## 2020-2021

## STOUGHTON HIGH SCHOOL

## Course Selection \& Career Planning Guide



Excellence in Academics, Arts, Athletics \& Co-Curricular Activities

## Table of Contents

- Mission Statement ..... 3
- Letter to Students ..... 3
- Nondiscrimination Statement ..... 3
General Topics
- Graduation Requirements ..... 4
- Scheduling Policies ..... 5
Extended Educational Opportunities
- Concurrent Enrollment Programs ..... 6
- Advanced Placement Courses \& Information ..... 6
- Programs For Unique Learners ..... 8
- Community Based Instruction ..... 8
- GEDO ..... 8
- Advanced Learning ..... 8
- Work-based Learning Programs ..... 9
- Youth Apprenticeship ..... 9
- Work Experience. ..... 11
- Teacher Assistant ..... 11
Planning Your Future
- Consider This ..... 12
- Career Clusters ..... 13
- Post-secondary Planning ..... 15
Course Offerings
- Agriculture, Food \& Natural Resources ..... 16
- Art ..... 19
- Business \& Information Technology ..... 22
- Family \& Consumer Science ..... 25
- General Electives ..... 27
- Health Science ..... 32
- Language Arts ..... 36
- Mathematics ..... 40
- Music ..... 44
- Physical Education \& Health ..... 48
- Science ..... 51
- Social Studies ..... 55
- Technology \& Engineering Education ..... 59
- World Language ..... 64

Dear Students of Stoughton High School,
The future holds many choices; few are more important than choosing a career path that is right for you. As you consider your future, think about what is important to you and what you want out of life. Use this knowledge to guide your selection of courses at Stoughton High School. The choices you make and the courses you take while in high school, in large part, affect your ability to achieve the goals in life that you set or will set for yourself.

Plan your four-year program of courses as early in high school as possible. Do this carefully and thoughtfully, and keep in mind your capabilities, interests, post-secondary plans, and career ambitions. When planning your four-year high school program, actively seek the advice and guidance of parents, teachers, counselors, and other respected adults. This guide is intended to assist you in this process. Read it thoroughly; ask questions of SHS Staff to learn more about the courses and programs offered at Stoughton High School.

Course planning is a complex and multi-faced task. Once students select courses, budget and staffing decisions are made to accommodate student requests. Because of this, students are highly encouraged to plan carefully and thoughtfully. When a course has been approved to run it is crucial to keep class size at acceptable levels. Therefore, schedule change requests cannot always be approved.

The time for decision-making and planning is now. The future is yours!

Sincerely,

MJK

Mr. Kruse
Principal

## Mission Statement

The mission of Stoughton High School, by maintaining a safe, challenging, and diversified learning environment, is to graduate literate, respectful, and responsible individuals with skills that prepare these citizens for a lifetime of informed decision-making.

Nondiscrimination Statement
Stoughton Area School District does not discriminate on the basis of a person's sex, race, national origin, ancestry, creed, religion, pregnancy, marital or parental status, sexual orientation, or physical, mental, emotional, or learning disability in its education programs or in employment (Wis. Stat. § 118.13, Title IX, Title VI of the Educational Amendments of 1972, and Section 504 of the Rehabilitation Act of 1973).

## GRADUATION REQUIREMENTS

Graduation requirements at Stoughton High School are established by the Board of Education.

## 24.0 credits are required to graduate from SHS

Students are expected to take a minimum course load of 6 credits per year

## No student is permitted to participate in commencement exercises unless all graduation requirements have been satisfactorily fulfilled <br> Credit Requirements

| Language Arts (4 credits) |  |
| :---: | :---: |
| Language Arts 9 | 1 credit |
| Language Arts 10 | 1 credit |
| Language Arts 11 | 1/2 credit |
| Additional LA classes | $11 / 2$ credits |
| Social Studies (3.5 credits) |  |
| Modern United States History | 1 credit |
| Ancient World History | 1 credit |
| Modern World History | 1/2 credit |
| American Government | 1/2 credit |
| Economics | 1/2 credit |
| Science (3 credits) |  |
| iSTEM | 1 credit |
| Biology | 1 credit |
| Chemistry | 1/2 credit |
| Additional Science classes | 1/2 credit |
| Mathematics (3 credits) |  |
| Physical Education (1.5 credits) |  |
| Health (. 5 credit) |  |
| Fine Arts ( 5 credit) |  |
| Career \& Technical Education ( 5 credit) |  |
| Additional Credits ( 7.5 credits) |  |

Please review each requirement carefully and contact your school counselor if you have a question or are unsure about your current credit status.

# SCHEDULING POLICIES <br> Students are expected to take a minimum course load of 6 credits per year 

## Counselors

Andrew Burke (Students A-G)
(608) 877-5609
andrew.burke@stoughton.k12.wi.us

Ann Ash (Students H-N)
(608) 877-5612
ann.ash@stoughton.k12.wi.us

Kristin Natzke (Students O-Z)
(608) 877-5614
kristin.natzke@stoughton.k12.wi.us

## General Guidelines

Students may change their original course requests for the following reasons:

- To resolve class conflicts (e.g., two classes scheduled during the same period)
- To meet graduation requirements
- To remove students from classes they are not eligible to take
- To balance class sizes

Students may not change a course for these reasons:

- To accommodate student preferences for teachers
- To accommodate student preference for class times
- For social reasons (e.g., to be with friends)


## Adding Classes

- Please note that students are encouraged to change their schedule prior to the start of school.
- Counselors are available to revise schedules during registration days and other published summer days.
- Students are not permitted to audit or take classes for no credit.
- Students may add classes within the first four (4) school days of each semester.


## Dropping Classes

- Students who drop classes within the first four (4) days of each semester will be withdrawn without academic penalty.
- Drops after the 4 day grace period will result in an F. Exceptions to this policy will be reviewed on a case-by-case basis.


## Exceptions

- Exceptions and appeals to scheduling policies are made to and approved by the High School Principal.
- Only those exceptions that are recommended by a counselor will be considered.
- The credit load requirement may be modified if student is enrolled in a work-based learning program such as Youth Apprenticeship or Work Experience. The modification must be recommended by a counselor and approved by the Principal.


## Concurrent Enrollment Programs

The Early College Credit and Start College Now programs allow public high school students to take courses at institutions of higher education that are not comparable to courses offered at the high school. Students are able to receive high school and/or postsecondary credit for doing so. Each of these programs has its own set of rules, application and admission procedures, and tuition requirements.

The Early College Credit program allows students grades $9-12$ to take classes at 4 year institutions in the state. The Start College Now program allows students in grades 11-12 to take courses at technical colleges in the state. Students must apply the semester prior to the term in which they wish to enroll. Applications are available through the School to Work Coordinator. For more information contact
jennifer.deadman@stoughton.k12.wi.us .

## Advanced Placement

## What is Advanced Placement?

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

## How difficult are AP courses?

AP courses are college courses, and therefore are more demanding academically. AP courses are not easy, but they are not impossibly difficult either. The intellectual skills (critical reading, analyzing data sets, synthesizing evidence to develop new insights) and interests that students develop by taking AP courses will equip them for lifelong learning.

## What do I need to do to succeed in an AP course?

Students need to be self-motivated and disciplined in order to keep up with the material, or better yet, get a little ahead. An AP course, as with any other college course, moves rapidly and covers a lot of material, which means many assignments are done outside of class on the student's time. This may also include doing assignments during the summer prior to the start of the AP class. Students need to have good time management skills since they may be spending 45 minutes to one hour each night working on a single AP course. Students need to be active participants by asking questions, taking part in class discussions and, again, keeping up with the assignments. Finally, they should set themselves up to be successful by first taking courses that will prepare them for the AP course.

