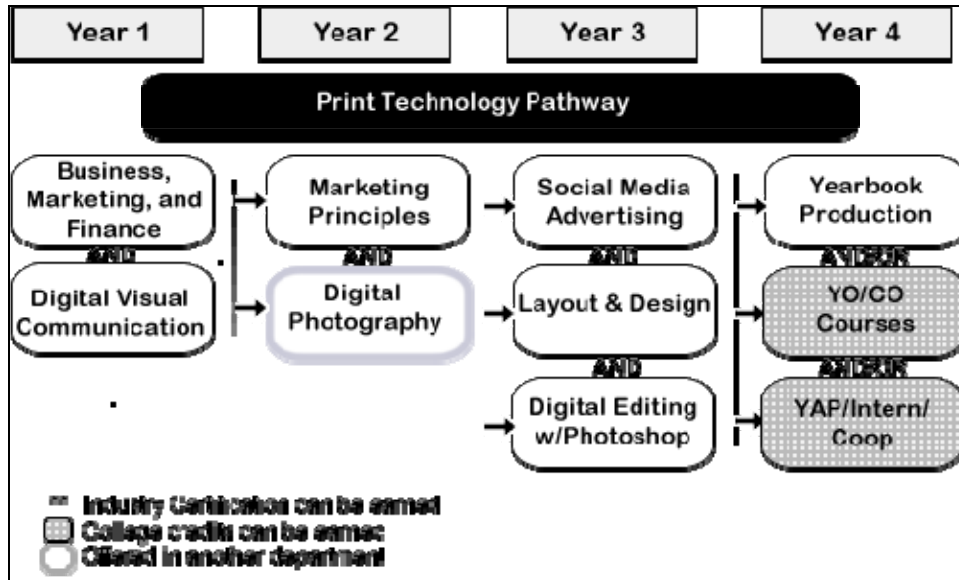
Entrepreneurial  
 Marketing Management  
 Digital Communication  
 Community Based  
 College And Career Ready  
 Career Management  
 Global  
 Financial Literate

# Info Technology

# Marketing







**#601-Your Money** (formerly Your Money 101)

Grades: 9,10,11,12

No prerequisite

No fees

Credit: .5, Semester Course

The goal of Your Money is to become a financially responsible, conscientious member of society. To reach that end, this course develops understanding and skills in such areas as money management, budgeting, financial goal attainment, the wise use of credit, insurance, investments, and consumer rights and responsibilities. This invaluable course should be taken by everyone!

**#616-Business, Marketing, and Finance** (formerly Introduction to Business)

Grades: 9,10,11,12

No prerequisite

No Fees

Credit: 1, Year Course

This entry-level exploratory elective prepares students for all business pathways. The course features a broad range of topics related to business, marketing, and finance. After being introduced to economics, we explore the fundamentals of business ownership. We then proceed to examine the ways businesses run their operations, market their products and services, and finance their long-term financial growth. Furthermore, an on-line simulation gives students a "hands-on" opportunity to experience running their own business. The course opens a world of career options in business, marketing, and finance.

**#620-Law & Ethics** (formerly Law)

Grades: 9,10,11,12

No prerequisite

No Fees

Credit: .5, Semester Course

How does law fit into life? This course will answer that question, as well as many others. Besides looking at the history, philosophy, and sources of law, engaging mock trials and role plays help to bring law to life. This class explores ethics and possible careers as they relate to law. In addition, current events and trends are another method brought into class.

**#627-Digital Visual Communication** (formerly Desktop Publishing)

Grades: 9,10,11,12

No prerequisite

Approximate cost: \$20 for consumable supplies & printing

Credit: .5, Semester Course

Digital Visual Communication is a survey course developing skills and understanding of how digital messages grab a person's attention and create action! Foundational understanding and knowledge of the use of the Adobe Creative Suite will guide the course. Creativity and problem solving will be used daily in producing publications and promotional tools.



### **#628-Layout & Design** (formerly Advanced Desktop Publishing)

*Grades: 9,10,11,12*

*No prerequisite*

*Approximate cost: \$20 for consumable supplies & printing*

*Credit: .5, Semester Course*

Building on the skills developed in Digital Visual Communications, Layout & Design is an in-depth study around the elements and principles of design at a professional level. This hands-on course uses technology to address the language of design in creating dynamic and visually well organized pieces useful in any business or personal setting. Opportunities to work with local businesses and organizations are a part of this course!

### **#630-Managing Your Financial Life**

*Grades: 9,10,11,12*

*No prerequisite*

*Fees: \$7 for software*

*Credit: .5, Semester Course*

Managing Your Financial Life explores a range of strategies for growing a small amount of wealth into a much larger amount of wealth. A variety of methods for starting this process of wealth creation – with the largest emphasis placed on the stock market – are examined. Other aspects like wealth creation, the psychology of money, and its effects on our financial well-being are also discussed. In addition, other investments such as real estate, bonds, mutual funds, and exchange-traded funds are embedded into course projects. After completing this course, students will be in a better position to assist others with financial issues.

### **#635 Social Media and Advertising**

*Grades: 9,10,11,12*

*No Prerequisite*

*No Fees*

*Credit: .5, Semester Course*

Social Media has transformed advertising! How businesses are using Social Media as advertising tools as well as how to create and deploy a Social Media Campaign will be the main focus of this class. Additionally, the history and development of Social Medias such as Facebook, YouTube, Twitter and LinkedIn will be explored as well as the many ethical and potential legal concerns that have arisen over these new forms of communication. Finally, the concept of Viral Marketing will be examined and how it uses Social Media to explode a message to millions of users in a brief time.

### **#645 Economics**

*Grades: 9,10,11,12*

*No Prerequisite*

*No Fees*

*Credit: .5, Semester Course*

We are all impacted by the economy. Economics is the study of economic principles such as growth, inflation, unemployment, interest rates, exchange rates, technological progress, and budget deficits. The course will address these topics and study the impact of different policies, such as monetary and fiscal policies, on the behavior of individuals. Explore recent experiences of the United States and other countries and address how current policy initiatives affect their economic performance. A must take course for anyone interested in business or global issues!



### **#665-College Accounting (Dual credit)**

*Grades: 9,10,11,12*

*No Prerequisites*

*No Fees*

*Credit: 1, Year Course*

College Accounting is recommended for college-bound students interested in majors in business, finance, accounting, economics and marketing and other similar careers. Accounting is the language of business and is one of the most sought-after skills in today's job market. As a result, many college majors require accounting, including many non-business majors such as health care. Clearly, this course opens many career doors. *This course is offered for credit through Madison College with transfer opportunities to other colleges and universities.*

### **#671-Web Design** (formerly Web Design 101)

*Grades: 9,10,11,12*

*No Prerequisites*

*No Fees*

*Credit: .5, Semester Course*

Nearly everyone has an online and mobile presence! **Web Design** exposes students to fundamental knowledge and skills utilized in the web design field. This course continues the pathway to the design, edit and launching of documents, images, graphics, sound and multimedia on the Internet. This course covers Internet theory, web page standards and policies, elements of web page design, user interfaces, special effects, interactive and multimedia components, search engines, navigation, e-commerce tools, and other web technologies.

### **#675-eTechnology**

*Grades: 9,10,11,12*

*No Prerequisite*

*No Fees*

*Credit: .5, Semester Course*

Explore the digital side of life! **E-Technology** will prepare students to discover and develop personal and professional materials through Web 2.0 technologies for placement on the web, such as: Social Media, Audio/Video Production, and Internet-based Advertising. Keyboarding skills and business software applications are important for anyone and are included in this dynamic and important course.

### **#680-Yearbook Production**

*Grades: 9,10,11,12*

*No Prerequisite*

*Fees: \$20*

*Credit: 1.0, Year Course*

*Note: Application encouraged*

MAKE HISTORY through the design, production, and marketing of the school yearbook. This is a project based course for students interested in graphic design, photography, marketing and publishing. Course content includes selling and designing ads, creating layouts, interviewing students and staff, filming and photography, and writing articles for publication. Students must be reliable, organized, and independent. Previous experience with InDesign and Photoshop helpful but not required. Students will use Josten's Yearbook software as well as Mac computers, scanners, and digital cameras. Students are encouraged to take Digital Visual Communication prior to this course.

### **Finance/Accounting Youth Apprenticeship**

*Grades 11, 12*

*Prerequisite: Application Required*

The Finance/Accounting Apprenticeship is for students interested in careers in financial and investment planning, banking, insurance, and business financial management. Students in the Finance and Accounting program learn and practice skills that prepare them for diverse post-secondary opportunities. Students in Youth Apprentice must complete two semesters of coursework yearly that focus on accounting, finance, or business. Students must also complete 450 hours per year of paid work experience in the industry. Youth Apprenticeship applications are available from the School to Careers Coordinator, Ms. Moschkau, in Student Services. Applications are due March 1.

### **Hospitality and Tourism Youth Apprenticeship**

*Grades 11, 12*

*Prerequisite: Application Required*

The Hospitality and Tourism Apprenticeship is for students interested in careers that encompass the management, marketing, and operation of restaurants, lodging, attractions, recreation events, and travel related services. Students in the Hospitality, Lodging, and Tourism program learn and practice skills that prepare them for diverse post-secondary opportunities. Students in Youth Apprentice must complete two semesters of coursework yearly that focuses on business, marketing, or food service. Students must also complete 450 hours per year of paid work experience in the industry. Youth Apprenticeship applications are available from the School to Careers Coordinator, Ms. Moschkau, in Student Services. Applications are due March 1.



# COMPUTER SCIENCE

## **#690\_1-Exploring Computer Science 1**

*Entry-level course, no prerequisite*

*No Fees*

*Credit: .5, Semester Course*

This is the entry-level programming class for students with limited or no experience but an interest in learning more about computer science. Problem solving and computational thinking skills will be developed through course content covering computer organization, internet topics, program design, web development, and programming. Most assignments are completed in class and in the computer lab. This course is especially recommended for students interested in the Information Technology Career Cluster and serves as a prerequisite for Exploring Computer Science 2 and AP Computer Science A.

## **#691\_1-Exploring Computer Science 2**

*Grades: 9,10,11,12*

*Prerequisite: Exploring Computer Science 1 (#690\_1)*

*No Fees*

*Credit: .5, Semester Course*

This course expands on the programming knowledge and computational thinking skills acquired in Exploring Computer Science 1. Students will gain experience in advanced programming techniques, control structures, arrays, algorithms, file access, and searching/sorting techniques. Class assignments, projects and assessments emphasize problem solving, with most of the work being completed in class in the computer lab. This course is especially recommended for students interested in the Information Technology Career Cluster and is recommended, but not required for 696-Advanced Placement Computer Science.

## **#692\_1-Game Design**

*Grades: 10,11,12*

*Prerequisite: Exploring Computer Science 1 (#690\_1) recommended but not required*

*No Fees*

*Credit: .5, Semester Course*

Game Design is an introductory course for students with an interest in learning to create their own games. Students will gain technical skills necessary to create, design & program original working games. They will troubleshoot existing game programs to fix bugs and ensure performance. Students will become familiar and competent using game engines (Game Maker); opening files, saving files, creating and programming original material, integrating separate files into a final game projects, and create and edit audio sound effects & music. In addition, students will critically examine the history, usefulness, elements, and process of game design. Course recommended for students interested in the Programming and Software Development Pathway of the Information Technology Career Cluster.

## **#696-AP Computer Science A**

*Grades: 10,11,12*

*Prerequisite: Exploring Computer Science 1 (#690\_1) \* may be waived with teacher recommendation*

*Approximate cost: Approximately \$90 for AP Examination; additional fee for required textbook*

*Credit: 1.0, Year Course*

This is a college-level, Advanced Placement class for students who plan to major in disciplines that require significant involvement with computer technology. Students enrolled in this class may earn college credit from the required AP Computer Science Examination in May. The course curriculum is aligned with Advanced Placement standards and includes: running and debugging programs, algorithms, data structures, classes, objects, libraries, data types, control structures, recursion, strings, inheritance, and sorting. Course utilizes a college-level textbook, and students are required to have strong note-taking and computational skills. Course recommended for students interested in the Programming and Software Development Pathway of the Information Technology Career Cluster.

## **#697-Exploring Software Development**

*Grades: 11,12*

*Prerequisite: AP Computer Science A*

*No Fees*

*Credit: .5, Semester Course*

This course will focus on students gaining introductory experience in the field of software development. Students will fully immerse in the software development cycle by taking projects from concept to completion. Students will design, implement, and test software for a wide range of purposes. One source of software design projects will come from school staff (K-12).

Students will work in teams to develop those software solutions. Students may also have the opportunity to work with local businesses that provide similar proposals as the K-12 community for software solutions for their company. There will also be opportunities within this course for students to partner with area businesses by joining their software development teams. Course recommended for students interested in the Programming and Software Development Pathway of the Information Technology Career Cluster.

### **#698 – Mobile App Design**

*Grades: 10,11,12*

*Prerequisite: Exploring Computer Science 1 (#690\_1) recommended but not required*

*No Fees*

*Credit: .5, Semester Course*

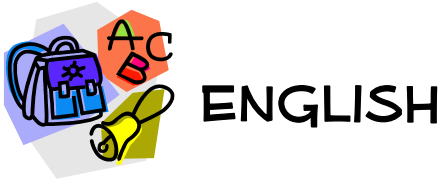
Mobile App Design is an introductory mobile application design & programming course using Java and Eclipse for Android devices. The course starts by taking students through the history of mobile applications. Then we move on to learning about the current industry standards, languages and platforms used in mobile apps development with a special focus on career opportunities within the industry and the entrepreneurial potential that exists. The “meat” of the course is spent learning some basic Java programming and then on to working with Eclipse in order to start developing real working apps. Those lessons and skills are then applied toward programming for Android devices. By the end of the course students are able to successfully download real working mobile applications for Android devices! Course recommended for students interested in the Programming and Software Development Pathway of the Information Technology Career Cluster.

### **Information Technology Youth Apprenticeship**

*Grades 11, 12*

*Prerequisite: Application Required*

The Information Technology Apprenticeship is for students interested in careers in the design, development, support, and management of hardware, software, multimedia, and systems integration. Students in the IT Youth Apprenticeship program learn and practice skills that prepare them for diverse post-secondary opportunities. Students in Youth Apprentice must complete two semesters of coursework yearly that focus on computer science and information technology. Students must also complete 450 hours per year of paid work experience in the industry. Youth Apprenticeship applications are available from the School to Careers Coordinator, Ms. Moschkau, in Student Services. Applications are due March 1.



### **#100-Principles of Literacy 1**

*Grade: 9*

*Prerequisites: Consent of English instructor*

*No fees*

*Credit: 1.0, Year Course*

*Note: This class counts for elective credit. It does NOT fulfill required English credit.*

This class is an extended literacy block attached to English 9. Students will improve ways to approach and comprehend text, develop methods to learn and integrate vocabulary, and enhance their general reading strategies. Students will build their skills through shared, guided, and independent reading as well as through increased exposure to non-fiction text. Two significant goals are to increase reading speed and increase comprehension through better note-taking.

### **#102-Principles of Literacy 2**

*Grade: 10*

*Prerequisites: Consent of English instructor*

*No fees*

*Credit: 1.0, Year Course*

*Note: This class counts for elective credit. It does NOT fulfill required English credit.*

This class is an extended literacy block attached to English 10. Students will improve ways to approach and comprehend text, develop methods to learn and integrate vocabulary, and enhance their general reading strategies. Students will build their skills through shared, guided, and independent reading as well as through increased exposure to non-fiction text. Two significant goals are to increase reading speed and comprehension.

### **#105-English 9**

*Grade: 9*

*Approximate cost: \$20-\$25 possibly for books, any field trip expenses*

*Credit: 1.0, Year Course*

*Note: This is a required course.*

Part of the 9<sup>th</sup> grade program that seeks to transition freshmen to the high school, English 9 is a required course for all incoming students. English 9 focuses on developing the foundational skills that students will build on throughout the rest of high school. Quality 20<sup>th</sup> century literature pieces are selected to pair with US History class in order to give students a richer, more complex look at the societal movements since 1900. Students write analytical essays, plan and present speeches and debates, and engage in small and large group discussions. Grammar and vocabulary are infused throughout units.

*Please Note: In the 2015-16 school year, many students will be learning with 1:1 technology using iPads.*

### **#110-English 10**

*Grade: 10*

*Prerequisites: Attempted a full year of English 9*

*Approximate cost: \$20-\$25 possibly for books, any field trip expenses*

*Credit: 1.0, Year Course*

*Note: This is a required course.*

English 10 strives to increase awareness of various media, cultures, and perspectives using texts written by authors outside of the United States. Students read and analyze fiction, nonfiction, and poetry and participate in a research project, write summaries, and synthesis essays. By completing these assignments, students will learn to verify source credibility, incorporate quotes in a variety of ways, and analyze various writing techniques for purpose and intended effect. Grammar and vocabulary will be incorporated throughout the course.

### **#111-English 11**

*Grade: 11*

*Approximate cost: Suggested Career Days donation, any field trip expenses, potentially \$15 for books*

*Credit: 1.0, Year Course*

*Note: Students are required to take this course or #125-AP English Language or #135 English Literacy during their junior year.*

English 11 is a general English language arts class that works to develop skills for college, careers, and personal enrichment. Students read a variety of texts from genres such as novels, drama, short stories, speeches, articles, and excerpts of longer works. They write in a range of modes as well, including research, analysis, and reflective response. Critical reading and the

writing process are emphasized. Students participate in the careers unit and ongoing class discussions and projects to strengthen their individual competencies and develop their group work skills. Grammar and vocabulary are integrated throughout the year.



### **#1110-English 11 Online**

*Grade: 11*

*Credit: 1.0, Year Course*

English 11 is a general English language arts class that works to develop skills for college, careers, and personal enrichment. Students read a variety of texts from genres such as novels, drama, short stories, speeches, articles, and excerpts of longer works. They write in a range of modes as well, including research, analysis, and reflective response. Critical reading and the writing process are emphasized. Students participate in the careers unit and ongoing class discussions and projects to strengthen their individual competencies and develop their group work skills. Grammar and vocabulary are integrated throughout the year.

Online English 11 covers the same content and skills as English 11, however the course is designed to be completed online. The online aspect of this class will help to further technology skills and serve as preparation for future high school and college classes that have similar requirements.

The following types of students would likely benefit from online instruction:

- Those who would benefit from a self-paced environment
- Those who are looking for more flexibility in their course schedule
- Those who are self-motivated
- Those who can manage their time effectively

If you do not see yourself represented by MOST or ALL of the statements above, it is suggested you consider taking English 11 in the traditional classroom.

Other required conditions of this class are:

- Face-to-face meetings with the teacher will need to take place periodically and will be scheduled in advance.
- If a student's grade drops below a C- for any Quarter, then a discussion will take place with the student and his or her parent or guardian, the teacher, and the guidance counselor to determine if the online class is an appropriate placement.