## Other Information

Students are also encouraged to purchase the books and course materials required for AP classes, just as they would for any college-level course.

## The Benefits of AP

If students take and pass the AP exam, they will receive credit, advanced placement or both at most colleges and universities. The amount of credit received varies from college to college and depends on the AP score and the subject. Whatever is granted by the college means time saved and financial savings for each credit earned while in high school. It is possible for a student to earn enough college credit by passing multiple AP exams to enter college at a sophomore standing. Students are strongly encouraged to take the AP exam.

## AP Exams

AP exams are given during the first two full weeks of May. The CollegeBoard sets the exam days and times so every student takes the same exam at the same time. The schedule is not determined by the high school and cannot be modified.

## AP Exam Grades

The AP exam grading scale is as follows:
5 - Extremely well qualified*
4 - Well qualified*
3 - Qualified*
2 - Possible qualified*
1 - No recommendation**
*Qualified to receive college credit or advanced placement
**No recommendation to receive college credit or advanced placement.
Students will be able to access their grades electronically beginning in July. Most colleges and universities accept AP exam scores of 3 or above, but this is the college or university's choice.

| AP courses offered at Stoughton High School |  |
| :--- | :--- |
| Department | Course |
| General Elective | AP Computer Science Principles |
| Language Arts | AP Literature and Composition |
| Math | AP Language \& Composition |
|  | AP Calculus AB |
| Music | AP Calculus BC |
| Social Studies | AP Statistics |
|  | AP Music Theory (enrollment-driven) |
|  | AP Psychology |
|  | AP U.S. History (enrollment-driven) |
| Science | AP World History |
|  | AP US Government \& Politics |
|  | AP Biology |
| World Language | AP Chemistry |
|  | AP Physics |
|  | AP Spanish |
|  | AP German |

To discuss questions or concerns contact any of the teachers whose courses are listed above, a high school counselor, or Lisa Schneeberger (608) 877-5763 or lisa.schneeberger@stoughton.k12.wi.us

## Programs For Unique Learners

## Community Based Instruction (CBI)

CBI is a program that provides transition services to students who have an Individualized Education Plan (IEP). Services include training in daily living, recreation/leisure, social, and vocational skills. Supported work experiences are available to students who need significant assistance in obtaining and maintaining employment. Students must be 18-21 years old or have permission from a transition coordinator to participate in this program.

To discuss questions or concerns, contact Megan Blankenheim-Villarreal at (608) 877-5629 or Megan.Blankenheim-Villarreal@stoughton.k12.wi.us.

## GEDO 2

Stoughton High School offers an alternative program that awards successful candidates a regular Stoughton High School Diploma. This program, GEDO 2, is a rigorous course of study that prepares students with a solid academic foundation, the possibility for post-secondary options, and a variety of skills for real life.

The successful GEDO 2 candidate will achieve passing cumulative scores on the GED test battery in language arts, math, science, and social studies. They will complete courses in civics and citizenship, personal finance, health, and career awareness and employability skills. It is suggested that GEDO 2 students contribute either a minimum of 40 hours of service learning to the community or be employed at a paying job during the school year.

If you ask the students in the GEDO 2 program what they have learned and how this opportunity has impacted them, they will tell you how this individualized program has made a difference in their lives and has given them a solid direction for their future. Please contact your child's school counselor for more information.

## Advanced Learning (Talented and Gifted)

Programming for advanced learners has its foundations within courses and classrooms. The basis of effective education in Stoughton schools is rigorous classroom instruction, a positive learning environment, and schoolwide support. All students are expected to receive instruction that meets state standards and district benchmarks/goals.

Advanced Learner services are aligned to Wisconsin's continuum of services model. A multi-level system of instructional supports is provided for students who demonstrate the need for additional challenge, including advanced course selection, independent study, and curricular challenge options. Opportunities exist for enrichment and collaboration with like-minded peers through challenge activities and academic competitions.

To discuss questions or concerns, please contact Chris Wiemer, High School Advanced Learning Coordinator at (608) 877-5657 or chris.wiemer@stoughton.k12.wi.us

## Work Based Learning Programs

## Youth Apprenticeship Programs

Do you learn by doing? Are you interested in working in your chosen career field while still in high school? Do you want to earn high school credits and a paycheck at the same time? If you answered YES to these questions, Youth Apprenticeship may be perfect for you!

## Program Specifics:

- Open to Juniors and Seniors
- One or two year programs available
- Student must work 450 hours (1 year program) or 900 hours (2 year program)
- Student must take 2 semesters of coursework related to area of apprenticeship
- School day may be modified - late start or early release
- Certificate of Mastery is awarded by the WI Department of Workforce Development and recognized state-wide


## Youth Apprenticeship Program Areas at Stoughton High School

Agriculture - Animals
Basic Animal Care
Veterinary Technician Assistant
Agriculture - Plants
Basic Plant Care
Greenhouse/Floral
Landscaping
Architecture
Construction
Carpentry
Electrical
Masonry/Concrete
Mechanical/HVAC
Plumbing/Sprinkler Fitting
Arts, A/V Technology \& Communication
Printing/Post-Press Machinery
Graphic Design/Pre-Press Files
Finance
Business Financial Management-Accounting
Banking
Insurance
Health Science
Dietary Aide
Nursing Assistant
Pharmacy Technician Assistant
Hospitality \& Tourism
Restaurant Food \& Beverage
Lodging
Reservation \& Tour/Activity
Maintenance \& Grounds

Information Technology
General IT/IT Essentials
Network Systems - Hardware
Programming - Software
Marketing
Professional Sales
Merchandising
Communications
Research
Management
Manufacturing
Assembly \& Packaging
Manufacturing Processes
Machining
Welding
Product Operations Management
Maintenance, Installation \& Repair/Industrial Equipment
STEM
Biotechnology
Engineering - Drafting, Mechanical \& Civil
Transportation, Distribution \& Logistics
Supply Chain/Planning \& Purchasing Inventory Management Auto Collision
Auto Technician
Diesel Technician

## Teacher Assistant (Open to Seniors, one semester only)

Are you a senior and interested in becoming a teacher, or working in the field of education? Did you do really well in a particular class or especially like a curricular area, such as Social Studies, Art or Technology Education? If so, consider being a Teacher Assistant. In this one semester, non-paid experience, you will develop leadership skills, gain understanding of what it means to teach, and deepen your own knowledge base while helping others learn. Teacher Assistant responsibilities may include:

- Facilitate small group instruction
- Provide feedback on formative assessments
- Tutor struggling students
- Teach a particular unit or part of a unit with support \& guidance from the HS instructor.

To be accepted as a Teacher Assistant, the student must:

- Complete \& submit application form (Incomplete applications will not be considered)
- Have $90 \%$ or better attendance record, includes both absences \& tardies
- Have a GPA of 2.0 or better
- Have taken 2 courses related to the TA position and earned a passing grade
- Career goal must relate to Teacher Assistant placement (i.e., Science, Art, PE/Health, Health Science)
- Grade is Pass/Fail and determined by ability to meet learning targets, complete and submit homework thoroughly and on time.

To discuss questions or concerns, contact Jennifer Deadman, School to Career Coordinator at (608) 877-5677 or jennifer.deadman@stoughton.k12.wi.us

## Work Experience I or II (Open to Seniors)

- Provides opportunity to gain employability skills and exposure to work environment
- One semester (18 weeks) in length
- Participants complete career-related assignments \& paid work experience
- Must be employed at time of enrollment
- Employment not necessarily related to career interest or goal
- Minimum of 90 hours work/semester is required
- Modified school day is possible (early release)
- Journaling of work experience required

To discuss questions or concerns, please contact Scott Model, at (608) 877-5657 or scott.model@stoughton.k12.wi.us or Jennifer Deadman, at (608) 877-5677 or Jennifer.deadman@stoughton.k12.wi.us

## Planning Your Future

## Consider This - Education pays in higher earnings and lower unemployment rates Education pays:



## What Careers Interest You?

The average college graduate changes majors three times before graduating. Research shows that informed and thought-out career choices result in higher levels of income, greater job satisfaction, and shorter periods of unemployment.

- If you aren't sure what career you want to pursue, or want to explore more possibilities, consider taking a career interest inventory to match your skills, interests, and abilities to careers. There are many inventories to choose from, including those found in Xello. Ask your counselor or the School to Career Coordinator for more information.

After you've decided what careers interest you, find out everything you can about them. Consider things such as the amount of education needed, the responsibilities of the job, the personal qualities and skills needed for these careers, if the career is available in the geographic area you want to live, and, of course, find out about earning potential. Investigate which post-secondary schools ( 2 and 4 -year schools) offer degrees or training programs that meet your goals and financial needs. Interview people currently doing the job you want and job shadow to learn more about the career and the work environment.

## Explore these websites to learn more about specific careers:

O*Net: http://www.onetonline.org/
Xello: www.xello.world

## Career Clusters

Career Clusters are groups of similar occupations and industries. Each cluster includes many more careers and career opportunities than are listed here. Talk with your counselor, parents, the school to career coordinator to learn more!

## Career Clusters are a tool for students to use to:

- Realize the many career possibilities available to consider
- More clearly identify career interests and goals
- Plan high school studies that are in-line with career goals
- Identify the post-secondary route needed to reach a career goal (e.g., 2 or 4-year college or university).

| CareerClusters" <br> Agriculture, Food \& Natural Resources | Jobs in this cluster are all about agricultural commodities and services and include horticulture \& plant science, animals \& animal science, the environment and natural resources. Careers include food scientist, biotechnologist, greenhouse manager, livestock buyer, geospatial technician, wildlife manager, park ranger, water quality manager, environmental technician, farm manager, USDA Inspector, logger, ecologist, fishery technician, agricultural economist. |
| :---: | :---: |
| CareerClusters" <br> PATHWAYS TO COLLEGE \& CAREER READINESS <br> Architecture \& Construction | This area encompasses all the jobs that are involved in the building, maintenance, and operation of businesses and residential properties. Occupations in this cluster include architect, civil engineer, drafter, electrician, plumber, painter, landscape designer, general contractor, cost estimator, carpenter, explosives worker, roofer, \& construction manager. |
| PATHWAYS TO COLLEGE A CARE <br> CareerClusters" <br> Arts, A/V Technology \& Communications | Creative people who love using their talents to entertain and inform others are drawn to jobs in this career cluster. Occupations in this cluster include journalist, commercial artist, printmaker, photographer, fashion designer, make-up artists, composer/conductor, station manager, radio \& TV announcer, telecommunications technician. |
| CareerClusters" <br> Business Management \& Administration | Entrepreneurial people who are highly organized and enjoy working with others often find business to be a suitable career area. Careers in this cluster include accountant, administrative assistant, human resources manager, budget analyst, meeting or event planner/coordinator, \& job analyst. |
| PATHWAYS TO CO <br> CareerClusters" Education \& Training | If you're patient and enjoy helping others, working in the education field can be a rewarding experience. Careers in this cluster include teacher, principal, superintendent, parent educator, college professor, corporate trainer, teacher aid, special education teacher or aid, \& coach. |
| CareerClusters" PATHWAYS TO COLLEGE \& CAREER READINESS <br> Finance | As you might expect, being successful in finance related careers requires strong mathematical ability and a solid attention to detail. Examples of careers in this cluster include loan officer, stock broker, credit analyst, accountant, financial advisor, insurance adjustor, bank teller, \& debt counselor |
|  | Careers in government and public administration are varied, but all offer the satisfaction of knowing you're making a contribution to your community. Jobs include solider, legislator, ambassador, economic development coordinator, tax attorney, assessor, city manager, lobbyist, \& military intelligence specialist. |
| PATHwars to college \& CAREER READINESS ${ }^{\text {C" }}$ Health Science | Health science careers encompass all aspects of the medical field. Career opportunities in this area include pharmacist, paramedic, physical therapist, dietician, veterinarian, lab technician, doctor, athletic trainer, \& dentist. |


| Hospitality \& Tourism | Hospitality and tourism is a rapidly growing industry with a great deal of room for advancement. Careers in this cluster include chef, lodging manager, travel agent, gaming \& casino manager, cruise ship/resort manager. |
| :---: | :---: |
|  | The human services career cluster refers to jobs with the primary purpose of helping families meet basic human needs. Jobs in this cluster include social worker, psychologist, substance abuse specialist, child care worker, religious leader, funeral director, cosmetologist, marriage counselor, customer service representative, \& consumer advocate. |
|  | Jobs in information technology deal with computer hardware, software, and systems integration services Career opportunities include web designer, network administrator, programmer, technical support specialist, software designer, data administrator, systems analyst, technical support specialist, webmaster, \& digital media animator. |
| Law, Public Safety, Corrections \& Security | Protecting the well-being of the public at large is the goal of occupations in this area. Jobs in this cluster include attorney, firefighter, police officer, transportation security officer, judge, court reporter, transportation security officer, rescue worker, case manager, forensic specialist, federal marshal, \& paralegal. |
|  | People who work in manufacturing jobs use their strong mechanical abilities to create many different kinds of products. Careers include sheet metal worker, millwright, and quality control technician, manufacturing engineer, quality control technician, safety engineer, machine operator, tool \& die maker, material mover, \& industrial engineer. |
|  | These careers allow people to use their creativity and communications skills to meet a variety of business objectives. Careers in this field include marketing director, customer service representative, sales associate, entrepreneur, sales manager, account executive, on-line market researcher, \& product planner. |
| Science, Technology, Engineering \& Mathematics | Careers in this area often involve cutting edge research into new technological developments. Careers include chemical engineer, oceanographer, biotechnologist, meteorologist, chemist, aerospace engineer, environmental engineer, technical writer, electrical engineer, statistician, cartographer, astronomer, archeologist, marine scientist, nuclear chemist, mathematician, physicist, biologist, \& biomedical engineer. |
| Transportation, Distribution \& Logistics | Jobs in this cluster involve moving people, materials, and products by road, air, rail, and water. Career opportunities include truck driver, pilot, flight attendant, air traffic controller, mechanic, \& dispatcher, urban planner, civil engineer, traffic technician, motor vehicle inspector, power plant mechanic, \& industrial equipment technician. |

The Career Clusters ${ }^{\top \mathbb{M}}$ brand logo and its extensions are the property of the National Career Technical Education Foundation, as managed by NASDCTEc.

To learn more about each Career Cluster, visit this website http://www.glencoe.com/sec/careers/cclusters/student/introclusters.shtm/

## Post-Secondary Planning

Listed below are general guidelines to help students understand the expectations of post-secondary institutions.