### **#125-AP English Language and Composition**

*Grades: 10, 11, 12*

*Approximate cost: Potentially \$80 for books, \$90 for test fees, any field trip expenses*

*Credit: 1.0, Year Course*

*Note: There is a required summer assignment.*

This college-level class asks students to analyze text for how the author used language to achieve purpose of effect. Students must demonstrate their abilities to read non-fiction texts analytically through annotations of texts and written responses to prompts, as well as through small and large-group discussions. Students will read a minimum of two non-fiction books, essays, oral arguments, *Macbeth*, and *Heart of Darkness*. Writing assignments will include a descriptive, definition, and compare/contrast paper. Since this is a college-level class, students should possess a strong work ethic, realizing that course expectations will match the reading, writing, and task requirements of a freshman college course.

### **#130-AP English Literature and Composition**

*Grades: 10, 11, 12*

*Approximate cost: Possible field trip expenses (unlikely)*

*Credit: 1.0, Year Course*

*Note: There is a required summer assignment.*

This college-prep class delves into literature, analyzing two novels, four plays, and various poems as a large class and requires that each student read six additional novels outside of usual class work. Students will apply active reading, large and small group discussion, and literary analysis skills learned in other classes, but to a higher degree as this course may earn college credit if students pass the AP exam. Ideal for the student going into liberal arts or simply an avid reader, AP Literature will use retired test prompts to engage students in critical thinking about text.

### **#135-English Literacy**

*Grades: 11, 12*

*Prerequisites: Consent of English instructor*

*No fees*

*Credit: 1.0, Year Course*

English Literacy is a two-year rotating curriculum that seeks to give students a smaller, more personalized learning environment in order to increase reading and writing abilities. Students in this course will work on developing reading proficiency by using various strategies to aid comprehension and vocabulary development. Students will read and write in

various genres, including realistic fiction, poetry, informative and persuasive nonfiction, and career and workplace documents. Each unit will begin with a pre-test and conclude with a post-test to measure achievement. Juniors in this class will participate in the Junior Career Days experience.

### **#147-College-Bound Writers**

*Grades: 11,12*

*No fees*

*Credit: .5, Semester Course*

Students who desire to improve writing skills should take this class concentrating on invention strategies to get the paper started, drafting strategies that clarify audience and purpose, and revision strategies to edit and polish work. Students are expected to have basic research and quote blending skills as well as a degree of comfort utilizing online resources to work through assignments. This class will likely split time between instruction in the classroom and work time in the computer lab.



### **#147B-Blended College-Bound Writers**

*Grades: 11,12*

*No fees*

*Credit: .5, Semester Course*

Students who desire to improve writing skills should take this class concentrating on invention strategies to get the paper started, drafting strategies that clarify audience and purpose, and revision strategies to edit and polish work. Students are expected to have basic research and quote blending skills as well as a degree of comfort utilizing online resources to work through assignments. This course covers the same concepts and skills as College Bound Writers, but the instructional delivery model is different. In this blended learning class, students will be required to attend scheduled small group activities as well as regular writing conferences with the teacher. These will be offered during a variety of times including lunches and before/after school. Be alert that blended learning requires stronger responsibility, advocacy, time-management, and technological skills, including trouble-shooting, but will offer greater flexibility and choice.



### **#148-Introduction to College Writing and Reading (Dual Credit)**

*Grades: 11,12:*

*Credit: 1.0, Year Course*

*Note: This class is the equivalent of Madison College's College Reading Strategies (10808101) and Intro to College Writing (10831103)*

Students passing both semesters of this class with a C or above will earn 6 credits at Madison College as well as create eligibility to take classes that require a score of Compass score of 80 or above. This course is designed to match the pace and rigor of the equivalent courses at Madison College. During first semester, the equivalent of Madison College's College Reading Strategies will be taught, focusing on enhancing college reading and study techniques. Emphasis will be given to developing the critical thinking and reading skills necessary to be successful college readers. Topics covered will include identifying main ideas and supporting details, highlighting and annotating text, summary writing and making inferences. The Reading course includes a reading and research project, as well as an opinion paper. Second semester, the equivalent to Intro to College Writing will be taught, introducing basic principles of composition including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. Students will also complete a major research project.



### **#149B-Blended Introduction to College Writing and Reading (Dual Credit)**

*Grades: 11,12*

*Approximate cost: Books required by Madison College: A Pocket Style Manual by Diane Hacker, ISBN 978-0-312-66480-0 (\$30, optional), Reading Across the Disciplines by Kathleen McWhorter, ISBN 978-0-205-18476-7 (\$90, optional)*

*Credit: 1.0, Year Course*

*Note: This class is the equivalent of Madison College's College Reading Strategies (10808101) and Intro to College Writing (10831103); however part of the course is designed to be completed online.*

Passing both semesters of this class with a C or above will earn 6 credits at Madison College as well as create eligibility to take classes that require a score of Compass score of 80 or above. First semester, the equivalent of Madison College's College Reading Strategies will be taught, focusing on enhancing college reading and study techniques. Emphasis will be given to developing the critical thinking and reading skills necessary to be successful college readers. Topics covered will include identifying main ideas and supporting details, highlighting and annotating text, summary writing and making inferences. Second semester, the equivalent to Introduction to College Writing will be taught, introducing basic principles of composition including organization, development, unity, and coherence in paragraphs and multi-paragraph documents.

In this blended version of the course, the class will meet in the classroom an average of 3 days per week to be introduced to

new information or react to work done online. On the other 2 days, class will NOT meet. Instead, students will either be off-campus or in a designated space doing work. Students that choose this type of class should be self-motivated learners and be able to manage their time. The online portion of this class will help to further technology skills and serve as preparation for future high school and college classes that have similar requirements.

### **#158-Art of Persuasion**

*Grades: 11, 12*

*Approximate cost: \$10 for Upfront Magazine*

*Credit: .5 Semester Course*

This college-prep course will look at arguments in persuasive essays, speeches, political commercials, and photographs, examining what makes an argument persuasive and analyzing what techniques the argument employs. There is a wide range of assignments such as writing an editorial on a topic of passion, crafting a persuasive essay and then turning it into a Blog with enhancing pictures and videos, and participating in the final team debate. This class seeks to make better consumers and propagators of information and moves at a college-prep pace.

### **#159-Women in Literature**

*Grades: 11, 12*

*No fees*

*Credit: .5, Semester Course*

Women in Literature will analyze the arguments and writing styles of women writers through history, beginning with fairytales in the 17<sup>th</sup> century and going through time to today's global women writers. Students will seek to understand the ideas and struggles that unite all these artists while distinguishing the characteristics of each time period. Students will participate in group presentations, practice analytical writing, and read two novels as well as various stories and essays. Students who enroll in this class should be college-bound, able to read both fiction and nonfiction proficiently, willing to actively participate in discussions, and interested in learning more about women's contributions to society.

### **#160-Creative Writing**

*Grades: 11, 12*

*Credit: .5, Semester Course*

Culminating in a final semester portfolio of collected, edited, revised, and polished work, this class expands students' creative writing repertoires through writing exercises, reading published models, and group interaction. Students are expected to share work with a peer group and the class and work on multiple revisions for a single piece of writing. Perfect for a student seeking to be a creative writer, this class will also hone editing and commenting skills.

### **#163-Principles of Writing**

*Grades: 11, 12*

*No fees*

*Credit: .5, Semester Course*

Principles of Writing, a computer-lab centered course, is meant for students who may be going into technical fields and wish to practice more technical writing skills not related to literature or other text analysis. Students will complete a mechanism description, write directions, and complete an incident report using sophisticated sentence building, word precision, and clarity of details. The final project requires students to deeply analyze sources while creating a one-page research synopsis.

### **#170-Nonfiction Writing Project (Newspaper)**

*Grades: 11, 12*

*No fees*

*Credit: 1.0, Year-long Course*

*Note: Application required*

Students who are interested in writing, thrive on teamwork, are strictly deadline-oriented, can openly talk to and interview peers, and can positively grow from public and private feedback are invited to apply for this intensive, college-bound class which will write, edit, layout, and distribute seven issues of the Cat's Eye Newspaper. Because this is a co-curricular class, students will be expected (and graded) to work outside of school hours selling ads, interviewing sources, editing others' work, and laying out the paper in InDesign. Layout time, in particular, will be a requirement of five or more hours after school during pre-set meetings with the class each month. All members of the class will be expected to contribute significant, edited, and revised writing pieces throughout the year. This is a college-paced class perfect for students going into journalism, teaching, editing, publishing, marketing, and art design.



### **#176-The Wilderness Language Arts Experience**

*Grades: 11,12*

*Approximate cost: Potentially \$30 for field trip expenses*

*Credit: 0.5, Semester Course*

Meant for students with an interest in the outdoors and the environment, Wilderness uses essays, novels, and articles to examine man's changing relationship with nature. Students will be expected to actively read and critically participate in group discussions. Written assignments will include critical reviews, short-answer responses, and essays. Students will be expected to work on numerous small group projects throughout the semester and present information using a variety of other presentation mediums.

### **#187-Stagecraft (Offered second semester ONLY)**

*Grades: 9,10,11,12*

*Entry-level course*

*Prerequisite: An interest in theatre*

*Approximate cost: Any field trip expenses.*

*Credit: 0.5, Semester Course*

**Note: Does NOT fulfill English requirement**

This course assumes no prior experience on the part of the student and is designed to provide a basic working knowledge of all aspects of backstage theatrical production. The course will emphasize terminology combined with basic information concerning organizational structure, scenery construction, rigging, lighting, sound, properties, and stage management.

### **#190-Theater Arts**

*Grades: 9,10,11,12*

*Entry-level course*

*Prerequisite: An interest in theatre*

*Approximate cost: Any field trip expenses for plays*

*Credit: .5, Semester Course*

Theater Arts assumes no prior experience with the theater on the part of the student and is meant for creative and gifted students willing to examine the actor-audience relationship and explore the world of theater through hands-on experiences, theater games, and performance projects. In this class, performance, creative problem solving, voice and diction, pantomime, and movement will be emphasized. Students will be required to participate in some after school rehearsals, attend theatrical performances, read and write about plays, and participate in producing a show for performance.

### **#195-Advanced Theater Arts**

*Grades: 10,11,12*

*Prerequisites: Theater Arts and permission of instructor or significant experience and permission of the instructor.*

*Approximate cost: Any field trip expenses for plays*

*Credit: .5, Semester Course*

**Note: Does NOT fulfill English requirement**

Designed for the serious and experienced student of theatre, Advanced Theater Arts is an advanced level course that investigates the art of the theatre primarily from the perspective of the performer. Students should be self-starters who possess a serious interest in theatre and performance. Emphasis is placed on exploring the actor-audience relationship as the center of every theatrical event. This class assumes significant and meaningful prior experience on the part of the student as well as a strong desire to improve performance skills, which is primarily done through hands-on experiences, including theater games and performance projects. Students will be required to participate in after school rehearsals, attend theatrical performances, read and write about plays, and participate in producing a show for performance.

### **#197-Independent Theater Project**

*Grades: 11,12*

*Prerequisites: Theater Arts and/or Advanced Theater Arts, Stagecraft, and application with instructor's written approval of preliminary proposal before enrolling; Junior/Senior standing*

*Approximate cost: None anticipated*

*Credit: .5, Semester Course*

**Note: Does NOT fulfill English requirement**

Designed for the serious student of theater, this class allows a culmination of skills learned throughout the VAHS theater experience. Do you have a project or idea you would like to see realized on stage? Do you enjoy reading plays or do you have an interest in the history of the theatre? Propose to pursue a particular area of study, such as design, direction, or research, and create a project proposal to see that dream become a reality. If your proposal is accepted, you will meet with the instructor on a weekly basis to discuss progress, report on activity recorded in your written daily log, and plan ahead. Once the project is completed, you will need to write a written analysis of the project, a personal assessment, and, in the case of a performance project, submit a production book.

# EXPLORATION ACADEMY

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**Exploration Academy (EA) is a Verona Area School District Charter School available for all high school aged students.**

## **What is the vision behind EA?**

EA is a school where students connect their passions and interests with academic and career goals ranging from performance arts, to entrepreneurship, to electrical engineering, to auto mechanics. EA provides an opportunity for students with a support network, which includes parents, an academic advisor, content area experts, and community mentors to develop a personalized learning plan. Student learning is not dictated by time requirements but rather is shaped by each student's unique learning needs. Our goal is to meet students where they are at academically and provide highly engaging activities to promote individual growth.

## **When does EA meet? Where?**

EA is a school located at 400 Main St. Verona, WI in the building known as the "K-Wing" on the VAHS campus. The school hours will vary depending upon the student's personalized learning plan and the schedule of seminars, workshops, and classes, but most classes do occur during a traditional high school day. There may be opportunities for students to engage in learning before or after the VAHS scheduled day concludes; however, in most instances, students are able to leave at the end of the regular school day. In addition, students may have opportunities to explore summer learning.

## **Who should apply?**

Students interested in EA have a variety of college and career plans that range from fine arts to electrical engineering. All students, however, share a common belief that they have passions and interests that are worthy of exhibiting within the context of school. Each student must be willing to invest in themselves and grow as well-rounded learners through their passions and interests. Below are a few characteristics that may help you decide if EA is a good fit for you:

I am a student wishing to integrate all subjects using real-world and technology-enhanced learning contexts as a platform for engaging in my education:

- I am committed to learning in preparation for life after high school.
- I am a student who recognizes the importance of collaboration and creativity for all career paths and learning experiences.
- I am an independent learner with passions and interests.

*For more information or an application to enroll, please visit our website at [www.theexplorationacademy.org](http://www.theexplorationacademy.org) or contact Pheng Lee, Exploration Academy Principal at 608-845-4560*



# FAMILY AND CONSUMER SCIENCE

## **#810-Surviving Independently-Life Skills Class**

*Grades: 11,12*

*Entry-level course, no prerequisite*

*Approximate cost: \$25 for lab use (extra expenses may be required)*

*Credit: .5, Semester Course*

This class teaches the 11<sup>th</sup> or 12<sup>th</sup> grade student who will soon graduate or leave the family home, what it takes to live independently and be self-sufficient. Through online research, work in the kitchen lab, and occasional field trips, students learn the basic skills necessary for an independent life, including developing cooking skills, renting an apartment, buying car insurance, and spending money wisely. This course provides relevant content for students interested in these career clusters: Business, Management, & Administration; Finance, Marketing, Sales, & Service; Hospitality & Tourism; and Science, Technology, Engineering & Mathematics Career Clusters.

## **#816-Culinary I - Beginning Foods**

*Grades: 9,10,11,12*

*Entry-level course, no prerequisite*

*Approximate cost: \$25 for lab use*

*Credit: .5, Semester Course*

Designed for students interested in studying basic kitchen skills and nutrition, this entry-level course provides students with the opportunity to study cooking and baking terminology, government nutrition guidelines, the use and care of kitchen utensils, menu planning and preparation, and microwave cooking. Coursework requires participation in labs and the completion of projects and tests. Students are expected to try new recipes at home. This course provides relevant content for students interested in careers in the Hospitality & Tourism Career Cluster. Completion and passing this class serves as a prerequisite for #821-Culinary 2-Advanced Foods or #821B Blended Culinary.



## **#816B-Blended Culinary 1- Beginning Foods**

*Grades: 9,10,11,12*

*Entry-level course, no prerequisite*

*Approximate cost: \$25 for lab use (extra expenses may be required)*

*Credit: .5, Semester Course*

Blended Culinary 1 covers the same information as Culinary 1 #816, however part of the course is designed to be completed online. On average, 3 out of the 5 days per week, the class will meet in the kitchen lab to create recipes that align with the content learned from the online experience. THE OTHER 2 DAYS CLASS WILL NOT MEET FACE-TO-FACE, but the student is expected to do the online assignments and requirements. On those 2 days students will either be OFF-CAMPUS OR IN OTHER DESIGNATED WORKSPACES. This course is designed for students who want to learn about food concepts and preparation. A Blended Culinary 1 student must be an independent learner capable of navigating a Moodle site with online accessibility. The Blended course is meant to be as paperless as possible and will rely heavily on online discussions, articles, and other assignments. It is recommended that students who would like to continue on with Culinary 2, take the Blended course to become familiar with Moodle in order to increase their successes in future culinary courses. This course covers the same concepts, and skills and prerequisites as Culinary 1, but the instructional delivery model is different.

## **#821-Culinary 2-Advanced Foods**

*Grades: 10,11,12*

*Prerequisite: #816 or #816B-Culinary 1 or Blended Culinary 1*

*Approximate cost: \$25 for lab use*

*Credit: .5, Semester Course*

Culinary 2 students will explore cake decorating, pies and pastries, chocolate, chili and soups. Students will participate in the planning, purchasing and preparation of American regional cooking. Students will utilize their Culinary 1 skills and further advance their culinary experiences in the lab. In addition, students will participate in discussions and other online activities on a Moodle course designed for the Culinary 2 student. This course provides relevant content for students interested in careers in the Hospitality & Tourism Career Cluster. This course serves as a prerequisite for #826-Culinary 3- Foods Around the World.



### #821B-Blended Culinary 2-Advanced Foods

Grades: 10,11,12

Prerequisite: #816 or 816B-Culinary 1 or Blended Culinary 1 or #830-Food Science

Approximately cost: \$25 for lab use

Credit: .5, Semester Course

Blended Culinary 2 covers the same information as Culinary 2 #821, however part of the course is designed to be completed online. On average, 3 out of the 5 days will meet in the kitchen lab to create recipes that align with the content learned from the online experience. THE OTHER 2 DAYS CLASS WILL NOT MEET FACE-TO-FACE, but the student is expected to do the online assignments and requirements. On those 2 days students will either be OF CAMPUS OF IN OTHER DESIGNATED WORKSPACES. This course is designed for students who want to learn about food concepts and preparation. A blended Culinary 2 student must be an independent learner capable of navigating a Moodle site with online accessibility. The blended course is meant to be as paperless as possible and will rely heavily on online discussions, articles, and other activities. It is recommended that students who would like to continue on with Culinary 3 take the blended course to become familiar with Moodle in order to increase their successes in future culinary courses. This course covers the same concepts, skills and prerequisite but the instructional delivery model is different.

### #827-ProStart One

Grades: 10,11,12

Prerequisites: passing (C or better) in either Culinary 1, Blended Culinary, **and** 1 teacher recommendation

Approximate Cost: \$50 for lab use (additional estimated \$20 cost for national accreditation test)

Credit: 1.0, yearlong course

The National Restaurant Association Educational Foundation's (NRAEF) ProStart Year One program teaches students the management and culinary skills needed for a career in the restaurant and foodservice industry. Students will utilize classroom experiences, as well as have opportunities for mentored work experiences, and/or participate state and national competitions. **Weekly food labs** will be an integral part of the course and will also include catering school/community events. In addition to learning advanced culinary techniques and practices, students will also explore hospitality as future careers, kitchen and management essentials, and have the opportunity to complete the ProStart program through ProStart Two in order to achieve the ProStart certificate. \*National Restaurant Association Year One certificates will be available to students who complete the course and pass the Level One Exam.