- Public and private colleges have more detailed admissions information.
- Some Wisconsin Technical College programs require certain grades in certain classes to demonstrate preparedness and to be accepted for admission.

| Subject Area | SHS Graduation <br> Requirements | Wisconsin <br> Technical College <br> Admission <br> Requirements | UW System <br> Admission <br> Requirements |
| :---: | :---: | :---: | :---: |
| English | 4 credits | 4 credits | 4 credits |
| Math | 3 credits | $2+$ credits | $3+$ credits |
| Science | 3 credits | $2+$ credits | $3+$ credits |
| Social Studies | 3.5 credits | $3+$ credits | $3+$ credits |
| Electives | 7.5 credits | 7.5 credits | $4+$ credits from core <br> areas or world <br> language, fine arts, <br> computer science, <br> and other academic <br> areas |

For additional information, visit these websites

Wisconsin Technical College System
UW Systems Schools
Wisconsin Private Colleges
www.witechcolleges.com
www.uwhelp.wisconsin.edu www.wisconsinprivatecolleges.org

## Agriculture, Food \& Natural Resources

## Why take Agriculture, Food \& Natural Resources?

Agriculture isn't just farming! This industry employs more than 23 million people in the United States and accounts for almost $20 \%$ of the nation's work force. Because agriculture encompasses so many aspects of our world, including the study of animal, plant, and environmental systems, students interested in the broad field of agriculture can enter a variety of careers in business, government and, they can work for themselves.

- Students more interested in animals might choose to go into wildlife management, dairy farming, fish farming, or continue their education and become veterinarians or researchers in animal medicine.
- Students who focus their learning on plants might become horticulturalists, landscape architects, or take up traditional or organic farming.
- Those who have a head for business might pursue careers in real estate, economics, farm equipment sales or marketing, or statistics.
- The field of agriculture includes career opportunities for students interested in ecology and environmental conservation.

Agriculture is way more than farming! In fact, it is a $\$ 60$ billion industry in Wisconsin.

## Students with a strong interest in Agriculture, Food \& Natural Resources should consider careers in these Clusters:

- Agriculture, Food \& Natural Resources
- Science, Technology, Engineering \& Math
- Business, Management \& Administration
- Health Science


## 8200 Intro to Agriscience <br> Grades: 9-12 <br> Credit: 0.5

Agriculture has played an important role in the lives of humans for thousands of years. It has fed us and provided materials which have allowed world cultures to survive and prosper. Agriscience is the application of scientific principles and new technologies to agriculture. Topics of study include biotechnology, careers in Agriscience, supervised agricultural experiences, field crop production, and food science.

## 8202 Natural Resources \& Wildlife Management <br> Grades: 9-12 <br> Credit: 0.5

This is an introductory course which includes topics related to maintenance of our natural resources such as soils, water, outdoor recreation, forestry and wildlife. After learning about the needs of wildlife based on species requirements and available habitats, students will study the science of these resources and research how the various systems are interrelated.

## 8206 Large Animal

Grades: 10-12
Credit: 0.5
This course focuses on the welfare, use, and care of livestock. Emphasis is on animal health, productivity, nutrition, and reproduction. Identification of breeds, proper feeding, genetics, and handling techniques are researched. Students will learn specific horse terminology and physiology in conjunction with proper health maintenance and disease prevention. The learning process will be enhanced by presentations from guest speakers and through field trip opportunities.

## 8210 Pet Care \& Veterinarian Studies

Grades: 10-12
Credit: 0.5
This course is designed for students who have an interest in companion animals and pets, or plan to pursue a career in the area of small animals or veterinarian science. Animal care and management will be emphasized for cats, dogs, small mammals, fish, birds, and reptiles. Students will learn common veterinarian terminology. Research into animal rights and welfare will provide students opportunity to discuss important societal trends. Activities will involve periodically caring for guest pets in our attached animal room and hatching fertilized eggs.

## 8212 Landscapes \& Environmental Design

## Grades: 10-12

Credit: 0.5
Landscape architecture and environmental design focuses on relationship between humans and their environment. Landscaping is among the fastest growing career fields. This course will focus on design, construction and management of landscapes within various environments. Guest speakers will enhance other important topics such as construction materials, pruning shrubs, proper maintenance of a grass yard, and career exploration. Skills mastered in this course will be valuable to any future homeowner or employee.

## 8214 Agribusiness \& Leadership Grades: 11-12 <br> Credit: 0.5 <br> Prerequisite: at least two other Ag-Ed classes

The need for effective leaders and management skills is found in every aspect of our global society. This course is highly recommended for students enrolled in an agricultural-related youth apprenticeship, FFA members with strong SAE activities, and/or those interested in learning about managing their personal finances. Students will enjoy learning about their personal leadership style and hone their public speaking skills while increasing knowledge about the financial and budgeting procedures needed to start and maintain a business or effectively working in the business sector.

## 8216 Weather \& Climate in Agriculture

## Grades: 10-12

Credit: 0.5
Weather is the state of conditions in the atmosphere and arguably the most significant of all key factors affecting crop production and commodity prices. Students will learn how atmospheric air masses, human actions, and global winds interact with land masses and ocean currents to determine regional climates. Knowledge will be gained on the following topics: 1) How the sun's energy flows through a variety of interacting systems, 2) Why solar energy is the driving force of daily weather change on our planet, 3) What scientific knowledge can be gained by researching past climates to accurately predict current and future trends in global warming and climate change, 4) What roles or actions can humans take to promote ethical choices to further the efficiency of agricultural decisions necessary to support the needs of a growing world population.

## 8224 Horticulture \& Greenhouse Management

## Grades: 10-12

## Credit: 0.5

If you like working with your hands, growing plants, and interactive projects this class will meet your passion for gardening. We will explore the science of plants and students will learn how to operate and manage all aspects of the reproduction, growth, design, and marketing of bedding plants, flowering baskets and vegetables in our modern $30^{\prime} \mathrm{x}$ $60^{\prime}$ fully automated greenhouse. Assisting with production of plants and flowers could be part of a supervised agricultural experience.

A total agricultural education program includes three components:

- Classroom instruction
- Membership in the FFA student organization
- Completing a Supervised Agriculture Experience (SAE)
* To be an FFA member, the student must be enrolled in a middle or high school agriculture class. To remain an active FFA member throughout high school, the student must successfully complete 2 agriculture courses.
* A Supervised Agriculture Experience (SAE) is an activity or project that ties to the student's career interest and is student rather than teacher managed. It happens outside of formal classroom instruction and takes place in a real world environment or simulated workplace environment. While the student is responsible to design the SAE project, it is supervised by the agriculture teacher.


## Art

## Why take Art?

The art experience does more than sweeten an individual's life - students connect more deeply to the world, it opens students to new ways of seeing and problem solving through creative expression- thinking "outside the box". "Arts education strengthens student problem-solving and critical-thinking skills, adding to overall academic achievement and school success" (Dr. Shirley Brice, Stanford University, for the Carnegie Foundation for the Advancement of Teaching). According to ecs.org, arts education is important in workforce preparation-"fostering teamwork, perseverance, and promoting success across all student groups." The major aim of arts education is to promote the students ability to develop his or her mind through the experience that the creation or perception of expressive form makes possible.

It is imperative for students who are interested in pursuing a fine arts career such as commercial artist or graphic designer to have a deep understanding of the elements and principles of art and design, the foundation of our art program. Having a solid art background is an important asset for many other careers in architecture, fashion design, interior design, plastic surgery, publication design, industrial design, hardware and software development, web page design, game art design, marketing, sales, information technology, and many more.

## Students with a strong interest in Art should consider careers in these Clusters:

- Architecture and Construction
- Art, A/V Technology, and Communication
- Information Technology
- Marketing
- Education and Training
- Health Sciences


## 7400 Basic Art 2-D <br> Grades: 9-12 <br> Credit: 0.5

This is a two-dimensional (or flat surface) design course. It is organized to help students develop a fundamental knowledge of drawing skills and 2-D design concepts. Topics covered include; drawing and painting techniques, perspective, still life composition, figure drawing, color theory, pen and ink, watercolor techniques, etc.

## 7402 Basic Art 3-D

Grades: 9-12
Credit: 0.5
Cost: Fee charged for materials used
This is a three-dimensional design class. It is organized to help students develop fundamental knowledge of the properties of the three-dimensional object. Skills will be developed in carving, sculpting and designing forms in a variety of media including paper, color, clay, wire, plaster, and mixed media.

## 7404 Painting \& Drawing

Grades: 10-12
Credit: 0.5
Prerequisite: 7400 Basic Art 2-D
Cost: Fee charged for materials used
This intermediate level studio class will focus on drawing and painting techniques. Media for this class will include- pastels, oil sticks, and acrylic on canvas, acrylic on masonite, mixed media and more. Students will learn historical art styles, techniques and concepts and apply them in their own original work.

## 7406 Printmaking \& Design

Grades: 10-12
Credit: 0.5
In this course, students will understand the significance of printmaking as an art form. Students learn history of printmaking and artists who develop these processes in our world and community. Students learn terms and techniques of the printmaking process. Students create their own prints using the following techniques: lino, wood block, embossing, collagraph, monoprint, dry point etching (Intaglio), serigraph (screen printing) and lithograph. Fab Lab technology will be incorporated in this course.

## 7414 Ceramics

Grades: 10-12
Credit: 0.5
Prerequisite: 7402 Basic Art 3-D
Cost: Fee charged for materials used
This intermediate class will cover methods of hand-built clay, throwing clay on the wheel and glazing. Sculpture concepts include- in the round, scale, function, and sculptural vessels.

## 7416 Jewelry \& Art Metals

Grades: 10-12
Credit: 0.5
Prerequisite: 7402 Basic Art 3-D
Cost: Fee charged for materials used
Students will learn the principles of jewelry and art metal design and construction. Techniques including cutting, soldering, polishing, flatware construction, rivet connections, lost wax silver casting, gravity casting pewter and simple stone setting. Students will work with silver, brass, copper, pewter, cabochons and facetted stones.

## 7422 Computer Art

## Grades: 10-12

Credit: 0.5
Recommended: 7400 Basic Art 2D
The intent of this course is to use the computer as a tool for creative design. Students will use Adobe Photoshop as a graphic tool to manipulate imagery in an individualized manner. Students will use digital photography and scanned images. Students will learn a variety of painting and editing techniques to create original artwork and design. The focus of this class will be commercial art.

## 7426 Computer Illustration \& Animation

## Grades: 10-12

Credit: 0.5
This one-semester art course will provide instruction in computer illustration techniques that are used to create both print and web-based graphics, and animation techniques used to create 2-D and 3-D animations in Autodesk Maya and Photoshop. This course is the prerequisite for Independent Study (instructor approval required).

## 7428 Digital Photography

## Grades: 10-12

## Credit: 0.5

Cost: \$10
Students will learn the creative and commercial techniques and applications of digital photography. Not only is photography an important creative art field, there are commercial opportunities for photographers in sports, food, fashion, product and event photography. Students will understand the camera and study the software applications for creative design.

## 7430/7432 Advanced Art

Grades: 10-12
Credit: 0.5
Prerequisite: 7400 Basic Art 2-D and at least one intermediate 2-D art course (7404 Painting \&
Drawing, $\mathbf{7 4 0 6}$ Printmaking \& Design, 7416 Jewelry \& Art Metals).
Student must have earned grade of B or better in one of these classes
Cost: Fee charged for materials used
Students will choose an area of concentration in painting, drawing, printmaking or commercial art. An in-depth study of these areas will be pursued and students will work individually and in small groups on assignments specific to their chosen interest area.

This course may be taken for credit more than once. Students who wish to take Advanced Art for additional semesters must submit a proposal and meet with and receive instructor approval before enrolling.

## 7434/7436 Advanced Ceramics <br> Grades: <br> Credit: 0.5 <br> Prerequisite: 7402 Basic Art 3-D and 7414 Ceramics \& Sculpture. <br> Student must have earned grade of B or better <br> Cost: Fee charged for materials used

Students will choose an area of concentration in Ceramics and Sculpture. An in-depth study of these areas will be pursued and students will work individually and in small groups on assignments specific to their chosen interest area.

This course may be taken for credit more than once. Students who take Advanced Ceramics for the second, third or more semesters will be required to submit a proposal for independent study and meet with the instructor for approval prior to enrolling.

## Business \& Information Technology

## Why take Business \& Information Technology?

Prepare yourself for the jobs of today and tomorrow! Business and Information Technology classes teach students real world skills that can be applied in all areas of life and all types of careers. Students learn about everything from fixing their computer to designing a webpage to dealing with financial matters to starting a business.

Business is the number one declared major of college freshmen and accounts for $39 \%$ of all US jobs. Plans for pursuing a degree in business should include classes in Accounting, Marketing, and Personal Finance to better prepare students for higher learning. Accounting is usually listed in the top four careers that are needed now and in the future. Jobs in the area of technology continue to grow at a rapid rate. Classes that focus on preparing you for a career in IT would include the MS Office class.

All courses in BIT provide valuable skills and experiences to move you towards whatever career you choose. BIT: Here's the Money!

## Students with a strong interest in Business \& Information Technology should consider careers in these Clusters:

- Business, Management and Administration
- Finance
- Government and Public Administration
- Information Technology
- Marketing, Sales and Service


## 8402 Principles of Business

Grades: 9-12
Credit: 0.5
This course is designed to help students explore various business concepts and understand the role business plays in our economy. Units covered include: what businesses do, how they function, producing goods and services, international business, consumer decision making, professionalism, and more. This course is helpful for students to understand the procedures/policies of all businesses, so they are better prepared to enter the workforce or continue their career path in the business field. This course provides basic business knowledge for any student that will work in our global economy. Class content includes many hands-on projects as well as speakers from area businesses.

## 8404 Principles of Marketing

Grades: 9-12
Credit: 0.5
We will learn about the art of marketing. We will evaluate and practice the marketing research process, evaluate and create new social media marketing strategies for big name companies and learn the ins and outs of an effective marketing plan. Other topics covered will include the marketing mix, marketing ethics, consumer behavior, market segmentation, and how to succeed with competitors. Marketing is important to understand, regardless of your career area of interest, because it truly impacts everything we see, hear, and do on a daily basis. Students will expand their self-awareness, communication skills, human relations, and leadership skills. Students will also learn skills to market themselves, such as professionalism tactics, resumes, and job interviewing that will serve them well in their future careers. Students are encouraged to be actively involved in DECA, an association of marketing students.

## 8408 Principles of Accounting

Grades: 10-12
Credit: 0.5
Principles of Accounting is a course that teaches basic accounting principles and procedures. Students learn how to set up and maintain an accounting system for a service business and a merchandising business. An emphasis in the course is placed on learning how to use various types of journals, ledgers, worksheets, and financial statements. In addition, payroll systems, checking accounts, sales tax, bad debts, depreciation, notes and interest, and accrual accounting are presented. Accounting is a must for students planning a career in the field of business or marketing occupations.