\*\* If students complete ProStart One and ProStart Two with "C" or better and earn the ProStart certificate, students may earn up to **12 credits at the University of Wisconsin-Stout** or **13 credits at Madison College** as well as earn opportunities to opt out of certain courses at various culinary schools across the country.

### #828-ProStart Two

Grades: 10,11,12

Prerequisites: passing (C or better) in ProStart One

Approximate Cost: \$50 for lab use (additional estimated \$20 cost for national accreditation test)

Credit: 1.0, yearlong course

Following ProStart One, the National Restaurant Association Educational Foundation's (NRAEF) ProStart Year Two program continues focusing skills needed for a career in the restaurant and foodservice industry. Students will cover topics such as menu planning and marketing (including a focus on nutrition), salads/garnishing, desserts/baked goods, purchasing and inventory control, and global cuisine. **Weekly food labs** will be an integral part of the course and will also include catering school/community events. Mentored work experience and participation in state and national competitions will continue to be opportunities for students. National Restaurant Association Year Two certificates will be available to students who complete the course, pass the Second Year Exam, and document 400 hours of work experience in the foodservice industry.

\*\* If students complete ProStart One and Two with "C" or better and earn the ProStart certificate, students may earn up to **12 credits at the University of Wisconsin-Stout** or **13 credits at Madison College** as well as earn opportunities to opt out of certain courses at various culinary schools across the country.

### #829-Culinary 3- Foods Around the World

Grades: 11,12

Prerequisites: #821-Culinary 2

Approximate cost: \$25 for lab use

Credit: .5, Semester Course

Culinary 3 is for the student who has taken all the culinary classes and wants something more! This class broadens the aspiring cook's repertoire to cuisines from many different cultures. Students will utilize their skills in the classroom, electronic classroom via moodle, and culinary lab. Through research, food labs, and various projects, students study the cuisine of various countries as well as different methods of cooking and preparation. Additional course content includes the study of the

cultures, holidays, histories, and geographies of other countries. This course provides relevant content for students interested in careers in the Hospitality & Tourism Career Cluster.

### **#835-Medical Occupations**

*Grades: 10,11,12*

*Entry-level course, no prerequisite*

*No fees*

*Credit: .5, Semester Course*

This comprehensive course is designed for focused, open-minded students looking to explore the healthcare delivery system and the fundamentals of quality patient care. Related sciences, such as biology, anatomy and physiology, and fundamentals of business and economics will be used as students explore a variety of topics including: professionalism, evaluating healthcare facilities, careers across the healthcare spectrum (diagnostics, informatics, therapeutics, social services and research), assessing patient care needs, measuring vital signs, basic medical terminology and abbreviations, human body systems, caring for special needs and populations (children, the aging, diagnosed illnesses and disorders, etc.), legal and ethical considerations, current issues, emergency care, and more. Students will utilize technology, media, text, and professional community resources/field trips as they work (individually and collaboratively) to practice skills, research topics, complete projects, culminating with developing a comprehensive healthcare plan of their own.

### **#840-Medical Terminology**

*Grades: 11,12 (Grade 10 with permission of instructor)*

*Entry-level course, (#835-Medical Occupations or Certified Nursing Assistant (CNA) courses recommended but not required)*

*Approximate cost: \$90 for new textbook or \$30 for used textbook*

*Credit: .5, Semester Course*

Learning and building a medical vocabulary is an asset for students who may be interested in health care careers as well as for students who are interested in matters of good health. Students will learn to analyze medical terms using word components and then classify those terms by body systems. Through independent research projects, case studies, and the examination of text and videos, students will develop skills to better understand physiology, anatomy, and human biology topics in the field of health science. This course provides relevant content for students interested in careers in the Health Science Career Cluster.

### **#845-Housing and Interiors**

*Grades: 10,11,12*

*Entry-level course, no prerequisite*

*Approximate Cost: \$25 for supplies*

*Credit: .5, Semester Course*

Designed for hands-on learners who are both proactive and flexible in their working style, this class teaches students how the elements and principles of design are used in the housing industry. Students draw floor plans using basic drafting equipment and apply newly gained knowledge of furniture and housing styles to their designs. Projects include designing a dream bedroom, drafting an apartment for a client, and designing a house. Projects will likely require work outside of class, and students may be asked to paint, redecorate, or rehabilitate some classroom, office, or furniture of VAHS. This course provides relevant content for students interested in these career clusters: Hospitality & Tourism and Arts, A/V Technology, & Communications.

### **#880-Child Development**

*Grades: 9,10,11,12*

*Entry-level course, no prerequisite*

*No Fees*

*Credit: .5, Semester Course*

This course is designed for any student interested learning about children and working with them in educational or home settings. The class will study child development theories and explore the milestones from prenatal development through school age. Students will participate in class discussions, practice child care with the "Real Care" baby simulator, wear a nine-month pregnancy profile, and observe children in a childcare setting. This course is recommended for students interested in the Education & Training career cluster. Completion and passing this class serves as a prerequisite for #862-Parents and Children.

### **#862-Parents and Children**

*Grades: 9,10,11,12*

*Prerequisite #880-Child Development*

*No Fees*

*Credit: .5, Semester Course*

The relationship between parent and child is an enduring one and provides the content for this class. Through discussion, reading, and practice, students gain a better understanding of the multiple roles of parents and specific techniques to use

when parenting young children. For several days in the course of this class, students tend to a “Real Care” mechanical baby. In addition, students experience artificial pregnancy bellies. Students will also conduct parent interviews and child observations. This course will allow students to plan and implement their own activities while providing them with basic infant and childcare skills.



### **#888-Child Care: Health Safety and Nutrition** (dual credit pending, 3.0 Madison College)

*Grades: 11, 12*

*Prerequisite: #880-Child Development or #862 Parents and Children*

*No Fees*

*Credit: .5, Semester Course*

Any Verona Area High School student who has taken Child Development or Parents and Children previously can enroll in this Madison College course. This course will examine the topics of health, safety, and nutrition within the context of the early childhood setting. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; follow governmental regulations and professional standards as they apply to health, safety, and nutrition; plan a safe early childhood environment; plan nutritionally sound menus; examine Child Abuse and Neglect issues and mandates; apply Sudden Infant Death Syndrome risk reduction strategies, apply strategies to prevent the occurrence of Shaken Baby Syndrome; incorporate health, safety, and nutrition concepts into the children’s curriculum. Students wishing to take the course for Madison College credit will need to obtain a C or better. It is the student’s choice whether or not they take the course for Madison College credit.

### **#895-Contemporary Living**

*Grades: 11, 12*

*Entry-level course, no prerequisites*

*No Fees*

*Credit: .5, Semester Course*

This course focuses on real-life relationship issues. Students are required to engage in classroom and on-line discussions; both in small and large group settings. Topics include family relationships, human sexuality, marriage, divorce, parenting, and death and dying. Through this class, students will learn communication and conflict resolution skills. Course requirements include participating in online discussions and creating a semester portfolio. This program provides relevant content for students interested in careers in the Law, Public Safety, Corrections, & Security Career Cluster and is relevant to all students.

### **Certified Nursing Assistant (CNA) Youth Options and/or Youth Apprenticeship**

*Prerequisites: Must be age 16 by course start date, 100% attendance is mandatory for all labs and clinical hours. In addition, students will complete the classroom requirements online. All students MUST have earned a test score of 60 or higher on the READING portion of the COMPASS test at Madison College or earned a score of 16 or more on the ACT test.*

*Credit: .75 (3.0 Madison College)*

*Grade Level: 11, 12*

*Fees: Approximately \$160 (this will cover cost of kit, scrubs, and watch with second hand: \$68.00 for background check & health history form. VAHS pays for the required text. Upon course completion, if the student chooses to keep the text, they may do so by reimbursing VAHS for the cost of the text. Otherwise, the student must return the textbook at the end of the course.)*

This Madison College course will be taught at Verona Area High School utilizing the high school labs and equipment. The Nursing Assistant (NA) class is recognized by the Wisconsin Department of Health Services as a nurse aide training program. The course prepares students for employment as entry level nursing assistants in area care centers, hospitals, and for a home health care organization, where they will perform selected tasks supportive to nursing staff and under the supervision of a licensed nurse.

After successfully earning at least 77% on the required quizzes, 100% participation in 25 hours of lab, and the online classroom assignments at Verona High School, students will qualify to participate in 45 hours of the clinical experience facilitated by a registered nurse at an area hospital or care center in order to qualify for the required state test. **The cost of this exam is approximately \$120, and is the responsibility of the student.** Upon passing the state exam, students are placed on a state registry and are able to work with patients at a variety of health care facilities (clinics, nursing homes, hospitals.) This class is required for admittance in many post secondary nursing programs.

**Note:** Lab and clinical time will be scheduled outside of the normal school day. Participation in the clinical part of this course is dependent on a state-mandated background check, health screening form completion, and the Madison College required 77% or better on the required quizzes, and satisfactory classroom completion to qualify for participation in the clinical portion of the course. All Madison College policies include the grading policy will be followed. **Students are responsible to provide their own transportation to and from the clinical site.**

**Students MUST complete a Youth Options application and/or a Youth Apprenticeship Application (Ms Moschkau, Student Services).**

A summer course at Madison College is also available to students who are interested in taking the course over the summer. Class runs from approximately June 15- August 5th. 100% participation is mandatory. Students who take the course over the summer must apply and be accepted into the Youth Apprentice program and commit to 450 hours of work-based learning after obtaining their CNA license. Students must take an additional 2 semesters of coursework/year. All other pre-requisites/qualifications (listed above) are still applicable

### **Pharmacy Technician Assistant Youth Apprenticeship**

*Grade: 12*

*Prerequisite: Application Required*

The Pharmacy Technician Assistant Apprenticeship is for seniors interested in careers in pharmacy, nursing, and healthcare. Students in the Pharmacy Technician Assistant program learn and practice skills that prepare them for diverse post-secondary opportunities. Students in Youth Apprentice must complete two semesters of coursework yearly that focus on healthcare or biotechnology. Students must also complete 450 hours per year of paid work experience in the industry. Students accepted into the program are also offered the option of taking evening Pharmacy Technician courses with the Dane County School Consortium that will prepare them to take the Pharmacy Technician Certification Board exam. Youth Apprenticeship applications are available from the School to Careers Coordinator, Ms. Moschkau, in Student Services. Applications are due March 1.

### **Hospitality and Tourism Youth Apprenticeship**

*Grades 11, 12*

*Prerequisite: Application Required*

The Hospitality and Tourism Apprenticeship is for students interested in careers that encompass the management, marketing, and operation of restaurants, lodging, attractions, recreation events, and travel related services. Students in the Hospitality, Lodging, and Tourism program learn and practice skills that prepare them for diverse post-secondary opportunities. Students in Youth Apprentice must complete two semesters of coursework yearly that focuses on business, marketing, or food service. Students must also complete 450 hours per year of paid work experience in the industry. Youth Apprenticeship applications are available from the School to Careers Coordinator, Ms. Moschkau, in Student Services. Applications are due March 1.



# MATH

The VAHS Math Department has divided most of the yearlong math classes into semester classes to allow for greater flexibility and appropriate student placement. The traditional sequence of Pre-Algebra, Algebra 1, Geometry, and Advanced Algebra, are now eight semester classes. For example, the yearlong class of Geometry is now divided into a semester of Geometry – Part 1 and a semester of Geometry – Part 2.

The conversion from yearlong to semester classes is as follows:

Pre-Algebra = Math Concepts + Pre-Algebra

Algebra 1 = Algebra – Part 1 + Algebra – Part 2

Geometry = Geometry – Part 1 + Geometry – Part 2

Advanced Algebra = Advanced Algebra – Part 1 + Advanced Algebra – Part 2

## **Foundational Math Sequence**

### **#253-Math Concepts**

*Grades: 9*

*Prerequisites: none*

*Fees and Requirements: Scientific calculator*

*Credit: 0.5, Semester*

Math Concepts is designed for students that need to develop foundational skills before they learn algebraic concepts. The topics of this course include but are not limited to the computation and application of whole numbers, integers, and rational numbers.

### **#255-Pre-Algebra**

*Grades: 9-10*

*Prerequisites: Math Concepts*

*Fees and Requirements: Scientific calculator*

*Credit: 0.5, Semester*

The topics of this course include but are not limited to order of operations, translating words into mathematical expressions and equations, evaluating expressions with variables, and solving simple equations.

## **Algebra Sequence**

### **#265A-Algebra – Part 1**

*Grades: 9-12*

*Prerequisites: Pre-Algebra*

*Fees and Requirements: Scientific calculator*

*Credit: 0.5, Semester*

Algebra – Part 1 is the first semester of a traditional yearlong high school Algebra 1 class. The topics of this course include but are not limited to working with numbers, starting to learn about variables, solving equations, and graphing lines on the coordinate plane.

### **#265B-Algebra – Part 2**

*Grades: 9-12*

*Prerequisites: Algebra – Part 1*

*Fees and Requirements: Scientific calculator*

*Credit: 0.5, Semester*

Algebra – Part 2 is the second semester of a traditional yearlong high school Algebra 1 class. The topics of this course include but are not limited to direct variation, rate of change, proportions, percentages, graphing linear equations, writing equations of lines, systems of equations, functions, modeling with graphs, one and two variable inequalities, and basic probability and statistics.

### **#275A-Advanced Algebra – Part 1**

*Grades: 9-12*

*Prerequisites: Algebra – Part 2*

*Fees and Requirements: Graphing calculator (TI 84 plus recommended)*

*Credit: 0.5, Semester*

Advanced Algebra – Part 1 is the first semester of a traditional yearlong high school Advanced Algebra class. The topics of



this course include but are not limited to linear equations and matrices, functions, quadratics, exponents, polynomials, and radicals.

### **#275B-Advanced Algebra – Part 2**

*Grades: 9-12*

*Prerequisites: Advanced Algebra – Part 1*

*Fees and Requirements: Graphing calculator (TI 84 plus recommended)*

*Credit: 0.5, Semester*

Advanced Algebra – Part 2 is the second semester of a traditional yearlong high school Advanced Algebra class. The topics of this course include but are not limited to sequences and series, exponential and logarithmic functions, rational functions, trigonometry and conics.

### **Geometry Sequence**

#### **#270-Geometry – Part 1**

*Grades: 9-12*

*Prerequisites: Algebra – Part 1*

*Fees and Requirements: Scientific calculator*

*Credit: 0.5, Semester*

Geometry – Part 1 is the first semester of a traditional yearlong high school Geometry class. The topics of this course include but are not limited to midpoint formula, distance formula, the Pythagorean Theorem, slope and angle relationships, properties of triangles, similarity and congruence, and properties of polygons.

#### **#270B Geometry – Part 2**

*Grades: 9-12*

*Prerequisites: Geometry – Part 1*

*Fees and Requirements: Scientific calculator*

*Credit: 0.5, Semester*

Geometry – Part 2 is the first semester of a traditional yearlong high school Geometry class. The topics of this course include but are not limited to area and perimeter of polygons, circles and composite figures, angles and chords in circles, arc length and area of sectors, volume and surface area of 3-dimensional shapes, special right triangles and right triangle trigonometry

### **College Level Courses**



#### **#273-Intermediate Algebra (Dual Credit With Madison College)**

*Grade: 11, 12*

*Prerequisites: Algebra 2 and Geometry 1*

*Fees and Requirements: Scientific calculator, possible fee of \$20-\$35 for online resources*

*Credit: 1.0, Year Course*

*Note: This class is the equivalent of Madison College's Elementary Algebra with Applications (10834110).*

Intermediate Algebra is a classroom-based course which studies algebra topics with applications. This class will ask students to do daily work, create homework presentations, keep an activity notebook, take accurate and thorough notes, and pass tests. This class is meant to bridge Algebra 1 and Advanced Algebra, targeting students who may need a bit more time to refine algebraic skills. In addition students who maintain a C for both semesters and get a C on a final exam approved by Madison College will earn Madison College credit

#### **#280-Precalculus**

*Grades: 9 -12*

*Prerequisites: Advanced Algebra or College Algebra*

*Fees and Requirements: Graphing calculator (TI 84 plus recommended)*

*Credit: 1.0, Year Course*

Precalculus continues with advanced algebra skills with an introduction to calculus at the end of the course. Advanced trigonometry skills are also woven through the course. Because this is a more advanced class, tests have a heavier weight, though daily work, class participation, and consistent organization are still expected. This class is meant for college-bound students aiming for AP classes.

#### **#285-Statistics**

*Grade: 12*

*Prerequisites: Algebra 2*

*Fees and Requirements: Graphing calculator (TI 84 plus recommended)*

*Credit: 1.0, Year Course*

Statistics will be a mixture of tests, homework (some graded on completion and some on correctness), quizzes, and projects, with tests and projects counting for the majority of your overall course grade. There will be a concerted effort to integrate and review algebraic skills as well. This class will be more project-based than AP Statistics, allowing for more group work. Class work will incorporate a variety of activities, including traditional note taking and simulations that will help students understand statistical concepts. This class is for motivated seniors who want to build statistical literacy. Students planning to study sociology, psychology, business, engineering, medicine, actuarial science are strongly encouraged to take a statistics class.

### **#290-AP Statistics**

*Grades: 9-12*

*Prerequisites: Algebra 2*

*Fees and Requirements: Graphing calculator (TI 84 plus recommended), \$90 for AP test*

*Credit: 1.0, Year Course*

This intensive course studying beginning-level college statistics examines descriptive statistics, experimental design, sampling distributions, probability, and statistical inference. Meant for the college-bound students, those who successfully pass the AP test may receive college credit.

### **#295-AP Calculus AB**

*Grades: 10-12*

*Prerequisites: Precalculus*

*Fees and Requirements: Graphing calculator (TI 84 plus recommended), \$90 for AP test*

*Credit: 1.0, Year Course*

*Note: Application Required*

This is the first semester of university level calculus and studies topics such as functions, limits, continuity, differential calculus, and integral calculus. Meant for the college-bound students, those who successfully pass the AP test may receive college credit.

### **#296-AP Calculus BC**

*Grades: 10-12*

*Prerequisites: Precalculus*

*Fees and Requirements: Graphing calculator (TI 84 plus recommended), \$90 for AP test*

*Credit: 1.0 Year Course*

*Note: Application Required*

This is a full-year (two semesters) university level course and studies the topics of Calculus AB plus additional topics. Meant for the college-bound students, those who successfully pass the AP test may receive college credit. The content of Calculus BC is designed to qualify the student for placement and credit in a course that is one course beyond that graded for Calculus AB.