## 8410 Advanced Accounting

## Grades: 11-12

Credit: 0.5
Prerequisite: 8408 Principles of Accounting
Second year accounting serves three groups: those who plan to continue the study of accounting, those who expect to enter other business careers, and students who anticipate entering other professions and need accounting to measure their financial progress in professional practice. Topics of study include accounting for: payroll, partnerships, corporations, cost accounting, financial reports, ratio analysis, and comparative reports.

## 8412 Personal Finance <br> Grades: 10-12 <br> Credit: 0.5

The modern economy is a jungle-get the financial skills to survive it. Using a variety of activities and media, students will explore the following topics: budgets, proper management of checking accounts in the electronic age, taxes, establishing and maintaining personal lines of credit including loans and credit cards, insurance options and investments for both short and long-term horizons. Students will also explore career options and learn about employee benefits and compensation as it will relate to their future financial planning. This course is a must for those students interested in securing a solid financial foundation.

## 8414 MS Office Applications <br> Grades: 9-12 <br> Credit: 0.5

Turn your computer and keyboard into a resume builder! Use the computer as a tool to explore word processing, presentations and spreadsheet software through Microsoft Office. In addition, students will also work on mastering the life-long skill of keyboarding. Computer application skills are an absolute necessity for work in the future. Students will learn to work more effectively by understanding the format of business letters, tables, and leader tabs in MS Word. In addition, students will have a basic understanding of how to effectively utilize spreadsheet software. Students will work extensively with MS Word, MS Excel, and MS PowerPoint. Students will earn a Microsoft Office Specialist (MOS) Certification at the end of this course.

## 8416 Business Law

## Grades: 10-12

Credit: 0.5
Students enrolling in Business Law will develop an understanding of their legal rights and responsibilities as future consumers, citizens and workers. Through a variety of projects, activities and guest speakers, students will gain an understanding of the American legal system by exploring topics ranging from: courts and court procedures; criminal justice; tort law theory; oral and written contracts; sales contracts and warranties; consumer protection and family law. Legal terminology is emphasized. Students with a variety of career and academic interests will benefit from this informative and practical course. Business Law is highly recommended for students interested in pursuing careers in business, criminal justice or administrative careers such as court reporting and legal secretary.

## 8418 Sports \& Entertainment Marketing

## Grades: 10-12

## Credit: 0.5

Prerequisite: 8402 Principles of Business or 8404 Principles of Marketing or 8408 Principles of Accounting

In this semester course, students learn about the fascinating areas of marketing as they relate to the sports and entertainment industries. Students explore the content areas of event planning, sponsorships, publicity, endorsements, branding/licensing, recreation marketing, and other entertainment industry-specific content. Through possible guest speakers, field trips, and projects, students will have the opportunity to use their business knowledge and apply it to the world in which they live.

## Family \& Consumer Science

## Why take Family \& Consumer Science?

Empower yourself to gain knowledge and skills necessary for life...and helpful when trying to land a job! It's not just about eating in class!

Family and Consumer Science (FCS) classes offer a range of opportunities for students to explore career paths in fields with the highest demand for employees. If you are interested in employment in the food service industry, dietetics, nutrition, food science, journalism, photography, or business, Culinary Arts classes are for you.

## Students with a strong interest in FCS \& Health Science Occupations should consider careers in these clusters:

- Agriculture, Food, and Natural Resources
- Education and Training
- Health Science
- Hospitality and Tourism
- Human Services


## 8100 World Cuisine

Grades: 9-12
Credit: 0.5
Recommended: 8102 Culinary I
Cost: $\$ 10$ fee to cover the costs of food and lab supplies
Explore the culture, foods and flavors of regions and countries around the world, including Europe, the Mediterranean, Asia, the Middle East, Central/South America, Africa and more. In this introductory course, safety and sanitation are emphasized as we cook our way around the world.

## 8102 Culinary Arts 1

Grades: 9-12
Credit: 0.5
Cost: $\$ 10$ fee to cover the costs of food and lab supplies

Culinary Arts is a two-year program designed for students who are highly interested in an advanced education in Culinary Arts or who are serious about pursuing a career in any aspect of the foodservice industry. Safety and sanitation are emphasized as we explore food service careers, safe food handling practices, and introductory food preparation, including salads, sandwiches, pizza, soups, and basic baking.

## 8103 Culinary Arts 2 <br> Grades: 10-12 <br> Credit: 0.5 <br> Prerequisite: 8102 Culinary Arts 1 <br> Recommended: 8100 World Cuisine <br> Cost: $\$ 10$ fee to cover the costs of food and lab supplies

This course is a continuation of Culinary Arts I, where students will continue building a broad-based, well-rounded knowledge of foodservice and restaurant management. With a continued emphasis on safety and sanitation, we explore intermediate-level cooking methods and techniques, including working with meat, poultry, seafood and baking.

## 8108 Nutritional Science

Grades: 10-12
Credit: 0.5
Recommended: 4304/4305 Biology
Cost: $\$ 10$ fee to cover the costs of food and lab supplies
Regardless of age, nutrition plays a major role in everyone's well-being. Personal wellness, food safety and sanitation, essential nutrients and their functions, dietary management and dietary trends and impacts are topics we will study. This course requires students to successfully read and write about informational text and participate in collaborative activities. This course is for students interested in learning more about becoming a dietitian, nutritionist, wellness coach or pursuing a career that combines culinary arts with science and health.

## General Electives

## Academic Studies

## 9801/9901 Academic Study <br> Grades: 9-12 <br> Credit: $\mathbf{0 . 5 0}$

Academic Study is a course that is designed to give students individualized supplementary help with their academic subjects. Emphasis is placed on more effective development of study habits and skills. Academic Study is a Pass/Fail course and is worth 0.50 credits each semester. Students must earn $70 \%$ of the total points to earn a passing grade.

## 9850/9950 Study Hall <br> Grades: 9-12 <br> Credit: 0

Study Hall is a non-credit class for students. Students will be expected to come to class everyday with all the necessary materials needed to complete homework, projects and/or reading assignments. Students will be expected to independently work productively for the entire class period.

1128/1129 Yearbook Design
Grades: 10-12
Credit: 1.0
Recommended: 1120 Journalistic Writing (completed or currently enrolled in)
English Publications is a two-semester elective course in which students put together the Stoughton High School yearbook, Yahara. The class size is limited so students will need to go through an application process. Yearbook staff members will use a variety of skills such as interviewing, page layout, photography, advertising sales and design, and various types of journalistic writing. Students will also learn skills in Adobe InDesign and Adobe Photoshop as they create pages. Excellent time management and writing skills are a must for this class. The course may be taken two years consecutively but additional expectations and a strong degree of leadership is required for students in their second year.

## Computer Science

Why Computer Science? You have more access to technology than any previous generation, but do you know how it really works? In Computer Science anyone can learn about the exciting possibilities that technology will play in your future life, education, and careers.

Learning Computer Science empowers you to compete in the global economy and pursue careers across all sectors because it teaches you computational thinking and problem-solving skills applicable in any industry. You will learn computational thinking, problem-solving, programming, and computer science concepts that will be applicable in whatever field you enter. Computer Science will help you become an informed citizen with a clear understanding of how modern technology works and its impact on society.