### **#299 Calculus and Analytic Geometry 3(Dual Credit with UW - Whitewater)**

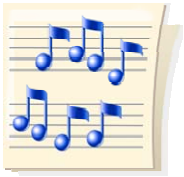
*Grades: 11,12*

*Prerequisites: AP Calculus BC*

*Fees and Requirements: Graphing calculator (TI 84 plus recommended)*

*Credit: 1.0 Year Course*

This course is the third semester of university level calculus. Topics include solid analytic geometry, vectors and vector functions, functions of several variables, multiple integrals and their applications. This course is offered as a dual enrollment option through the University of Wisconsin - Whitewater



# MUSIC

## **VAHS BANDS**

**Eric Anderson, Band Director**

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[www.vahsmusic.org](http://www.vahsmusic.org)

845-4484

### **#520\_9-Concert Band 9**

Grades: 9

*Prerequisite: Prior performing experience on instrument recommended or approval of instructor; no audition required*

*Fees: Though most students own their personal instruments, VAHS does have a limited supply for rent; the rental fee is \$30 per semester. All percussionists are charged \$40 per semester for use of the school-owned percussion equipment.*

*Credit: 1.0, Year Course*

Concert Band builds on the fundamental skills introduced in middle school band, including rehearsal skills, tone, technique, musicality, music-reading, and ensemble awareness. No audition is required; however, students who do not have prior experience on an instrument should contact the instructor prior to enrollment in course. This is an active performing ensemble; students are required to perform in concerts, including Pep Band performances at regular season home football games. Students in Concert Band are expected to practice their instruments outside of class time as well as complete at least two small-group sectionals per quarter. Students will study and perform a wide variety of band repertoire from diverse musical styles and time periods. This course is recommended for students interested in careers in the arts and communications, and also for students who enjoy participating in an instrumental music experience.

### **#521-Symphonic Band**

Grades: 10,11,12

*Prerequisite: Completion of #520-Concert Band 9 or equivalent prior performing experience on an instrument is highly recommended; no audition required.*

*Fees: Though most students own their personal instruments, VAHS does have a limited supply for rent; the rental fee is \$30 per semester. All percussionists are charged \$40 per semester for use of the school-owned percussion equipment.*

*Credit: 1.0, Year Course*

Symphonic Band builds on the skills developed in #520-Concert Band, including rehearsal skills, tone, technique, musicality, music reading, and ensemble awareness, through the performance of a more challenging and diverse repertoire. This is an active performing ensemble for students in grades 10-12. Students are required to perform in concerts, including Pep Band performances at regular season home football games. Students in Symphonic Band are expected to practice their instruments outside of class time as well as complete at least two small-group sectionals per quarter. This course is recommended for students interested in careers in the arts and communications, and also for students who enjoy participating in an instrumental music experience.

### **#530-Wind Ensemble**

Grades: 10,11,12

*Prerequisite: Open to students by audition only*

*Fees: Though most students own their personal instruments, VAHS does have a limited supply for rent; the rental fee is \$30 per semester. All percussionists are charged \$40 per semester for use of the school-owned percussion equipment.*

*Credit: 1.0, Year Course*

Wind Ensemble is an advanced-level band open by audition only to students in grades 10-12. Students study and perform the masterworks of band literature as well contemporary and new music composed for college- and professional-level bands. Members of the Wind Ensemble also have the opportunity to perform in small chamber ensembles and with the Symphony Orchestra. Wind Ensemble students are strongly encouraged to take private lessons on their instruments. This is an active performing ensemble: students are required to perform in concerts, including Symphony Orchestra concerts and Pep Band performances at regular season home football games. Students in Wind Ensemble are expected to practice their instruments outside of class time as well as complete at least two small-group sectionals per quarter. This course is recommended for students pursuing careers in the arts - composing or performance - and music education.

## **VAHS CHOIRS**

**Judy Georgeson, Choir Director**

[judy.georgeson@verona.k12.wi.us](mailto:judy.georgeson@verona.k12.wi.us)

[www.vahsmusic.org](http://www.vahsmusic.org)

845-4485

### **#540\_9-Chorale 9**

*Grades: 9*

*Entry-level course, no prerequisite or audition*

*Fees: Occasional field trip fees for travel to festivals*

*Credit: 1.0, Year Course*

This course is for 9<sup>th</sup> grade students who like to sing and want to perform in a vocal ensemble. No audition or prior experience is required. Students progress toward becoming well-versed, well-rounded vocal musicians through their study and practice of vocal technique, choral ensemble skills, and music notation. This is a performance class, and students must participate fully in daily rehearsals as well as perform in all required concerts, events, and festivals, typically one required performance per quarter. All necessary materials are provided; many 9<sup>th</sup> grade Chorale students progress to Concert Choir. This course is recommended for students interested in careers in the arts and communications, but also for students who just want to participate in a vocal music experience.

### **#540-Chorale**

*Grades: 10,11,12; occasionally 9<sup>th</sup> with permission of instructor*

*Entry-level course, no prerequisite or audition*

*Fees: Occasional field trip fees for travel to festivals*

*Credit: 1.0, Year Course*

This course is for students who want to *sing--and sing* with others in a choral ensemble. No audition or prior experience is required. Students will create meaningful and expressive choral music by practicing and studying vocal technique, choral ensemble skills, and music notation. This is a performance class, and students must participate fully in daily rehearsals as well as perform in all required concerts, events, and festivals, typically one required performance per quarter. All necessary materials are provided; many Chorale students progress to Concert Choir. This course is recommended for students interested in careers in the arts and communications, but also for students who enjoy music in their lives.

### **#550-Concert Choir**

*Grades: 11,12, occasionally 10<sup>th</sup> graders*

*Prerequisite: Audition and consent of instructor*

*Fees: Occasional field trip fees for travel to festivals*

*Credit: 1.0, Year Course*

Concert Choir is an advanced level and highly active performance ensemble. Students in this Choir desire continual growth as a musician, feel confident in performance, and dedicated to the ensemble's success. Audition is required, and the student must demonstrate vocal skill as well as some music reading knowledge. Participation in concerts, festivals, and other scheduled events is required, typically two performances per quarter. Lessons/sectionals are scheduled as needed, and individual practice should be pursued for personal development and success of the ensemble. This course is recommended for students pursuing careers in the arts - performance or composing - and music education. Auditions are held in the spring. Contact Ms. Georgeson for information.

## **VAHS ORCHESTRA**

**Scott Vandermeuse, Orchestra Director**

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845-4484

### **#560\_9-Concert Orchestra**

*Grades: 9*

*Prerequisite: Completion of beginning lessons on instrument or consent of instructor*

*Fees: \$70 per year for instrument rental if needed*

*Credit: 1.0, Year Course*

This course is designed for 9<sup>th</sup> grade students who study string instruments and are interested in performing in a large ensemble. Concert Orchestra builds on the fundamentals of string playing and ensemble performance introduced in middle school. No audition is required, but students who do not have prior experience should contact the instructor. This is a performance class requiring active participation during class and performance in evening concerts. Students are expected to study their parts and practice their instruments outside of class, as well as participate in small group instruction as needed.

Students will study a variety of musical genres, styles, time periods, and cultures. This course is recommended for students interested in careers in the fine arts and students who enjoy orchestral music and performance.

### **#560-Symphony Orchestra**

*Grades: 10,11,12*

*Prerequisite: Previous experience on a string instrument recommended or consent of instructor*

*Fees: \$70 per year for instrument rental if needed*

*Credit: 1.0, Year Course*

This course for students in grades 10-12 builds on the ensemble skills established in Concert Orchestra, as well as the individual students' performance skills through study and performance of more challenging repertoire. No audition is required, but if students do not have prior experience studying a string instrument they should contact the instructor. This is a performance class requiring active participation during class and performance in evening concerts. Students are expected to practice music outside of class and participate in small group instruction as needed. This course is recommended for students interested in careers in the fine arts as well as students who enjoy orchestral music and performance.

## **SEMESTER MUSIC COURSES**

### **#0054A/B-Joyful Noise Music Mentor**

*Grades: 9,10,11,12*

*Application needed and consent of instructor required*

*Fees: None*

*Credit: .5 Semester Course*

This course provides regular education students the opportunity to partner with students with special needs to learn about music. Students are expected to participate in all class activities which include singing, dancing, and playing music. All musical instruments, recordings, and course materials will be provided. This course provides relevant content for students interested in careers in the Education & Training, *and* Human Services Career Clusters.

### **#500-Guitar 1**

*Grades: 9,10,11,12*

*Entry-level course, no prerequisite*

*Approximate cost: \$15*

*Credit: .5, Semester Course*

Designed for students interested in learning to read and perform music on the guitar, this class focuses on acquiring and developing basic guitar skills. These skills include chord strumming and picking, and scales and melodies skills necessary for student growth as a musician and performer. Course content will include music theory and composition. Students will be expected to participate, make recordings, and give performances in class. This course provides relevant content for students interested in careers in the Arts, A/V Technology *and* the Communications Career Cluster. This class serves as a prerequisite for #501-Guitar 2.

### **#501-Guitar 2**

*Grades: 9,10,11,12*

*Prerequisite: C- or better in #500-Guitar 1*

*Approximate cost: \$15*

*Credit: .5, Semester Course*

This course further develops the technical skills for guitar performance learned in #500-Guitar 1, including the knowledge and application of a variety of chords, scales, composition, and improvisation. Students will be expected to participate, make recordings, and give performances in class. This course provides relevant content for students interested in careers in the Arts, A/V Technology *and* the Communications Career Cluster.

### **#505-Piano**

*Grades: 9,10,11,12*

*No prerequisite*

*Fees: \$15*

*Credit: .5 Semester Course*

This course is designed to give students an introduction to the basic fundamentals of piano playing as well as music theory (including reading musical notation, scales and chords, symbols and vocabulary.) It is reasonable to expect each student to progress at his/her own speed. After the basics are learned, each student will work on piano skills and pieces chosen especially for them, which are recorded in our recording studio when completed. Students have the opportunity to play several different types of pianos; acoustic, digital, electric, and MIDI keyboards. There is a portion of this class which is technology-based, using MOODLE. All resources and materials are provided.

### **#506-Piano 2**

*Grades: 9,10,11,12*

*Prerequisite: C or better in #505-Piano*

*Fees: \$15*

*Credit: .5 Semester Course*

Students in this course will work toward independence in their piano skills through learning advanced level repertoire; working on accompanying skills; composing and arranging music for piano; and recording self-assessments. This is an advanced level course for students who might be interested in pursuing a career in music (performance, teaching, music therapy) emphasizing independent learning, use of technology, and personal creativity. This course provides relevant content for students interested in careers in the Arts, A/V Technology, & Communications and also Health Science Career Clusters, but also for students who enjoy music in their lives.

### **#510-Creating Music**

*Grades: 9,10,11,12*

*Entry level course, no prerequisite*

*Credit: .5, Semester Course*

*Approximate cost: \$30*

This introductory level course teaches students the fundamentals of the language of music and how to apply those fundamentals to create music. Students will receive instruction in music theory and music composition and gain hands-on experience with computers, music-creating software, and recording equipment. Music-creating lab workstations include MIDI keyboards, audio mixers, iMacs, and software such as Garage Band and Finale. This course provides relevant content for students interested in careers in the Arts, A/V Technology, & Communications Career Cluster. This course serves as a prerequisite for #511-AP Music Theory.

### **#511-AP Music Theory**

*Grades: 11,12*

*Prerequisite: C- or better in #510-Creating Music OR placement examination; concurrent enrollment in a performing ensemble OR significant instrumental/vocal experience strongly recommended but not required*

*Approximate cost: \$30 AND \$87 for Advanced Placement Examination*

*Credit: .5, Semester Course*

Designed for the advanced music student who may pursue music in college, this course will prepare students for the AP Music Theory Examination. Successful class participation includes sight singing, ear training, and demonstration of knowledge of concepts through voice and performance on an instrument. Students will complete an analysis of a significant work of "classical" music and will create an original composition demonstrating concepts covered in the course. This course provides relevant content for students interested in careers in the Arts, A/V Technology, & Communications Career Cluster. Note: All students who register for this course must take the AP Music Theory exam. Students who wish to take the course but not the AP exam can register for #518-Advanced Music Theory.

### **#515-Exploring Studio Technology**

*Grades: 9,10,11,12*

*Entry level course; prior music experience encouraged but not required*

*Approximate cost: \$30*

*Credit: .5, Semester Course*

This course is for motivated and curious students who want to explore recording, composing, and creating electronic music. Course content includes instruction in Mac basics, acoustics, waveforms, microphones/sound equipment, digital music creation, and multi-track recording. All students will be expected to participate as a sound engineer or technician at live concert performances and recording sessions. Students will also compile an individual web-based digital portfolio. This course provides relevant content for students interested in careers in the Arts, A/V Technology, & Communications Career Cluster. This course serves as a prerequisite for #590-Advanced Studio Technology.

### **#516-Advanced Studio Technology**

*Grades 9,10,11,12*

*Prerequisite: Completion of #515-Exploring Studio Technology with a grade of C- or higher*

*Fees: \$30*

*Credit: .5, Semester Course*

This is a laboratory-based course in which students become advanced users of the music recording studio and technology lab. Students extend their skills using Mac workstations, MIDI keyboards, and Logic software. With the collaboration of the instructor, students design and create individual and group projects. Each student is responsible for producing a web-based digital portfolio. Coursework may require studio time outside of class. Students will also participate as a sound engineer or technician at live concert performances and recording sessions. This course is recommended for motivated students interested in careers in the arts and technology.

### **#518-Advanced Music Theory**

*Grades: 11,12*

*Prerequisite: C- or better in #510-Creating Music OR placement examination; concurrent enrollment in a performing ensemble OR significant instrumental/vocal experience strongly recommended but not required*

*Approximate cost: \$30 AND \$87 for Advanced Placement Examination*

*Credit: .5, Semester Course*

Advanced Music Theory is identical to AP Music Theory, but without the requirement that students take the AP exam.

***Sign up for Instrumental Jazz(#575) and Vocal Jazz(#581) will take place after the start of the school year.***

### **#575-Instrumental Jazz 1**

*Grades 9,10,11,12*

*Prerequisite: Audition required; must be member of #520-Concert Band, #521-Symphonic Band, or #530-Wind Ensemble\**

*Fees: \$10 and \$70 per year for instrument rental if needed*

*Credit: .25, Year Course*

*\* Guitar, piano, and bass musicians may audition without concurrent enrollment in one of the three bands*

Jazz 1 is open to advanced instrumentalists from all grade levels. Students interested in the study and performance of big band jazz, combo jazz, and improvisation are encouraged to audition. All levels and styles of jazz literature are studied, with an emphasis on big band jazz. Faithful attendance at weekly evening rehearsals and participation in frequent concerts are required. This course is recommended for students interested in careers in the music industry and for jazz enthusiasts. The class meets once a week, outside of the regularly scheduled school day.

### **#581-Vocal Jazz**

*Grades: 9,10,11,12*

*Prerequisite: Audition only; student must be member of #550-Concert Choir, #540-Chorale, or #540\_9-Chorale 9*

*Fees: \$10 for resources and event registrations; Occasional field trip fees for travel to festivals*

*Credit: .5, Year Course*

This ensemble is designed to study and perform one type of music—jazz! Participation is by audition only, and students must be concurrently enrolled in one of the three vocal performance ensembles. The class meets once a week, outside of the regularly scheduled school day. Students must be dedicated to the ensemble's success, motivated to grow musically, and confident in their vocal skills. Concerts, festivals, and other scheduled events are required, typically three performances per year. Students study and practice vocal jazz ensemble music and enhance their vocal technique, rehearsal skills, jazz music notation, and singing with a microphone.



# PHYSICAL EDUCATION/HEALTH

## #900-Health Education

Grade: 10,11,12

Approximate cost: \$15 for book and field trip

Credit: .5, Semester Course

Note: This is a required course.

A comprehensive health education course, this course emphasizes life skills and decision making by providing and exploring aspects of physical, social, and mental health. The information in this course will assist individuals in forming and realizing life-long positive health habits and behaviors.



## #900B-Blended Health Education

Grade: 11,12

Approximate cost: \$15 for book and field trip

Credit: .5, Semester Course

Note: This is a required course.

Blended Health Education covers the same information as Health Education, however part of the course is designed to be completed online. On average, 3 out of 5 days in a week, the class will meet in the classroom to be introduced to new information or react to work done online. On the other 2 days, the class will NOT meet. Instead, students will either be off-campus or in a designated space doing work. Students that choose this type of class should be *highly self-motivated learners* and be able to *manage their time*. The online portion of this class will help to further technology skills and serve as preparation for future high school and college classes that have similar requirements. A comprehensive health education course, this course emphasizes life skills and decision making by providing and exploring aspects of physical, social, and mental health. The information in this course will assist individuals in forming and realizing life-long positive health habits and behaviors. The curriculum in this course is identical to Course #900. This course covers the same concepts and skills but the instructional delivery model is different.

## #907-Fitness for Life Class

Grades: 9,10,11,12

Prerequisites: None

Fees: None

Credit: .5, Semester Course

This course is designed for students who want to develop and improve their physical fitness levels. Upper and lower body strengthening and stretching exercises, core (abdominal) exercises, and cardiovascular exercises will be emphasized in order to improve muscle strength, coordination, flexibility, and change of direction skills. Students will be pre and post-tested in order to facilitate and show progress and to work toward improving overall body composition. Whether in the weight room, gym, track, or grounds, students will be asked to be part of a supportive team atmosphere. This class can be repeated for credit in order to continue physical progression through high school.

## #909- Physical Education 9

Grade: 9

Approximate cost: None

Credit: .5, Semester Course

Note: This is a required course

This course focuses on basic skills and fundamentals with an emphasis on lifetime fitness and activity. Units include softball, basketball, volleyball, floor hockey, speedball, and ultimate frisbee, among others. This course will also examine healthy choices and lifetime fitness plans. **This course must be taken your Freshman year.**



### **#912I-Individual Sports**

*Grades: 10,11,12*

*Prerequisites: #909-Phy Ed 9*

*Approximate cost: \$30 for off-campus use of facilities*

*Credit: .5, Semester Course*

The focus of this class is the teaching and participation in individual sports as life-time activities. The emphasis will be on teaching skills, techniques and rules needed to participate in these activities for the remainder of your life to assure wellness through an active life. Activities will include badminton, pickelball, bowling, archery, golf, tennis, ice skating, and fitness/wellness. This class employs differentiation to allow students to take the class multiple times while continuing the learning progression.

### **#912T-Team Sports**

*Grades: 10,11,12*

*Prerequisites: #909-Phy Ed 9*

*Fees: None*

*Credit: .5, Semester Course*

The focus of this class will be on the techniques, rules, strategies, and teamwork of team sports, with an emphasis on life-long fitness. Units will include basketball, flag football, volleyball, broomball, floor hockey, lacrosse, speedball/soccer, and ultimate Frisbee, among others. This class employs differentiation to allow students to take the class multiple times while continuing the learning progression.

### **#916- Lifeguard Training/CPR for Professional Rescuer**

*Grades: 10,11,12*

*No prerequisites*

*Approximate cost: \$60 for texts*

*Credit: .5, Semester Course*

This course trains individuals in lifesaving skills and the knowledge needed to prevent and respond to aquatic emergencies. Students will become certified in First Aid, CPR, and AED. This course provides the necessary training to become a certified professional lifeguard through the American Red Cross.

This course can be repeated for credit during the senior year to assist with skill and activity demonstration and instruction as well as recertification.

### **#917- Water Safety Instructor/Instructor Candidate**

*Grades: 11,12*

*Prerequisites: must be 16 by the end of the course*

*Fees: \$70 for texts*

*Credit: .5, Semester Course*

This course trains students to teach swimming lessons to people of all ages and abilities. Students will learn to break swimming skills into drills with progressions. Class management, water safety, technique analysis, and lesson/unit development are practiced in student teaching sessions. Students will also work to improve their own swimming technique in all the strokes in the American Red Cross Learn-to-Swim program.

### **#920-Strength, Speed, and Agility**

*Grades: 9,10,11,12*

*Prerequisites: None*

*Fees: None*

*Credit: .5, Semester Course*

This course is designed for students who want to develop and improve their athletic ability. Upper body, lower body, and core strengthening exercises as well as running speed, and change of direction will be emphasized. Students will be pre- and post-tested in a variety of physical skills. Along with daily participation in a wide variety of physical skills and drills, students will be asked to be part of a team atmosphere. This class can be repeated for credit in order to continue physical progression through high school.

### **#921-Character & Leadership Development**

*Grades: 10,11,12*

*No Prerequisites*

*Fees: \$15.00*

*Credit: .5, Elective Semester Course*

**Note: Does NOT fulfill PE graduation requirement**

This elective course is designed for students who want to take their participation in the game called "life" to the next level. Each day we will explore character and leadership through various activities including; guest speakers, observations, field

trips, discussions, projects, readings, role reversals, and role model movies. Using these resources we will focus on what it means to *have* **Character** and how our character influences our decisions. We will then study **Leadership** styles and how our decisions influence our *own* future, as well as the future of others. Lastly, we will use those character and leadership skills and apply them to real life situations by leading, instructing, or motivating a class, group, or team. This class is a must for those who are passionate about leading and motivating the people around them!

**#0035A/B Adaptive Physical Education Mentorship**

*Grades: 10, 11, 12*

*Prerequisites: Completion of Application and Consent of Instructor*

*Fees: None*

*Credit: .5, Semester Course/can request both semesters*

**Note: Does NOT fulfill PE graduation requirement**

Students will assist the special needs students with daily physical education class activities. This course can be repeated multiple times.



# PROJECT LEAD THE WAY

VAHS students may elect to take courses through the Global Academy, a program designed to provide advanced learning opportunities to students from schools within a multiple-district consortium. Some Global Academy courses are taught at VAHS and some are taught at a nearby high school campus during a 60 minute or 90 minute time, most often at the beginning or end of the school day. Students spend most of their day at VAHS and are responsible for their own transportation to the Global Academy class when the class is taught at another campus. Global Academy courses are rigorous, project-based, and career-focused. The Global Academy courses align with a national curriculum called Project Lead the Way.

## **Project Lead the Way (PLTW)**

Project Lead the Way is a non-profit organization focused on introducing and preparing high school students for Biomedical, Engineering and Technical careers of the future. PLTW forms partnerships with public schools, higher education institutions and the private sector to increase opportunities for students in engineering and technical fields.

Particularly, PLTW provides a high rigor, project-based curriculum meeting national science and math standards, professional development for teachers and guidance counselors and a comprehensive national support network. PLTW courses are accessible to ALL students, and the initial biomedical courses expose students to multiple career options in the biomedical arena. All of the courses are based on problem-solving, teamwork, communication and leadership as the students also build the math, science and technology skills to prepare for and succeed in tomorrow's careers.

The PLTW middle and high school STEM education programs provide the inspiration for a new generation of innovators, the practical skills and hands-on experience to make students' knowledge count in the real world, and the basis for the next generation of leadership in the sciences, technology, engineering, and mathematics.

PLTW develops motivated, well-rounded students by instilling confidence, stressing the importance of self-discovery, encouraging innovative problem solving and critical thinking, teaching team building, and rewarding creativity.

Students develop skills essential for achievement in the classroom and success in college and at work. Additionally:

- PLTW students achieve significantly higher scores in reading, mathematics, and science.
- PLTW graduates earn higher GPA's as college freshmen.
- PLTW graduates are 5 to 10 times more likely to study STEM related fields.

**\*\*NOTE:** VAHS is a certified PLTW school. Upon successful completion of an End of Course EXAM, students are eligible for college credit through a Global Academy cooperating colleges for all four PLTW Biomedical Sciences courses and IED, POE, EDD and DE in the PLTW Engineering program.

***The following course descriptions have been submitted by the Global Academy:***

## **ENGINEERING**



### **PLTW: Introduction to Engineering Design (IED) (\*\*College Credit eligible upon successful completion of End of Course Exam)**

This course is offered at VAHS.

*Grades: 9, 10, 11, 12*

*Length: Year*

*Prerequisite: Completion of or concurrent enrollment in Algebra or above*

*Credit: 1.0, Year Course*

Introduction to Engineering Design is a course that teaches problem-solving skills by using the design development process. The design process is an engineering activity that turns a concept into reality. The design process from concept to solution is a logical sequence of steps to develop the best solution to a specific problem. Models of product solutions are created, analyzed and communicated using solid modeling computer design software.

Units include:

Student Portfolio Development Model Analysis and Verification

Sketching and Visualization Presentation

Geometric Relationships Production

Modeling, Assembly Modeling & Marketing



**PLTW: Principles of Engineering (POE) (\*\*College Credit eligible upon successful completion of End of Course Exam)**

This course is offered at VAHS.

*Grades: 10,11,12*

*Prerequisites: Must have taken Geometry or currently be enrolled in Geometry*

*Approximate cost: \$5.00*

*Credit: 1.0, Year Course*

This Project Lead the Way course of engineering exposes students to some of the major concepts they'll encounter in a postsecondary engineering course of study. Students have an opportunity to investigate engineering and high-tech careers and to develop skills and understanding of course concepts. Students employ engineering and scientific concepts in the solution of engineering design problems. They 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. Students will be using textbook, computer resources along with hands on activities.



**PLTW: Digital Electronics (DE) (\*\*College Credit eligible upon successful completion of End of Course Exam)**

This course will be available at Middleton High school for VAHS students. Students must provide their own transportation.

*Grades: 10,11,12*

*Length: Year or Equivalent (semester-long block)*

*Prerequisite: Completion of or concurrent enrollment in Geometry or above*

*Credit: 1.0, Year Course*

Digital Electronics is a course of study in applied digital logic. Students will be introduced to digital circuits found in video games, watches, calculators, digital cameras, and thousands of other devices. Students will use computer simulations to learn about the logic of electronics as they design, test, and actually construct circuits and devices. Students will study the application of digital logic and how digital devices are used to control automated equipment. The use of digital circuitry is present in virtually all aspects of our lives and its use is increasing rapidly. This course is similar to a first semester college course and is an important course of study for a student exploring a career in engineering or engineering technology.



**PLTW: Engineering Design & Development (EDD) (\*\*College Credit eligible upon successful completion of End of Course Exam)**

This course will be offered at VAHS.

*Grades: 11,12*

*Length: Year or Equivalent (semester-long block)*

*Prerequisite: Completion of one prior PLTW engineering course (POE, IED, DE, CEA)*

*Credit: 1.0, Year Course*

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 lifecycle 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. This course is designed for 11th and 12th grade students.

**BIOMEDICAL SCIENCES**



**PLTW: Principals of the Biomedical Sciences (PBS) (\*\*College Credit eligible upon successful completion of End of Course Exam)**

This course will be offered at VAHS.

*Grades: 9,10,11,12*

*Credit: 1.0, Year-long Science elective credit*

*Length: Year*

Students investigate the human body systems and various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. They determine the factors that led to the death of a fictional person, and investigate lifestyle choices and medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, medicine, research processes and bioinformatics. Key biological concepts including homeostasis, metabolism, inheritance of traits, and defense against disease are embedded in the curriculum. Engineering principles including the design process, feedback loops, and the relationship of structure to function are also incorporated. This course is designed to provide an overview of all the courses in the Biomedical Sciences program and lay the scientific foundation for subsequent courses.



**PLTW: Human Body Systems (HBS) (\*\*College Credit eligible upon successful completion of End of Course Exam)**

This course will be offered at VAHS.

*Grades: 9,10,11,12*

*Credit: 1.0, Year-long Science elective credit*

*Length: Year*

*Prerequisite: Completion of or concurrent enrollment in Principles of the Biomedical or consent of Global Academy Advisor*

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



**PLTW: Medical Interventions (MI) (\*\*College Credit eligible upon successful completion of End of Course Exam)**

This course will be offered at VAHS.

*Grades: 10,11,12*

*Credit: 1.0, Year-long Science elective credit*

*Length: Year*

*Prerequisite: Completion of or concurrent enrollment in Human Body Systems (HBS) or successful completion (B- or better) of an AP science or advanced science course, such as biotechnology.. Or consent of Global Academy Advisor.*

Students investigate the variety of interventions involved in the prevention, diagnosis and treatment of disease as they follow the lives of a fictitious family. The course is a "How-To" manual for maintaining overall health and homeostasis in the body as students explore: how to prevent and fight infection; how to screen and evaluate the code in human DNA; how to prevent, diagnose and treat cancer; and how to prevail when the organs of the body begin to fail. Through these scenarios, students are exposed to the wide range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. Each family case scenario introduces multiple types of interventions and reinforces concepts learned in the previous two courses, as well as presenting new content. Interventions may range from simple diagnostic tests to treatment of complex diseases and disorders. These interventions are showcased across the generations of the family and provide a look at the past, present and future of biomedical science. Lifestyle choices and preventive measures are emphasized throughout the course as well as the important roles scientific thinking and engineering design play in the development of interventions of the future.



**PLTW: Biomedical Innovations (BI) (\*\*College Credit eligible upon successful completion of End of Course Exam)**

This course will be offered at VAHS.

*Grades: 11,12*

*Credit: 1.0, Year-long Science elective credit*

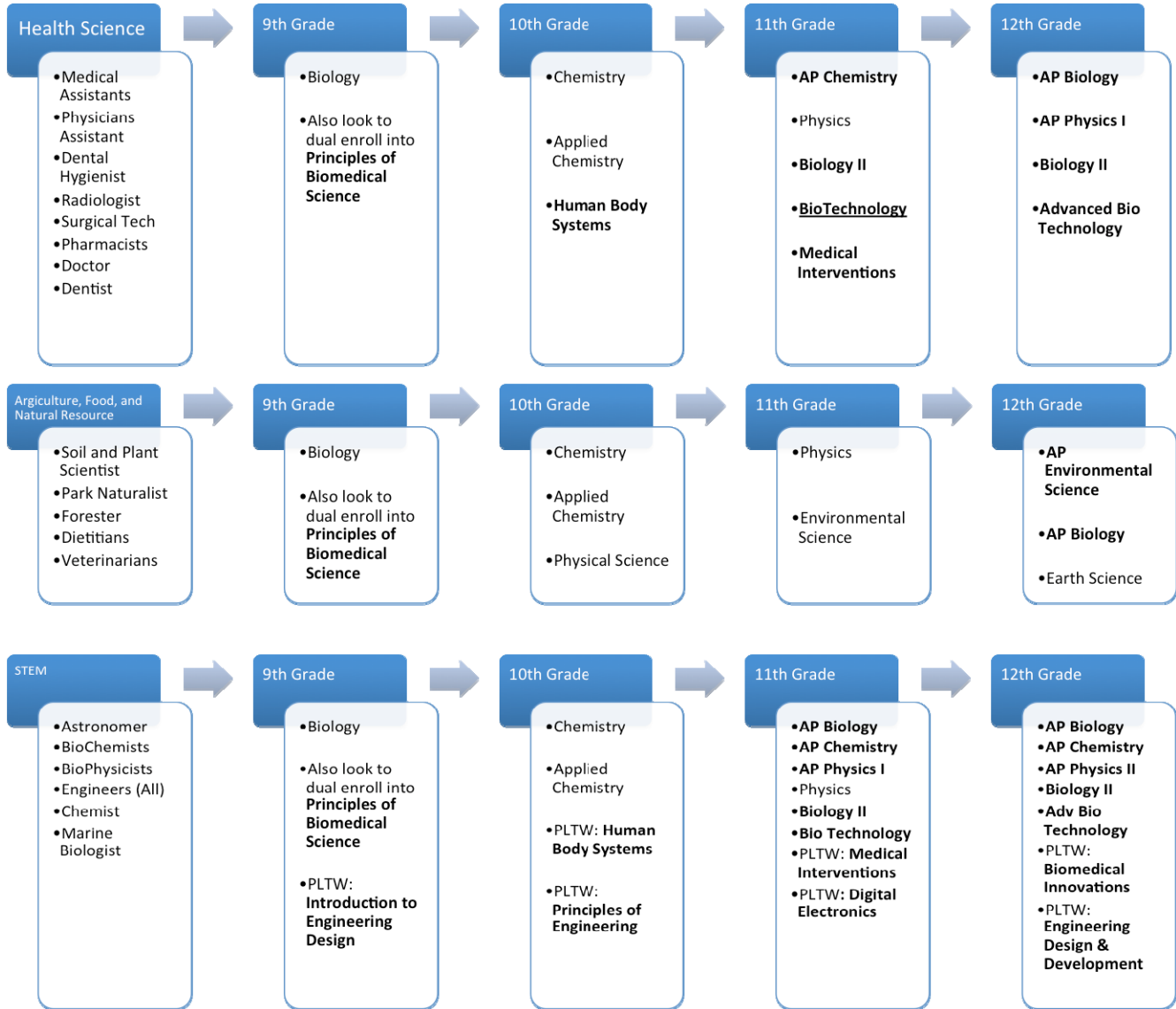
*Length: Year*

*Prerequisite: Completion of or concurrent enrollment in Medical Interventions (MI) or completion (B- or better) of an AP science course. or advanced science course, such as biotechnology. Or consent of Global Academy Advisor.*

In this capstone course, students apply their knowledge and skills to answer questions or solve problems related to the biomedical sciences. Students design innovative solutions for the health challenges of the 21st century as they work through progressively challenging open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health. They have the opportunity to work on an independent project and may work with a mentor or advisor from a university, hospital, physician's office, or industry. Throughout the course, students are expected to present their work to an adult audience that may include representatives from the local business and healthcare community.



Each diagram represents a Wisconsin Career Pathway, along with example careers. These are possible course sequence recommendations during your high school career here at VAHS. Please see your current Science teacher if you have any questions. Classes in **bold** can earn College Credit at the completion of the course.



## #220-Biology

*Grades: All 9th graders will take Biology.*

*Fees: None*

*Credit: 1.0, Year Life Science Course*

*Note: This is a Life Science class which meets the graduation requirements.*

Biology provides an interesting foundation in the biological sciences with emphasis placed on laboratory work and problem solving. Students will learn from regular assignments, lecture, reading, and labs in order to acquire essential background for a variety of careers such as those in the medical fields, forestry, biotechnology, wildlife management, zoology, botany, and horticulture. Biology is a life science class, meeting the VAHS graduation requirements.



## #222-Biotechnology (Dual Credit)

*Grades: 10, 11, 12*

*Prerequisites: Biology*

*Fees: \$10 lab fee, possible field trip expenses*

*Credit: .5, Semester Life Science Course*

*Note: One Dual Credit is available from Madison College upon completion of this course with a C or better at no cost to the student.*

Team-taught between the Agriculture and Science departments, this class explores tissue cultures, genetic engineering, food production, medical advances, and crime scene technology. This class is designed to be a lab intensive course. This class is appropriate for students interested in entering technical, medical, law enforcement, and laboratory or biotechnology fields.



## #222B- Blended Biotechnology (Dual Credit)

*Grades: 10, 11, 12*

*Prerequisites: Biology*

*Fees: \$10.00 lab fee, possible field trip expenses*

*Credit: .5, Semester Life Science Course*

*Note: One Dual Credit is available from Madison College upon completion of this course with a C or better at no cost to the student.*

Blended Biotechnology covers the same curriculum as Biotechnology, however part of the course is to be completed online.

This course covers the same concepts and skills but the instructional delivery model is different. On average, 2-3 out of 5 days a week, the class will meet in the normal classroom for face-to-face instruction and labs. The other 2-3 days students will either be off-campus or in a designated space doing work. Students that choose this class should be self motivated learners and able to manage their time. The online portion of this class will allow students to individualize their educational needs to an extent not possible in the normal classroom.



## #223-Advanced Biotechnology (Dual Credit)

*Grades: 10, 11, 12*

*Prerequisites: Biology and Biotechnology*

*Fees: \$10 lab fee, possible field trip expenses*

*Credit: .5, Semester Life Science Course*

*Note: One Dual Credit is available from Madison College upon completion of this course with a C or better at no cost to the student.*

This course builds from Biotechnology, continuing to explore the latest research, breakthroughs, and information in biotechnology, including ethical questions. Upon completing this class, students should be able to perform basic laboratory procedures using lab ware, solutions, and equipment using prescribed protocols partly through experiments of their own design. This class is appropriate for students interested in furthering their experience designing and executing laboratory procedures.



## #223B-Blended Advanced Biotechnology (Dual Credit)

*Grades: 10, 11, 12*

*Prerequisites: Biology and Biotechnology*

*Fees: \$10 lab fee, possible field trip expenses*

*Credit: .5, Semester Life Science Course*

*Note: One Dual Credit is available from Madison College upon completion of this course with a C or better at no cost to the student.*

Blended Advanced Biotechnology covers the same curriculum as Biotechnology, however part of the course is to be

completed online. This course covers the same concepts and skills but the instructional delivery model is different. On average, 2-3 out of 5 days a week, the class will meet in the normal classroom for face-to-face instruction and labs. The other 2-3 days students will either be off-campus or in a designated space doing work. Students that choose this class should be self motivated learners and able to manage their time. The online portion of this class will allow students to individualize their educational needs to an extent not possible in the normal classroom.