## 9004 Intro to Coding 1 - Snap! <br> Grades: 9-12 <br> Credit: 0.5

Have you ever wondered how Snapchat or Instagram work? In this course, you will learn to use a block-based programming language called Snap as you code your own programs and apps, including visual displays and interactive video games. The underlying principles of algorithms, data structures, and computational thinking skills you will learn are fundamental in many different career paths.

## 9005 Intro to Coding 2-Python <br> Grades: 9-12 <br> Credit: 0.5 <br> Prerequisites: 9004 Intro to Coding 1 - Snap!

In this continuation course, students will apply the skills they learned in Coding 1 to transition from blockprograming to using Python. Python is the programming language behind sites and apps like Google, YouTube, Instagram, and Spotify. Students will develop an understanding of how these and other applications work and be able to create their own.

## 9006/9007 AP Computer Science Principles

Grades: 10-12
Credit: 0.5
Recommended: Intro to Coding courses are strongly encouraged
AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. AP Computer Science Principles also gives students the opportunity to use current technologies to create computational artifacts for both selfexpression and problem solving. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science.

## What is a Fab Lab?

A Fab Lab (fabrication laboratory) is a small-scale workshop offering personal digital fabrication allowing you to make "almost anything". They began as an outreach project from MIT's Center for Bits and Atoms (CBA), and became a collaborative and global network. Fab labs have spread from inner-city Boston to rural India, from South Africa to the North of Norway. Fab Lab Stoughton is one of only a handful of labs in the Midwest, providing users the ability to make their ideas become reality.

## Unleash your creativity in the Fab Lab!

## Students with a strong interest in Fab Lab should consider careers in these clusters:

- Architecture and Construction
- Arts, A/V Technology, and Communications
- Manufacturing
- Science, Technology, Engineering, and Mathematics


## 7406 Fab Lab: Printmaking \& Design <br> Grades 10-12 <br> Credit: 0.5 Art credit

In this course, students will understand the significance of printmaking as an art form. Students learn history of printmaking and artists who develop these processes in our world and community. Students learn terms and techniques of the printmaking process. Students create their own prints using the following techniques: lino, wood block, embossing, collagraph, monoprint, dry point etching (Intaglio), serigraph (screen printing) and lithograph. Fab Lab technology will be used in this course. This course is one prerequisite for Advanced Art.

## 8700 Fab Lab: Introduction

## Grades 9-12

Credit: 0.5
Do you like art, design, electronics, building or wonder how everyday things are made? Do you have an idea that solves a want or a need? Would you like to improve a product or build something of your own that is fun and functional? Let us help you learn how to make just about anything. In the Fab Lab you will use state-of-the-art equipment to turn an idea into a design that you will build and test. This course develops skills used in many interrelated career fields, including engineering, science, mathematics, art, graphic design, computer aided design (CAD), electronics, and entrepreneurship.

## 8702 Fab Lab: Make Something Big <br> Grades 9-12 <br> Credit: 0.5 <br> Prerequisite: $\mathbf{8 7 0 0}$ Fab Lab: Introduction

Can you make the perfect rocking chair? Will you design the ultimate treehouse? In this course you are not limited by size as you will learn how to use large format machining to create large scale projects. To do this, you will apply the principles of art, design, and engineering to create large objects of interest to you.

## 8704 Fab Lab: Community Projects

## Grades 9-12

Credit: 0.5
Prerequisite: 8700 Fab Lab: Introduction
It is time for you to move beyond making objects for yourself and to begin to make objects for others. You will create innovative products to solve a problem facing the school or community. You will form a design team to analyze the issues facing stakeholders and design and build a solution using the principles of art, design, and engineering with fab lab software and equipment. Emphasis is placed on working collaboratively with others on a design team, and mastering software and equipment.

## 8705 Fab Lab: Individual Projects

## Grades 10-12

## Credit: 0.5

Prerequisites: 8700 Fab Lab: Introduction and one additional Fab Lab Course.
This course is designed for students who have completed multiple Fab Lab courses and wish to learn more about digital design and fabrication. Participants will develop a plan of study for the semester, possess good independent work habits and a thorough knowledge of the lab equipment and processes. Students will work on one or more advanced independent learning projects to increase their skills and knowledge of the techniques and processes explored in previous Fab Lab courses. This course may be taken for credit more than once with instructor consent before enrolling.

## Leadership

## 9000 Service Leadership

Grades 10-12, Application Required for Approval
Credit: 0.5
In this course, service learning experiences provide students opportunities to learn about themselves, to gain leadership skills, and demonstrate civic responsibility, in addition to serving as tutors/mentors twice weekly at a local elementary school. The four-part, interactive curriculum emphasizes the impact of personal decisions, focusing on leadership, child development and communication, service preparation and delivery, and reflection.

To be accepted into this course, the student must:

- give presentations to classmates
- be reflective and engage in challenging conversations/discussions
- keep information about elementary students confidential
- conduct themselves in a safe and respectful way with elementary children
- have good attendance and a history of prompt arrival to first period
- complete an application prior to enrollment


## 9002 Service Leader Mentorship

Grades 10-12, Application Required for Approval
Credit: 0.5
In this second Service Leadership course, students will complete 75 hours of community service through focused field work. The student's interested and post-secondary plans will influence the field placement and learner goals. In addition to field work, students will meet once per month with course instructor and maintain a field journal.

To be accepted into this course, the student must:

- complete \& submit an application form (Incomplete applications will not be considered)
- have good attendance record, includes both absences \& tardies
- have a GPA of 2.75 or better
- have taken Service Leadership and earned a B or better
- have consent of Service Leadership instructor
- provide own transportation \& agree not to transport other students


## Health Science

## Why take Health Science?

We work hard; we play hard. We sit at computers for hours. We run marathons. We eat too much. Americans are living longer, but we need help caring for ourselves when age, disease, or injury catches up with us.

Health care is one of the largest and fastest-growing industries in the U.S. and offers many and varied career opportunities. Some careers involve working directly with people, some involve working in a lab and doing research; and still others focus on collecting and formatting data and information. The work environments are as varied as the careers and may be in a hospital, a medical or dental office, at a community organization, or an athletic facility. You owe it to yourself to explore health science!

## Students with a strong interest in Health Science should consider careers in these clusters:

- Education and Training
- Health Science
- Hospitality and Tourism
- Human Services


## 8112 Human Development <br> Grades: 9-12 (Encouraged in grades $\mathbf{9 - 1 0}$ if planning to take other health science classes) Credit: 0.5

Although all people are not exactly alike, all go through similar stages of development. Throughout the life span, we grow and change physically, socially and emotionally, and in our ability to think. This process of growth and change is called human development. It is influenced by many things, and most importantly by culture. In this course, we explore this amazing and gradual process that begins at birth and continues throughout the lifespan. An understanding of human development is a must for students interested in a career in health care, human services, education, and even marketing and sales.

## 8113 Introduction to Health Careers <br> Grades: 9-12 ( Encouraged in grades 9-10 if planning to take other health science classes) Credit: 0.5

Get a jump-start on a career in the rapidly growing health care industry. Students will have the opportunity to explore careers in a wide range of areas such as: diagnostic services, therapeutic services, health information, and support services. So whether you are someone looking for direct patient care, working in a lab, or with information technology, take a look. See the connections between entry-level positions and advanced degree positions. Assess personal interest and abilities to find a good fit and start developing a plan for next steps. Students will learn from professionals working in various healthcare careers. Students will create a resume and do career research.