### **#225-Biology 2**

*Grades: 10,11,12*

*Prerequisites: Biology*

*Fees: Lab fee of \$10, any field trip expenses*

*Credit: 1.0, Year Life Science Course*

*Dual Credit (3 credits) from UW-Green Bay is available for an additional fee.*

This is a college-prep course meant for self-motivated and college bound students who have an interest in biological sciences, specifically human anatomy and physiology, this class will study both microbiosystems and macrobiosystems through laboratory activities, lectures, and readings. Comparative dissection will be completed during the second semester on a cat. Dissection units will enhance instruction, and students are required to maintain an organized and thorough lab notebook.



### **#227-AP Biology**

*Grades: 10,11,12*

*Prerequisites: Biology (required), Chemistry (recommended)*

*Fees: \$80 for AP test, \$10 lab fee, possible field trip expenses*

*Credit: 1.0, Year Life Science Course*

This is a college-level course designed for students planning to take the Advanced Placement examination for college credit. Topics include cellular processes - energy and communication, genetics, evolution, human systems, and ecology.

Twenty-five percent of the course is devoted to hands-on multi-day laboratory activities with an emphasis on inquiry-based investigations. Results are presented in lab reports and poster presentations. Students should expect extensive daily reading assignments, weekly quizzes, lab preparation, analysis and discussion. This class is appropriate for students with a strong interest in the biological sciences..

### **#230-Environmental Science-Wisconsin Ecology**

*Grades: 10,11,12*

*Prerequisites: Biology*

*Fees: Possible field trip expenses*

*Credit: 1.0, Year Life Science Course*

This class is meant for students who wish to continue studying biology with a focus on ecology and who have an eagerness to be outdoors in the school forest, even when it is a bit cold or hot or wet. Students will analyze the biology of Wisconsin's wildlife habitats and ecosystems, and will use data software and field guides to further knowledge.



### **#231-AP Environmental Science**

*Grades: 10,11,12*

*Prerequisites: Biology, Algebra*

*Fees: \$90 for AP test, \$10 lab fee, possible field trip expenses*

*Credit: 1.0, Year Course*

This course is designed to provide students with the scientific principles, concepts, and methodologies to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, and to evaluate the risks associated with these problems and examine alternative solutions for resolving and/or preventing them. Students will be presented with, and be expected to understand, specific local environmental issues as they pertain to this course. In addition; the economic, political and ethical challenges associated with environmental issues will be incorporated into the class. This course is also designed to help the students pass the AP Environmental Science exam.

### **#232-Earth Science**

*Grades: 10,11,12*

*Prerequisites: Biology*

*Fees: Possible field trip expenses*

*Credit: 1.0, Year Earth Science Course*

Earth Science emphasizes nature center management, soil science, map reading, landform analysis, and earth processes. Students, who must be comfortable working outside in the school forest in a variety of conditions, will increase awareness of the school forest, maps, landform models, compasses, and field guides. This class is ideal for those meaning to study Natural Resources or Geology.





### **#233- Blended Earth Science**

*Grades: 10,11,12*

*Prerequisites: Biology*

*Fees: Possible field trip expenses*

*Credit: 1.0, Year Earth Science Course*

Blended Earth Science covers the same curriculum as Earth Science, however part of the course is designed to be completed online. This course covers the same concepts and skills but the instructional delivery model is different. On average, 3 out of 5 days a week, the class will meet in the normal classroom for face to face instruction and labs. The other 2 days students will either be off-campus or in a designated space doing work. Students that choose this class should be self motivated learners and able to manage their time. The online portion of this class will allow students to individualize their educational needs to an extent not possible in the normal classroom. This will also help to further technology skills and serve as preparation for future online courses the student may experience in high school or college.

Earth Science emphasizes nature center management, soil science, map reading, landform analysis, and Earth processes. Students, who must be comfortable working outside in the school forest in a variety of conditions, will increase awareness of the school forest, maps, landform models, compasses, and field guides. This class is ideal for those meaning to study Natural Resources or Geology

### **#234-Physical Science**

*Grades: 10, 11.*

*Prerequisites: none*

*Fees: \$10 Lab Fee, \$15 Field Trip Costs*

*Credit: 1.0, Year Course*

Physical Science will provide a hands-on physical science class which combines units of study from both Chemistry and Physics. The first semester will focus on basic chemistry topics including measurement, chemical reactions and balancing chemical equations. The second semester of this course will focus on physics topics including forces, energy, laws of motion, waves, and thermodynamics. This course is intended for students who want to explore chemistry and physics concepts before or in place of committing to a year-long course in either subject. This course may be also appropriate for students who are interested in Chemistry & Physics, and are still developing their math skills since it would be designed for students to explore and probe in Chemistry & Physics rather than to prove mathematically in these two areas of science. This class will provide both developed content and lab experiences for the students.

### **#236- Applied Chemistry**

*Grades: 9,10,11,12*

*Prerequisites: Concurrent enrollment in Geometry, or a higher Math.*

*Fees: \$10 lab fee, scientific calculator, possible field trip expenses*

*Credit: 1.0, Year Physical Science Course, which meets the graduation requirements.*

*Note: This class is a physical science class*

Applied Chemistry takes a more personal view of chemistry, asking students to explore the important role that chemistry will play in their personal and professional lives. This class will explore the same fundamental chemical concepts as Chemistry, but with less emphasis on the mathematics of chemistry. This lab-based class is designed primarily for college-bound students whose strongest interests lie in fields other than mathematics and science.

### **#240-Chemistry**

*Grades: 9,10,11,12*

*Prerequisite: Concurrent enrollment in Geometry, or a higher Math.*

*Fees: \$10 lab fee, scientific calculator, possible field trip expenses*

*Credit: 1.0, Year Physical Science Course, which meets the graduation requirements*

Chemistry will provide a solid foundation in the areas of basic chemistry and will require students to hone abstract thinking and problem-solving skills by asking students to set up and solve math problems independently. Students will have multiple lab experiences and be required to write reports and take extensive notes, which, along with tests, will comprise the student's grade. Students should expect to put in at least 3-5 hours of work a week in this class. This class is a prerequisite for AP Chemistry.



### #241-Blended Chemistry

Grades: 9, 10, 11, 12

Prerequisite: Concurrent enrollment in Geometry, or a higher Math.

Fees: \$10 lab fee, scientific calculator, possible field trip expenses

Credit: 1.0, Year Physical Science Course, which meets the graduation requirements

Blended Chemistry covers the same curriculum as Chemistry, however part of the course is to be completed online. This course covers the same concepts and skills but the instructional delivery model is different. On average, 2-3 out of 5 days a week, the class will meet in the normal classroom for face-to-face instruction and labs. The other 2-3 days students will either be off-campus or in a designated space doing work. Students that choose this class should be self motivated learners and able to manage their time. The online portion of this class will allow students to individualize their educational needs to an extent not possible in the normal classroom.



### #245-AP Chemistry

Grades: 10, 11, 12

Prerequisites: Chemistry and successful completion of Geometry or current enrollment in Intermediate Algebra, or a higher Math

Fees: \$8 lab fee, \$90 AP test fees, lab goggles, graphing calculator

Credit: 1.0, Year Physical Science Course, which meets graduation requirements.

Note: This class requires summer assignments to be submitted through Moodle over the course of the summer.

This college-entry level course is meant for students headed to science-based careers such as medicine, chemistry, and environmental engineering. The class moves at a fast pace and requires medium to high-level problem-solving skills; good time management; analytical and independent thinking; and clear, succinct writing from motivated and organized students. Students should expect to spend approximately 7-15 hours a week watching videos and taking notes and completing lab write-ups and homework assignments. Edmodo and Moodle are used to provide resources, assignments and communication with students. In class, time is spent completing and discussing experiments and working on and reviewing problems. The first 3 chapters will be covered during the summer in an on-line format.

### #249-General Physics

Grades: 10(with prerequisites), 11, 12

Prerequisites: Successful completion of Geometry and concurrent enrollment in Intermediate Algebra or higher Math

Fees: \$8 lab fee, approximately \$50 for field trip, graphing calculator

Credit: 1.0, Year Physical Science Course, which meets graduation requirements.

Aimed at college-bound students, General Physics works to develop problem-solving and analytical thinking skills as students study mechanical and Newtonian physics and their associated math. General Physics covers approximately 2/3 of the material covered in AP Physics and is highly lab-based. Students will use labs, lecture, reading, and online activities to further their skills. Skills necessary to be successful in this class are good time management, a willingness to complete the assignments, a desire to learn and develop good problem-solving skills. Moodle is used to provide resources, assignments and communication with students. General Physics is useful in medical, engineering, sports, construction, musical, and optical careers.



### #252-AP Physics 1

Grades: 11, 12 (or Prerequisites)

Prerequisites: Successful completion of Chemistry and Geometry and concurrent enrollment in Intermediate Algebra or higher Math

Fees: \$10 lab fee, \$90 AP test fees, optional \$50 field trip fees, graphing calculator

Credit: 1.0, Year Physical Science Course

This is a college-level class designed for students planning to take the Advanced Placement examination for college credit. This course uses class discussion, demonstrations, videos, computer simulations, textbooks, labs, and graphical analysis software to study algebra-based physics. The demands for the student will be extensive with daily homework, chapter tests, chapter problem sets, and approximately one lab per week. In order to be successful in this class, students need strong basic algebra skills. In particular, students should know how to graph and solve linear, quadratic, inverse, and rational functions. Students should be comfortable computing area of trapezoids and circles. Students should be able to compute volume of spheres, rectangular prisms, and cylinders. This class is appropriate for students interested in entering technical, medical, or engineering careers, or for a liberal arts college student interested in earning credit for an algebra-based physics to satisfy the physical science credit for a B.A. or B.S. degree.

More information: [http://media.collegeboard.com/digitalServices/pdf/ap/ap\\_physics1\\_2page\\_course\\_overview.pdf](http://media.collegeboard.com/digitalServices/pdf/ap/ap_physics1_2page_course_overview.pdf)

## #251-AP Physics 2

Grades: 11, 12 (or Prerequisites)

Prerequisites: Successful completion of AP Physics 1 or General Physics and Instructor Consent

Fees: \$50 for optional field trips; \$90 for AP Physics 2 exam

Credit: 1.0, Year Course

Students will develop a deep understanding of Physics concepts including thermodynamics, electric fields, complex circuits, magnetism, and optics. They will reason about physical phenomena using important science process skills such as explaining causal relationships, applying and justifying the use of mathematical routines, designing experiments, and analyzing data.

## BioTechnology Youth Apprentice

Grades 11, 12

Prerequisite: Application Required

The BioTechnology Youth Apprentice is for students interested in careers in science, technology, engineering, medicine, research, and mathematics. Students in the BioTechnology program learn and practice skills that prepare them for diverse post-secondary opportunities. Students in Youth Apprentice must complete a year long course that covers the theory and applications of biotechnology and laboratory techniques. This course is offered one night a week, at the BioPharmaceutical Technology Center Institute in Fitchburg. Students must also complete 450 hours per year of paid work experience in the industry. Youth Apprenticeship applications are available from the School to Careers Coordinator, Ms. Moschkau, in Student Services. Applications are due March 1.



**PLTW: Principals of the Biomedical Sciences(PBS)** (College Credit eligible upon successful completion of End of Course Exam) This course will be offered at VAHS.

Grades: 9, 10, 11, 12

Credit: 1.0, Year-long Science elective credit

Length: Year

Students investigate the human body systems and various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. They determine the factors that led to the death of a fictional person, and investigate lifestyle choices and medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, medicine, research processes and bioinformatics. Key biological concepts including homeostasis, metabolism, inheritance of traits, and defense against disease are embedded in the curriculum. Engineering principles including the design process, feedback loops, and the relationship of structure to function are also incorporated. This course is designed to provide an overview of all the courses in the Biomedical Sciences program and lay the scientific foundation for subsequent courses.



**PLTW: Human Body Systems(HBS)** (College Credit eligible upon successful completion of End of Course Exam)

This course will be offered at VAHS.

Grades: 9, 10, 11, 12

Credit: 1.0, Year-long Science elective credit

Length: Year

Prerequisite: Completion of or concurrent enrollment in Principles of the Biomedical or consent of instructor.

Students examine the interactions of body systems as they explore identity, communication, power, movement, protection, and homeostasis. Students design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration. Exploring science in action, students build organs and tissues on a skeletal manikin, work through interesting real world cases, perform multiple dissections, and often play the role of biomedical professionals to solve medical mysteries. Additional Science courses are available to VAHS students via the Global Academy. See descriptions on page 40.



**PLTW: Medical Intervention(MI)** (College Credit eligible upon successful completion of End of Course Exam)

This course will be offered at VAHS.

Grades: 10, 11, 12

Credit: 1.0, Year-long Science elective credit

Length: Year

Prerequisite: Completion of or concurrent enrollment in Human Body Systems (HBS) or successful completion (B- or better) of an AP science or advanced science course, such as biotechnology.. Or consent of Global Academy Advisor.

Students investigate the variety of interventions involved in the prevention, diagnosis and treatment of disease as they follow the lives of a fictitious family. The course is a "How-To" manual for maintaining overall health and homeostasis in the body as students explore: how to prevent and fight infection; how to screen and evaluate the code in human DNA; how to prevent,

diagnose and treat cancer; and how to prevail when the organs of the body begin to fail. Through these scenarios, students are exposed to the wide range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. Each family case scenario introduces multiple types of interventions and reinforces concepts learned in the previous two courses, as well as presenting new content. Interventions may range from simple diagnostic tests to treatment of complex diseases and disorders. These interventions are showcased across the generations of the family and provide a look at the past, present and future of biomedical science. Lifestyle choices and preventive measures are emphasized throughout the course as well as the important roles scientific thinking and engineering design play in the development of interventions of the future.



**PLTW:Biomedical Innovations(BI)** (College Credit eligible upon successful completion of End of Course Exam)

This course will be offered at VAHS.

*Grades: 11,12*

*Credit: 1.0, Year-long Science elective credit*

*Length: Year*

*Prerequisite: Completion of or concurrent enrollment in Medical Interventions (MI) or completion (B- or better) of an AP science course. or advanced science course, such as biotechnology. Or consent of Global Academy Advisor.*

In this capstone course, students apply their knowledge and skills to answer questions or solve problems related to the biomedical sciences. Students design innovative solutions for the health challenges of the 21st century as they work through progressively challenging open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health. They have the opportunity to work on an independent project and may work with a mentor or advisor from a university, hospital, physician's office, or industry. Throughout the course, students are expected to present their work to an adult audience that may include representatives from the local business and healthcare community.



# SOCIAL STUDIES

## #305-United States History

*Grades: 9*

*Prerequisites: None*

*Fees: None*

*Credit: 1.0, Year Course*

*Note: This is a required course.*

Part of the 9<sup>th</sup> grade program that seeks to transition freshmen to the high school, U.S. History will use debate, speeches, daily class work and homework, quizzes, tests, and writing to examine U.S. History from the end of the 19<sup>th</sup> Century to the end of the 20<sup>th</sup> Century. Team-taught with English, U.S. History will ask students to synthesize knowledge from both classes in order to provide more complex understanding of our century. Reading and literacy skills will also be emphasized.

## #310-World Studies

*Grades: 10*

*Prerequisites: 10<sup>th</sup> grade standing*

*Fees: None*

*Credit: 1.0, Year Course*

*Note: This is a required course.*

World Studies investigates the cause and effect relationship between past and present through concentration on five regions of the world- Africa, Europe, the Middle East, Asia, and Latin America. Students will use skills from US History as a platform and build and extend upon them in World Studies, improving map, research, thinking, analysis, and writing skills, interpreting data, and debating skills.



## #311-Blended World Studies

*Grades: 10*

*Prerequisites: 10<sup>th</sup> grade standing*

*Fees: None*

*Credit: 1.0, Year Course*

Blended World Studies covers the same information as World Studies, however part of the course is designed to be completed online. On average, 3 out of 5 days in a week, the class will meet in the classroom to be introduced to new information or react to work done online. On the other 2 days, class will NOT meet. Instead, students will either be off-campus or in a designated space doing work. Students that choose this type of class should be *self-motivated learners* and be able to *manage their time*. The online portion of this class will help to further technology skills and serve as preparation for future high school and college classes that have similar requirements. World Studies investigates the cause and effect relationship between past and present through concentration on five regions of the world- Africa, Europe, the Middle East, Asia, and Latin America. Students will use skills from US History as a platform and build and extend upon them in World Studies, improving map, research, thinking, analysis, and writing skills. The curriculum in this course is identical to Course #310. This course covers the same concepts and skills but the instructional delivery model is different.



## #311O-Online World Studies

*Grades: 10*

*Prerequisites: 10<sup>th</sup> grade standing*

*Fees: None*

*Credit: 1.0, Year Course*

Online World Studies covers the same information as World Studies, however the course is designed to be completed online. World Studies investigates the cause and effect relationship between past and present through concentration on five regions of the world- Africa, Europe, the Middle East, Asia, and Latin America. Students will use skills from US History as a platform and build and extend upon them in World Studies, improving map, research, thinking, analysis, and writing skills. The curriculum in this course is identical to Course #310. The online aspect of this class will help to further technology skills and serve as preparation for future high school and college classes that have similar requirements.

The following types of students would likely benefit from online instruction:

- Those who would benefit from a self-paced environment
- Those would be looking for more flexibility in their course schedule

- Those who are self-motivated
- Those who can manage their time effectively

**If you do not see yourself represented by MOST or ALL of the statements above, it is suggested you consider taking Blended World Studies instead.**

Other required conditions of this class are: Face-to-face meetings with the teacher will need to take place periodically and will be scheduled in advance.

If a student's grade drops below a C- for any Quarter, then a discussion will take place to determine if the online class is an appropriate placement.

### **#337-Introduction to Sociology**

*Grades: 11, 12*

*Fees: None*

*Credit: .5, Semester Course*

Introduction to Sociology is an entry-level class for those interested in social science, or the study of behavior in society. Students will explore the elements of society in order to develop an appreciation and respect for the variety of human cultures. Topics include socialization, culture, race & ethnicity, gender, and education. Students will be expected to read the class textbook and related sources, participate in discussion, and write analytically. This class is ideal for those who are more interested in social sciences rather than history. For instance, those considering being a social worker, sociologist, or psychologist should consider this course.

### **#340-Social Psychology**

*Grades: 11, 12*

*Prerequisites: None*

*Fees: None*

*Credit: .5, Semester Course*

Social Psychology examines the basics of psychology, looking at its historical roots, its different approaches, and its varying methods. Class will use graded class and online participation, formal and informal writing, projects and tests to further explore adolescent development, self-concept, prejudice, and social influence. Psychological thinking underlie all human behavior, so knowledge of psychology can be helpful to all individuals regardless of career path. While not a necessary prerequisite, it is recommended that this class and/or Adolescent Psychology be taken as a foundation to AP Psychology in order to build the unique psychological thinking, reading, and writing skills needed to get the most out of your AP Psychology experience.

### **#347-Ancient Civilizations**

*Grades: 11, 12*

*Fees: None*

*Credit: 0.5, Semester Course*

Ancient Civilizations will examine civilizations from the past that often don't get covered in much detail in the World Studies course. Each unit will look at the rise and fall of a specific civilization, as well as its political, economic, social, and cultural characteristics. Students will display their knowledge of these various civilizations through weekly quizzes, written essays, unit tests, and a cultural research project. Students will also be expected to actively participate in simulations and class discussions.

### **#351-Government and Politics**

*Grades: 11, 12*

*Fees: None*

*Prerequisites: None*

*Credit: .5, Semester Course*

Government and Politics stresses the underlying principles that form American Government, such as limited government, popular sovereignty, rule of law, separation of powers, federalism, and protections of rights. Graded participation, analysis, research, and writing will be emphasized as this college-bound course examines the role and responsibilities of citizens in this increasingly complex society. If you are considering taking AP US History, it is strongly recommended that students take either US Government and Politics OR History of US Foreign Policy as the content in these classes corresponds to two of the seven themes in APUSH. These classes, therefore, provide valuable background content to ensure success in APUSH.

### **#352-History of US Foreign Policy**

*Grades: 11,12*

*Fees: \$15 for books*

*Credit: .5, Semester Course*

This college-bound class studying the role and influence of the USA since 1776 will emphasize research, discussion, debate, and writing skills. Students will be regularly asked to examine primary and secondary sources in order to draw defensible conclusions that will be assessed through graded class participation, debates, and research papers. If you are considering taking AP US History, It is strongly recommended that students take either US Government and Politics OR History of US Foreign Policy as the content in these classes corresponds to two of the seven themes in APUSH. These classes, therefore, provide valuable background content to ensure success in APUSH.

### **#365-Global Issues**

*Grades: 11,12*

*Fees: None*

*Credit: .5, Semester Course*

Examining global contemporary issues such as population growth and its effects, global security, sustainability, weapons proliferation, globalization, and human rights, Global Issues looks at the interplay of the United States and other world powers. Students will exhibit learning through class discussion, written analysis, and comprehensive projects, as well as through use of the Global Issues Analysis Model. This class provides relevant content for students interested in Business, International Business, as well as International Relations and the Political Realm.

### **#370-Psychological Foundations of the Adolescent**

*Grades: 11,12*

*Prerequisites: None*

*Fees: None*

*Credit: .5, Semester Course*

Focusing on how psychology can be applied to everyday situations, the subject matter is intended to give the student the opportunity to look at human behavior in a more informed and analytical way. Psychology Foundations of the Adolescent should help the student to better comprehend, analyze and rationalize the behaviors of themselves, their peers and the motives that underlie these behaviors. This class will be assessed using discussions, readings, role-plays quizzes, tests and projects. While not a necessary prerequisite, it is recommended that this class and/or Social Psychology be taken as a foundation to AP Psychology in order to build the unique psychological thinking, reading, and writing skills needed to get the most out of your AP Psychology experience.

### **#373-Cultural Perspectives in America**

*Grades: 11, 12*

*Prerequisites: No*

*Fees: None*

*Credit: .5, Semester Course*

This is a **\*NEW\*** course which will take an interdisciplinary approach to examining current issues and experiences related to diverse groups in America. This course is designed to examine cultural diversity and to increase self-awareness related to views and beliefs about experiences of diverse groups. The course will challenge students to examine issues from differing perspectives. This course is unique in that it will allow for **student input** and leadership related to topics and methods of learning. This will likely be a discussion and project based class that allows for hands on learning. Students are expected to come to class prepared to engage in a focused exchange of ideas as they express *informed* opinions on a range of topics. A variety of groups will be explored. Topics include, but are not limited to, race and ethnicity, sexual orientation, gender, ability and disability, and socioeconomic status. A key objective is to develop and expand knowledge and think critically about diverse cultural groups, with a focused on those that have been oppressed in American society.

### **#385-AP Psychology**

*Grades: 12*

*Prerequisites:* While not necessary prerequisites it is recommended that Adolescent and/or Social Psychology be taken as a foundation to AP Psychology in order to build the unique psychological thinking, reading, and writing skills needed to get the most out of your AP Psychology experience.

*Fees: \$90 Class Text, \$90 AP test fee*

*Credit: 1.0, Year Course*

*Note: This class requires a summer assignment.*

This college-level introductory survey course is designed to take the highly motivated psychology student further into the systematic and scientific study of behavioral and mental processes. Students will learn the major core concepts and theories of psychology while examining research methods and ethical standards. Detailed discussion, debate, formal and informal writing, quizzes and tests will all be used to assess student progress.

### **#388-AP United States History**

*Grades: 11, 12*

*Prerequisites: It is strongly recommended that students take either US Government and Politics OR History of US Foreign Policy as the content in these classes corresponds to two of the seven themes in APUSH. These classes, therefore, provide valuable background content to ensure success in APUSH.*

*Fees: \$100 class text, \$90 AP test fee*

*Credit: 1.0, Year Course*

*NOTE: This class requires a summer assignment to be submitted on the first day of class.*

This is a college-level class designed for students planning to take the Advanced Placement examination for college credit. This course will be a comprehensive study of American History from the Colonial Era to the present. The demands for the student will be extensive in terms of writing, reading, and document analysis.

### **#390-AP World History**

*Grades: 10\*11, 12 (\*Students interested in taking this class as a 10th grader should speak to their teachers or the AP teacher to help inform their decision.)*

*Prerequisites: Success in passing 9<sup>th</sup> and 10<sup>th</sup> grade social studies courses.*

*Fees: AP test fee (\$90), cost of text book*

*Credit: 1.0, Year Course*

AP World History is designed to prepare students for college-level history classes and covers the time of ancient civilizations to the present. Comparing and contrasting cultures to analyze change and continuity over time, AP World History focuses on “the big picture” as it analyzes different economic, social, and political structures. Students will work on higher-order thinking, analytical reading, effective discussion, and argumentative writing throughout the year.



### **#391 Online AP World History**

*Grades: 11, 12*

*Prerequisites: Success in passing 9<sup>th</sup> and 10<sup>th</sup> grade social studies courses (experience in an online or blended course strongly suggested)*

*Fees: Cost of textbook, cost of AP exam*

*Credit: 1.0 VAHS credit, possible college credit depending on score on AP test*

The online format of AP World is *only* open to Juniors and Seniors; sophomores who passed the exam to take AP World must take the classroom format. The online format will allow students to move more at their own pace through the curriculum. The same content and skills will be covered, but most work will be done using the Moodle website. Periodic meetings with the teacher will still need to take place and will be scheduled at the beginning of the school year. AP World is designed to prepare students for the college-level and is open to 10<sup>th</sup>-12<sup>th</sup> grade students. The course covers the time of ancient civilizations to the present. Material is presented to assist students in comparing and contrasting cultures and to analyze change & continuity over time. As a result, the study of world history is not the same as the study of more specific histories; it focuses on the “big picture”. It also practices the analysis of different economic, social, and political structures. Discussion of major developments, the impact on people, and studying interactions among various cultures is another main characteristic of the course. Students will work on higher-order thinking, analytical reading, group discussion, and argumentative writing throughout the year. WHAT is studied and HOW it is studied helps prepare the student for college and the types of thinking skills needed in a variety of careers, especially in the globalized world we live in.

### **#392-AP Comparative Government and Politics**

*Grades: 11, 12*

*Prerequisites: Strongly recommend that students take US Government & Politics*

*Fees: \$100 class text, \$90 AP test fee*

*Credit: 1.0, Year Course*

AP Comparative Government and Politics introduces students to the rich diversity of political life outside the United States. The course uses a comparative approach to examine the political structures; policies; and the political, economic, and social challenges among six selected countries: Great Britain, Mexico, Russia, Iran, China, and Nigeria. Additionally, students examine how different governments solve similar problems by comparing the effectiveness of approaches to many global issues.



### **#394-AP Human Geography**

*Grades: 10, 11, 12*

*Prerequisites: Students would benefit from the historical and regional perspectives offered in US History and World Studies prior to taking AP Human Geography*

*Fees: \$200 for textbook and AP exam (75 multiple choice questions and 3 free-response essay questions)*

*Credit: 1.0, Year Course*

*Note: This class requires a summer assignment.*

Advanced Placement Human Geography is an introductory college level course designed to introduce students to the systematic study of the earth and its inhabitants. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. They also learn about the methods and tools geographers use in their science and practice. The course covers seven units: the geographic perspective; population; cultural patterns and processes; political organizations of space; agriculture and rural land use; industrialization and economic development; and cities and urban land use. The cross curricular nature of the topics covered in AP Human Geography make it a good foundational course for a variety of academic pursuits. Students will practice spatial thinking, analytical reading, class and small group discussion, evidence based conclusions, and free response writing throughout the year.



# TECHNOLOGY EDUCATION AND ENGINEERING

## **#705-Exploring Technology**

*Grades: 9,10,11,12*

*Entry-level course, no prerequisites*

*Approximate cost: \$10.00*

*Credit: .5, Semester Course*

Exploring Technology is a semester-long course devoted to technology and the impact it has on our lives today and in the future. While studying the areas of Transportation, Communications, Construction, and Manufacturing, students will build prototypes, design and construct buildings, test boat designs, communicate with machines using technology, study manufacturing, make metal float on air, use computer simulations, and participate in many other exciting learning activities which are too numerous to list here. Students will be using a textbook, computer resources and hands-on activities. Because of its broad and foundational nature, this course is good for a wide variety of career clusters.



## **#707-Computer Hardware Essentials (Dual Credit)**

*Grades: 9,10,11,12*

*Entry-level course, no prerequisites*

*Approximate cost: \$5*

*Credit: .5, Semester Course*

Computer Hardware Essentials covers the fundamentals of computer hardware and software as well as advanced concepts. Students who complete this course will be able to describe the internal components of a computer, assembling a computer system, install an operating system, and troubleshoot using system tools and diagnostic software. Students will be given the opportunity to take a computer, open it and replace components as needed either to upgrade or repair. No prior knowledge of computers is required. Students will also have the opportunity to earn dual credit with Madison College with a grade of "C" or better. Students will be using an online textbook, computer resources, and with hands-on activities. This course is suited for students entering the Information Technology career cluster.

## **#710-Wood Processes**

*Grades: 9,10,11,12*

*Entry-level course, no prerequisites*

*Approximate cost: \$25.00*

*Credit: .5, Semester Course*

Wood Processes will introduce students to the various woodworking machines, processes, and materials used in the woodworking industry. Students will construct a product using mass production or custom production methods. Emphasis will also be placed on safety procedures that must be followed in a shop environment. This course is recommended for those students interested in taking future woodworking and building construction courses. Examples of first projects students will create include: Bread Cutting board, Deer Plaques, Clocks, and Stools. After students complete two of these beginner projects they will be able to move on to a more difficult approved project of their choice. Class fees will cover the cost of the first two projects, students will be responsible for the cost of their final project that they choose. This class is suited for students entering the Architecture and Construction career cluster.

## **#710\_2-Wood Processes 2**

*Prerequisite: Wood Processes 1*

*Credit: .5, One Semester*

*Grades: 9-12*

Approximate Cost & Required Materials: \$25 Class Fees (students will be responsible for material costs for projects after their required project)

Course Description: This course will provide students with a review of technical woodworking information covered in Wood Processes. This course introduces the learner to the operation of traditional woodworking equipment. Students perform numerous exercises to gain familiarity with the portable power tools and industrial woodworking machinery while building their skills and familiarity with wood. Units include layout, cabinetmaking, sawing, surfacing, boring, and sanding. Students will study design principles and apply them to an individual, major project of their choice, with approval by the instructor. Student's first project will be a small night stand or cabinet followed by a project of their choice that is instructor approved.

### **#719-Electronic Engineering**

*Grades: 10,11,12*

*Entry-level course, no prerequisites*

*Approximate cost: \$8.00*

*Credit: .5, Semester Course*

Students will explore the field of solid state electronics from transistors/resistors to integrated circuits (computer chips). Emphasis will be placed on understanding the concepts behind circuits, using problem-solving skills to design and build useful devices. This course is designed so students will be comfortable in understanding the use of this technology at the same time gain enough skills to advance if they choose. Examples of projects are: wireless microphones, electronic timer, strobe light, motion detector, door alarm and many more.

Students will be using textbook, computer resources, hands-on activities and electronic computer simulations. This class is suited for the Arts, Audio/Video Technology, and Communications; and Science, Technology, Engineering, and Mathematics career clusters.

### **#712-Applied Electricity**

*Grades: 9,10,11,12*

*Entry-level course, no prerequisites*

*Approximate cost: \$10.00*

*Credit: .5, Semester Course*

This course will include instruction in the technical and practical applications of electricity as it applies to residential electricity, electrical wiring codes, types of wiring, electrical equipment and supplies, safety and electrical protection, and circuit troubleshooting. Students will be provided an opportunity to practice electrical installation skills, circuit wiring, service entrance and panel installation. This class is suited for the Architecture and Construction career cluster.

### **#714-Engineering Drafting**

*Grades: 9,10,11,12*

*Entry-level course, no prerequisites*

*Approximate cost: \$2.00*

*Credit: .5, Semester Course*

Engineering Drafting is for the student interested in further developing his/her skills in drafting and for students interested in pursuing print reading and computer aided design. Pictorial drawings, working drawings, print reading instruction will be the major units and problem solving will also be emphasized. Students will design, draw, and construct a device that may be the solution to an assigned problem. This class is suited for the Architecture and Construction career cluster.

### **#715-Computer Aided Drafting and Design**

*Grades: 9,10,11,12*

*Entry-level course, no prerequisites*

*Approximate cost: \$5.00*

*Credit: .5, Semester Course*

Students will have the opportunity to learn how to manage and recreate objects in a 3D environment on a computer. This course will benefit both the curious student who would like to learn how to use CAD software, and the student who wants to use this as a career building opportunity for the workplace, either in Computer Aided Drafting or the many occupations in the engineering fields. Examples of projects are, building a virtual catapult, design and aerodynamic testing of a dragster; reverse engineering a v6 car engine. AutoCad and Google Sketchup are the programs that will be used. Students will be using computer resources along with hands on activities. This class is suited for the Architecture and Construction and Manufacturing career cluster.

### **#720-Metals Processes**

*Grades: 10,11,12*

*Entry-level course, no prerequisites*

*Approximate cost: \$5.00*

*Credit: .5, Semester Course*

This course is for students who are considering Engineering, Machining, or other related occupations and will include units in design and layout, sheet metal, hot and cold metal forming, and heat treatment. Safe and proper use of tools and equipment will be emphasized. Metal machining will introduce the student to the basic operations involved in operating the metal lathes, milling machine, grinders, power band saw, and drill presses. Several exercises or projects will be required. Students will be using a textbook, computer resources, and hands-on activities. This class is suited for the Architecture and Construction and Manufacturing career clusters.

### **#722-Welding Technology**

*Grades: 9,10,11,12*

*Entry-level course, no prerequisites*

*Approximate cost: \$10.00*

*Credit: .5, Semester Course*

This course will include instruction in electric arc welding, oxyacetylene welding, and wire feed welding. Units that will be covered in arc welding are equipment and accessories, safety, kinds of electrodes, types of welds, cutting with the arc welder, and carbon arc welding. Units in oxyacetylene will include the study of equipment and accessories, adjusting torches and gauges, types of welds, brazing and cutting of metal and soldering. Students will be able to do repair work during the semester. Students will be using a textbook, computer resource along with hands on activities. This class is suited for the Architecture and Construction and Manufacturing career clusters.



### **#723-Advanced Welding Tech(Dual Credit)**

*Grades: 10,11,12*

*Prerequisites: Welding Tech or consent of the instructor*

*Approximate cost: \$10.00*

*Credit: 1.0, Year Course*

Dual Credit at Madison College is offered for course if requirements are met. This course will cover methods and procedures used in the welding area. Reading blue prints, layout techniques, welding and separating methods, and metallurgy will be covered in depth by the use of required and independent projects. About 75% of your time will be spent in the lab on activities and projects related to the various areas covered. Students must pay for materials used to build "take home" projects. This course is recommended for all students interested in advanced welding processes, engineering, and automotive maintenance.

### **#724-Principles of Construction**

*Grades: 10,11,12*

*Entry-level course, no prerequisites*

*Approximate cost: \$10.00*

*Credit: .5, Semester Course*

This course is for students who may be interested in some areas of the building trades as a possible career choice. This course will introduce students to the various areas of the trades such as concrete, masonry, carpentry, electricity, plumbing and heating, and blueprint reading. Activities will be simulated projects similar to those that are done in the actual trade. Projects may include but are not limited to Gazebos, Storage Sheds, Garages, Ice Fishing Shacks, and Display Kiosks. After completing this course, students will be better able to determine if they wish to pursue Building/Construction as a career objective as a junior or senior. Students will be using a textbook, computer resource along with hands on activities.

### **#732-Engine Maintenance**

*Grades: 10,11,12*

*Entry-level course, no prerequisites*

*Approximate cost: \$5.00*

*Credit: .5, Semester Course*

This class is designed for those students who wish to learn more about how vehicle engines operate and what they can do themselves for maintenance. The various systems, such as fuel, electrical, mechanical, and hydraulic, will be studied and students will perform maintenance as needed. Both problem solving and consumer responsibility will be emphasized. Power Mechanics is recommended, but not required, before enrolling in this course. Students will be working with actual car engines on stands along with diagnosing errors on their own vehicles. Students will be using a textbook, computer resource along with hands on activities. This course is suited for students going into the Agriculture, Food and Natural Resources and Transportation, Distribution and Logistics career clusters.

### **#760-Power Mechanics**

*Grades: 10,11,12*

*Entry-level course, no prerequisites*

*Approximate cost: \$5*

*Credit: .5, Semester Course*

This is a hands-on class for students who want to know how power equipment works. Prior knowledge or experience is not necessary. During class, students work on gas engines, taking them apart and re-assembling them to work better than new! In the process students gain knowledge and familiarity with a variety of tools. This class is useful for all

students who like working with their hands and is related to careers in the following career clusters: Agriculture, Food & Natural Resources; Architecture & Construction; Transportation, Distribution, & Logistics, and Science, Technology, Engineering & Mathematics. This course serves as a prerequisite for #762-Advanced Power Mechanics.

### **#762-Advanced Power Mechanics**

*Grades: 11, 12*

*Prerequisite: Grade of C- or better in #760-Power Mechanics*

*Approximate cost: \$5*

*Credit: .5, Semester Course*

This class is for students who want more power and efficiency from their engines, more time to develop mechanical improvements, and more research into advanced engine designs. Units will include advanced machining, alternative fuels and lubricants, and independent research. Because the class is primarily project-based, students must be motivated to work independently and in small groups. Students should enjoy solving problems and have a respect for detail as well as a strong interest in mechanics. Recommended for students interested in engineering and in the following career clusters:

Agriculture, Food & Natural Resources; Architecture & Construction; Transportation, Distribution, & Logistics; and Science, Technology, Engineering & Mathematics

### **#971-Sculpture/Welding**

*Grades: 9, 10, 11, 12*

*Prerequisite: Entry-level course, no prerequisite*

*Approximate cost: \$25*

*Credit: .5, Semester Course*

Cross-listed with Art, this sculpture class teaches the fundamentals of 3-D design and introduces students to welding and basic woodworking skills. This is a class for students who enjoy hands-on craft and appreciate good design. Use of woodworking power tools and a variety of welding techniques are taught, including arc, acetylene, and mig. Students will also explore art and craft in America as it relates to wood and metal working. This course is recommended for students interested in the arts, teaching, and professional design, as well as these career clusters: Architecture & Construction and Arts, A/V Technology & Communications. While this class is recommended for students interested in careers in the arts, teaching, professional design, and audio/video technology and communications, involvement in the arts equips students for success in a broader range of settings as well.



### **PLTW: Introduction to Engineering Design(IED) (College Credit eligible upon successful completion of End of Course Exam)**

*Grades: 9, 10, 11, 12*

*Length: Year or Equivalent (semester-long block)*

*Credit: 1.0, Year Course*

*Prerequisite: Completion of or concurrent enrollment in Algebra or above*

Introduction to Engineering Design is a STEM based course that teaches problem-solving skills by using the design development process. The design process is an engineering activity that turns a concept into reality. The design process from concept to solution is a logical sequence of steps to develop the best solution to a specific problem. Models of product solutions are created, analyzed and communicated using solid modeling computer design software.

Units include:

Student Portfolio Development Model Analysis and Verification

Sketching and Visualization Presentation

Geometric Relationships Production

Modeling, Assembly Modeling & Marketing



### **PLTW: Principles of Engineering(POE) (College Credit eligible upon successful completion of End of Course Exam)**

*Grades 10, 11, 12*

*Length: Year*

*Prerequisites: Must have taken Geometry or currently be enrolled in Geometry*

*Approximate cost: \$5.00*

*Credit: 1.0, Year Course*

Principles of Engineering is a STEM based course that exposes students to some of the major concepts they'll encounter in a postsecondary engineering course of study. Students have an opportunity to investigate engineering and high-tech careers and to develop skills and understanding of course concepts. Students employ engineering and scientific concepts in the solution of engineering design problems. They 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. Students will be using textbook, computer resources along with hands on activities



**PLTW: Engineering Design & Development (EDD)** (College Credit eligible upon successful completion of End of Course Exam and course certification process)

*Grades: 11, 12*

*Length: Year*

*Prerequisite: Completion of one prior PLTW engineering course (POE, IED, DE, CEA)*

*Cost: \$10.00*

*Credit: 1.0, Year Course*

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 lifecycle 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. This course is designed for 11th and 12th grade students.

### **Automotive Technology Youth Apprentice**

*Grades: 11, 12*

*Prerequisite: Application Required*

The Automotive Technology Apprentice is for students interested in the maintenance, repair, and servicing vehicles. Students in the Automotive Technology program learn and practice skills that prepare them for diverse post-secondary opportunities. Students in the Automotive Technology Apprenticeship must take a year-long evening class at McFarland (1<sup>st</sup> year) or Madison College (second year) that covers safety, brakes, suspension, steering, electrical, and engine performance. The second year of classes is offered as dual credit with Madison College. Students must also complete 450 hours per year of paid work experience in the industry. Youth Apprenticeship applications are available from the School to Careers Coordinator, Ms. Moschkau, in Student Services. Applications are due March 1.

### **Construction Youth Apprentice**

*Grade: 12*

*Prerequisite: Application Required*

The Construction Youth Apprentice program is for students interested in careers in the skilled trades of Carpentry, Electrical, Masonry/Concrete, Mechanical/HVAC, and Plumbing/Sprinkler Fitting. Students in the construction program learn and practice skills that prepare them for diverse post-secondary opportunities. Students in Youth Apprentice must complete two semester-long courses that focus on the construction trades and will also complete the core employability, safety and certifications in OSHA and First Aid. Students must also complete 450 hours per year of paid work experience in the industry. Youth Apprenticeship applications are available from the School to Careers Coordinator, Ms. Moschkau, in Student Services. Applications are due March 1.

**Additional Technical Education courses are available to VAHS students via Project Lead the Way. See descriptions on page 51**



# WORLD LANGUAGES

## #405-French 1

*Grades: 9 predominantly, but open for all*

*Entry-level course, no prerequisite*

*No fees*

*Credit: 1.0, Year Course*

*Note: A passing grade from semester one is required to continue into the second half of the course.*

French I is an introductory language class. No previous French experience is necessary. Students will begin to listen, speak, read, and write in French through the study of basic grammatical structures and selected vocabulary. Most classroom instructions are given in French with more presentations gradually given in French as well. Students will study French geography and points of interest and complete a project on famous French people. This class serves as a prerequisite for French 2.

## #415-French 2

*Grade: 10 predominantly, but open to all.*

*Prerequisites: C- or better in the second semester of French 1*

*No fees*

*Credit: 1.0, Year Course*

*Note: A passing grade from semester one is required to continue into the second half of the course.*

In French 2, students will continue to build basic language skills and add new vocabulary. Emphasis is on the spoken language and students are encouraged to use only French in the classroom. Students examine how to use French in everyday situations and travel, complete short readings and writings, and craft a project on Paris and the Metro. This class serves as a prerequisite for French 3.

## #425-French 3

*Grades: 10, 11, 12*

*Prerequisites: C- or better in the second semester of French 2*

*No fees*

*Credit: 1.0, Year Course*

*Note: A passing grade from semester one is required to continue into the second half of the course.*

In French 3, students will continue to build language skills and add new vocabulary with a greater emphasis on more complicated grammar, including narration of past, future, and hypothetical situations. Students speak and use only French, improving their language through skits, storytelling, and travel projects. Due to the immersion nature of this course, students should possess good listening, reading, writing, and speaking skills and be willing to work and participate daily to ensure progress. This class serves as a prerequisite for French 4.



## #435-French 4(Dual Credit)

*Grades: 11, 12*

*Prerequisites: C- or better in the second semester of French 3*

*Approximate cost: \$50 for field trips and book*

*Credit: 1.0, Year Course*

*Note: A passing grade from semester one is required to continue into the second half of the course.*

Fourth year students focus on improving their ability to read, speak, listen, understand, and write French, expanding on the grammar and language structures taught in levels 1-3. Students at this level work to perfect comprehension, speaking ease and pronunciation. Advanced writing skills are sharpened through essays and projects. This class is oriented towards projects and presentations including a study of the French Impressionists and the novel *Le Petit Prince*. One of the principal objectives of French 4 is to prepare students for success at the post-secondary level. Classes are conducted exclusively in French and students are expected to speak French daily.

**PLEASE NOTE: French 4 students who have earned a B or better in French 3 will have the opportunity to earn dual credit through UW-Green Bay. Enrollment is in the Fall and the cost is approximately \$400. Students may earn up to 11 college credits if they earn a B- or better in French 4.**

#### **#440-French 5**

#### **#442-French 6**

*Grades: 12*

*Prerequisites: C- or better in the second semester of French 4/5 OR consent of instructor*

*Approximate cost: \$10 for field trip, AP test fee (optional)*

*Credit: 1.0, Year Course*

*Note: A passing grade from semester one is required to continue into the second half of the course. These courses are geared toward students who have had special language experiences that have enabled them to accelerate their studies. Students will continue to study advanced grammar while improving writing skills. This course will involve independent study with projects proposed and designed by the students. Students may elect to take the French Language AP Exam in the spring.*

#### **#445-German 1**

*Grades: 9 predominantly, but open for all*

*Entry-level course, no prerequisite*

*No fees*

*Credit: 1.0, Year Course*

*Note: A passing grade from semester one is required to continue into the second half of the course.*

German I is an introductory language class. No previous German experience is necessary. Students will begin to comprehend, speak, read, and write in German through the study of basic grammatical structures and selected vocabulary organized around themes including: self, family, home, free time, and school. Students will be assessed by the accuracy and organization of their German binders, their in-class oral participation, completion of homework assignments and projects, and quizzes and tests. Students with good organizational and study skills will do well in this course. This class serves as a prerequisite for German 2. **Please Note:** Students who have successfully completed both the 7<sup>th</sup> and 8<sup>th</sup> grade German program should enroll in German 2 at the high school. A repeat of German I is not recommended if the grade earned at middle school was a C or better.

#### **#450-German 2**

*Grades: 9 and 10 predominantly, but open for all*

*Prerequisites: C- or better in the second semester of German 1*

*No fees*

*Credit: 1.0, Year Course*

*Note: A passing grade from semester one is required to continue into the second half of the course.*

In German 2, students will continue to build basic language skills and add new vocabulary. Students will spend the first half of the year learning about the countries where German is spoken. The second half of the year is spent planning and participating in a fictional trip to Germany including purchasing an airline ticket, packing a suitcase, and navigating an airport. Students will continue to grow in their skills of comprehension, speaking, reading and writing in German so daily in class participation and outside classroom practice is crucial. Students will be assessed by the accuracy and organization of their German binders, their in-class participation, completion of homework assignments and projects, quizzes and tests. Students with good organizational and study skills will do well in this course. This class serves as a prerequisite for German 3.

#### **#455-German 3**

*Grades: 10,11,12*

*Prerequisites: C- or better in the second semester of German 2*

*No fees*

*Credit: 1.0, Year Course*

*Note: A passing grade from semester one is required to continue into the second half of the course.*

In German 3 students will develop more complex language skills while continuing to add new vocabulary. In the first semester, students continue on their fictional trip to Germany by learning about the German railway, foods, mealtimes and dining out. The second half of the year focuses on German literature. Students first read a play, followed by a poetry. As the complexity of the material increases, daily in class participation and outside classroom practice is crucial. Students will be assessed by the accuracy and organization of their German binders, their in-class participation, completion of homework assignments and projects, quizzes and tests. Students with good organizational and study skills will do well in this course. This class serves as a prerequisite for German 4.



#### **#460-German 4**

*Grades: 11, 12*

*Prerequisites: C- or better in the second semester of German 3*

*No fees*

*Credit: 1.0, Year Course*

*Note: A passing grade from semester one is required to continue into the second half of the course.* Fourth year students of German focus on improving and refining their ability to comprehend, speak, read, and write in German while expanding on the grammar and language structures taught in levels I-III. Students will begin the year with a fairy tale unit. As part of this unit, students will have the opportunity to write and illustrate their own German fairy tale. This unit will turn into a unit on Anti-fairy tales and students will read and analyze authentic German literature from authors Hoffmann and Busch. The second half of the year will be spent reading and comprehending a radio play and addressing familiar topics such as personal hygiene, clothing, chores, and going out. To keep up with the pace of the class, daily in class participation and outside classroom practice is crucial. Students will be assessed by the accuracy and organization of their German binders, their in-class participation, completion of homework assignments and projects, quizzes and tests. Students with good organizational and study skills will do well in this course. This class is a prerequisite for German 5.

#### **#465-German 5**

*Grades: 12*

*Prerequisites: C- or better in the second semester of German 4*

*No fees*

*Credit: 1.0, Year Course*

*Note: A passing grade from semester one is required to continue into the second half of the course.*

The purpose of fifth year German is to prepare students for the placement exam and continued study of German at an institution of higher learning. Emphasis will be placed on improving a student's ability to express him/herself both in oral and written form in the target language. The first unit of the year will be taught using the blended learning model Moodle giving students the opportunity to learn and practice within the classroom and online setting. A play follows this unit and students will compare and contrast their lives with the lives of German teens. At the end of 1<sup>st</sup> semester, students will take the AATG sponsored German exam, which tests their auditory and written comprehension of the German language. The remainder of the year will be spent working with 1-2 pieces of authentic German literature, based on the interest of the students. Due to the advanced nature of this course, only students with a commitment to furthering their study of German at a secondary institution should enroll.

#### **#470-German 6**

*Grades: 12*

*Prerequisites: C- or better in the second semester of German 5 OR consent of instructor*

*No fees*

*Credit: 1.0, Year Course*

*Note: A passing grade from semester one is required to continue into the second half of the course.* Students in this course have lived in a German speaking country or have transferred from a district that begins language study in elementary school. This class is combined with German 5 and generally follows the curriculum of that course with alternative requirements tailored to the needs of the individual.

#### **#475-Spanish 1**

*Grades: 9 predominantly, but open for all*

*Entry-level course, no prerequisite*

*No fees*

*Credit: 1.0, Year Course*

*Note: A passing grade from semester one is required to continue into the second half of the course.*

Spanish 1 is an introductory language class. No previous Spanish experience is necessary. Units on geography, self, school, activities, telling time, weather, food, and culture will help students' listening, comprehension, speaking, writing, and reading skills. Much of the class is in Spanish. Students will be graded on projects, quizzes, and tests as well as accurate completion of homework and constructive participation and speaking Spanish in class. For students to be successful in Spanish 1, they will need to memorize quickly, organize notes effectively, study daily, and participate constructively. This class is a prerequisite for Spanish 2. **Please Note:** Students who have successfully completed **both** the 7<sup>th</sup> and 8<sup>th</sup> grade Spanish programs (the equivalent of Spanish 1) should enroll in Spanish 2 at the high school. A repeat of level one is not recommended with a C or better and a teacher recommendation.

### **#480-Spanish 2**

*Grades: 9 and 10 predominantly, but open for all*

*Prerequisites: C- or better in the second semester of Spanish 1*

*No fees*

*Credit: 1.0, Year Course*

*Note: A passing grade from semester one is required to continue into the second half of the course.*

In Spanish 2, students will continue to learn basic language skills and add new vocabulary. Students' listening, comprehension, speaking, writing, and reading skills will develop through units on family, celebration, restaurant, travel, daily routine, shopping, childhood, and Spanish culture. Spanish 2 introduces students to increasingly complicated grammatical lessons. Almost all readings, lectures, and discussions will be conducted in Spanish. Due to the immersion nature of this course, students should possess good listening, reading, writing, and speaking skills and be willing to work and participate daily to ensure progress. This class is a prerequisite for Spanish 3.

### **#485-Spanish 3**

*Grades: 10, 11, 12*

*Prerequisites: C- or better in the second semester of Spanish 2*

*No fees*

*Credit: 1.0, Year Course*

*Note: A passing grade from semester one is required to continue into the second half of the course.*

Spanish 3 is an advanced course taught almost exclusively in Spanish. Students are expected to have a strong foundation (ideally a B- or better) in Spanish 1 and 2. Spanish 3 continues to build conversation and composition skills as students complete units on nature, sports, childhood, art/entertainment, food, symptoms/remedies, health and relationships. They will encounter authentic texts, short stories, and excerpts from Latin American and Spanish authors. In order to advance speaking ability, pair practice, group work, and role plays are used. Nearly all lectures, discussions, and readings will be in Spanish and students are expected to speak Spanish with their teacher and their peers. This class is a prerequisite for Spanish 4.

### **#490-Spanish 4**

*Grades: 11, 12*

*Prerequisites: C- or better in the second semester of Spanish 3*

*No Fees*

*Credit: 1.0, Year Course*

*Note: A passing grade from semester one is required to continue into the second half of the course.*

Spanish 4 is meant for academically-minded students planning to continue their study of Spanish at a post-secondary institution. Fourth year students focus on improving their ability to read, speak, listen, understand, and write Spanish, expanding on the grammar and language structures taught in levels 1-3. Reading will grow in emphasis as students are exposed to longer and more complicated authentic works including short stories, legends, and fables. Unit themes include professions, finding a job, community, cultures, human rights, and immigration. Students will be required to produce more oral and written language, both rehearsed and spontaneous. All readings, lectures, and discussions are in Spanish. This class is a prerequisite for Spanish 5.



### **#495-Spanish 5**

*Grades: 12*

*Prerequisites: C- or better in the second semester of Spanish 4*

*B or better in Spanish 4 if taking for dual credit through UW-Green Bay*

*Approximate cost: \$40 Online textbook, everyone*

*\$400 for students who choose to take the course for 14 college credits through*

*UW-Green Bay transferable to any UW system school*

*Credit: 1.0, Year Course*

*Note: A passing grade from semester one is required to continue into the second half of the course.* Intended for academically-minded students of Spanish planning on continuing their study of Spanish at a post-secondary institution, Spanish 5 strengthens and extends students' ability to use Spanish fluently and correctly. All grammar is fine-tuned, and vocabulary becomes more precise. Non-fiction from Latin America and Spain pairs with fictional work to extend written language. Class is conducted in Spanish and students are required to speak Spanish in class. In taking this class, students indicate willingness to dedicate time to advancing reading and writing ability in order to procure the ability to earn retroactive credits at the university level.

### **#SP\_NS Spanish for Native Speakers**

*Grades: 9,10,11,12*

*Prerequisites: Native or native-like Spanish skills when speaking, listening, and reading, with moderate command of the written language.*

*Approximate cost: \$20 (workbook)*

*Credit: 1.0, Year Course*

*Note: A passing grade from semester one is required to continue into the second half of the course.*

This course is designed to serve the needs of Spanish speakers from Spanish-speaking homes whose speaking and understanding skills are advanced but written and reading skills may need to be developed. Students will read text with complex vocabulary and grammar, and writing lessons will be geared to advance students' skills in proper spelling, punctuation, vocabulary use, and idea organization. Culture and history will also be studied. Consistent attendance, timely work completion, and constructive participation will be required for all members.



## YOUTH APPRENTICESHIP

### **Youth Apprenticeship**

The Youth Apprenticeship Program is open to juniors and seniors for a one or two-year program. This cooperative program with Madison College, the Dane County School Consortium, and an area employer students complete their high school diplomas, earn college credits, and obtain paid work experience in a career pathway of their choice. All tuition and fees are paid by VAHS pending successful completion of coursework offered by Madison College. (Students will be required to pay tuition costs for failed or dropped courses.)

Students must complete a Youth Apprenticeship application and arrange for their own employment to participate in this program. Interested students should meet with the School-to-Career Coordinator or their counselors regarding this dual-credit program. Applications are accepted in spring for the following school year.

The Youth Apprenticeship Program at VAHS currently offers programs in the following career areas:

- Agribusiness (see description page 15)
- Automotive Technology (see description page 70)
- Biotechnology (see description page xx)
- Certified Nursing Assistant (CNA) (see description page 38)
- Construction (see page 70)
- Finance/Accounting (see description page 26)
- Pharmacy Technician (see description page 39)
- Hospitality/Tourism/Food Service (see description page 26)
- Information Technology (see description page 28)
- Veterinary Technician (see description page 15)

If interested, please see Ms. Moschkau, VAHS School to Career Coordinator, or your counselor for additional information and a Youth Apprenticeship Application.