## Credit: 0.5

Recommended: 4322 Anatomy \& Physiology, 8113 Intro Health Careers, 8112 Human Development
Designed to introduce students to the broad field of sports medicine, this course is for students interested in athletic training, physical therapy, medicine, fitness, physiology of exercise, kinesiology, nutrition and other careers related to sports medicine. Topics such as emergency care and evaluation of athletic injuries, as well as prevention, rehabilitation, diet and nutrition and conditioning will be covered in this one-semester class.

## 8115 Youth Options (YO)-Nursing Assistant <br> Grades: Grades 11-12 <br> Credit: 0.75 <br> Prerequisites: 8113 Introduction to Health Careers or Instructor Consent

Students taking this course must complete a Youth Options application; application deadline is March 1 for fall semester enrollment \& October 1 for spring semester enrollment. An Accuplacer Reading test score of $\mathbf{6 0}$ or better or an ACT Reading score of $\mathbf{1 3}$ is required. Students must attend all lab and clinical classes; these last beyond the school day. Students with evening commitments such as sports may not be eligible to take this course.

The Nursing Assistant class is a great jump start to a career in health sciences and is a prerequisite for acceptance into most college-level health science programs. This hybrid course is taught by Madison Area Technical College staff and combines on-line instruction, on-site lab instruction, and community-based clinical experience. Students who complete the course successfully earn 3 college credits from Madison Area Technical College and are eligible to take the state certification exam (written \& skill) and be listed on the Wisconsin Nurse Aide Registry. The test fee of $\$ 115.00$ is the responsibility of the student. Certification is required for employment in nursing homes, hospitals, home health agencies, hospices and homes for the developmentally disabled.

## 8117 Youth Options (YO)-Emergency Medical Responder <br> Grades: Grades 11-12 <br> Credit: 0.75 <br> Prerequisite: 8113 Introduction to Health Careers or Instructor Consent <br> Recommended: 4322 Anatomy \& Physiology

Students taking this course must complete a Youth Options application; application deadline is March 1 for fall semester enrollment \& October 1 for spring semester enrollment. This course includes 2 labs per week; these last beyond the school day (2:30-4:30). Attendance at all labs is required. Students with evening commitments such as sports may not be eligible to take this course.

Are you interested in becoming an emergency medical technician, a firefighter, a police officer, or working in protective services? If yes, then this course is for you! In this entry-level course, you will receive training in multiple aspects of emergency medical care required at the scene of an accident or in sudden illness. It includes instruction and skill practice in anatomy and physiology, patient assessment and treatment, basic airway management, critical thinking, documentation, and communication. Successful completion of this course prepares you for a job in a variety of pre-hospital, industrial and first responder settings.

This hybrid course combines on-line instruction and on-site lab instruction and is taught by Madison College (MATC) staff. Students who successfully complete this course earn 2 college credits from Madison College and are eligible to take the EMR certification exam and be licensed in WI as an EMR. The exam fee (\$65) is the responsibility of the student.

## 8120 Medical Terminology

## Grades: 10-12

Credit: 0.5
Recommended: 8113 Introduction to Health Careers or 8112 Human Development
Are you considering a career in medicine? Being able to use and understand medical terminology is critical for any career in the area of health sciences. The focus of this course is to communicate effectively using the language of medicine. Students will learn the meanings of roots, prefixes, and suffixes to become fluent in medical language. Word construction, definition, spelling and pronunciation will be emphasized and practiced.

## 8121 Health Science Field Study <br> Grades: 11-12 <br> Credit: 0.5 <br> Recommended: 8113 Introduction to Health Careers, 8120 Medical Terminology

Are you interested in working in the medical profession, but not completely sure what career you would like to pursue? This course provides students an opportunity to do an in-depth study of health care careers of specific interest to them. Students will investigate the skills, knowledge, education, and abilities required for their chosen careers. They will also do a job shadow and interview professionals working in those specific careers. The intent of this course is to equip students with the knowledge to choose a career in a medical profession that best fits their personality, interests, and work values.

## Language Arts

## Why take Language Arts?

The study of English/Language Arts is the foundation to all learning. As we become avid readers, our thinking realizes all that the world possesses. Through thought, we can then transfer our ideas to the written expression. The English/Language Arts department is committed to engaging students to fulfill their potential in the reading of literature, speaking, and the written word for their future endeavors. The offered courses provide a wide variety of selections to fully explore all avenues of English/Language Arts, be it through literature analysis, speaking, creative writing, journalistic writing, technical writing, and research. The door to knowledge is held wide open through English/Language Arts!

## Students with a strong interest in Language Arts should consider careers in these Clusters:

- Arts, A/V Technology, and Communications
- Business, Management, and Administration
- Education and Training
- Government and Public Administration
- Health Science
- Hospitality and Tourism
- Human Services
- Information Technology
- Law ,Public Safety, Corrections, and Security
- Marketing, Sales, and Service
- Transportation Distribution Logistics


## 1100/1101 Language Arts 9

## Grades: 9

Credit: 1.0
The curriculum is in accordance with the Common Core State Standards, the Wisconsin Model of Academic Standards, and the Six Traits of Quality Writing. These skills are approached through units in drama, poetry, the novel, short stories, and reading strategies. Assignments include quizzes, tests, writing responses, essays, projects, and presentations.

## 1132/1133 Language Arts 10

Grades: 10
Credit: 1.0
Prerequisites: 1100/1101 Language Arts 9
This curriculum is in accordance with the Common Core State Standards, the Wisconsin Model of Academic Standards, and it takes students chronologically through American literature. These skills are approached through Reading, Writing, Speaking, Listening and Language tasks.

Language Arts 11
Grades: 11 Required Semester
Credit: 0.5
Prerequisites: 1132/1133 Language Arts 10
This is a one semester required course which will be taken during a student's junior year, first semester. LA11 attempts to provide students with a progression of Language Arts skills that include but are not limited to: Literature Comprehension, Composition and Public Speaking. This class will provide the rigor that is appropriate for students in the 11th grade. The rigor of the class will also prepare these students for ACT testing as well as their future academic careers in college. The Language Arts 11 curriculum modules continue to develop students' skills in analyzing complex literary and informational texts as students delve deeply into works by acclaimed authors and historical figures. Through the study of a variety of text types and media, students build knowledge, analyze ideas, delineate arguments, and develop writing, collaboration, and communication skills. The lessons within the modules are linked explicitly to the Common Core Learning Standards, and provide a rigorous and pedagogically-sound approach for how the standards can come alive with thoughtful planning, adaption, and instruction.

## 1106 Multi-Cultural Literature

## Grades: 11-12

Credit: 0.5
Multicultural Literature attempts to provide students with an appreciation for the parallel cultures that have contributed their rich traditions to help shape our identity as a nation. Asian American, Jewish American, Native American, African American and Mexican American contemporary and traditional lifestyles are reflected through twentieth century writers in novels, short stories, documentaries, and movies. The course will help prepare students for a changing world made up of diverse viewpoints, along with, historical perspectives and attitudes. Students taking this course should be good readers who can handle heavy reading requirements throughout the semester. Some of the readings are for more mature readers. The course will include short inclass writing assessments, essays, daily assignments, quizzes, and projects.

## 1109 British Literature <br> Grades: 11-12 <br> Credit: 0.5

This course focuses on selections of literature chosen from the English heritage from the Anglo-Saxon through the modern period. Students will read many works of literature identifying how earlier works influence later works and how forms of writing and ideas evolve over time. Students analyze prominent themes for each time period and relate a work to cultural and historical circumstances. This course demands reading, writing, and class participation.
Assessment is based on essays, projects, presentations, class discussions, daily assignments, quizzes, and tests.

## 1111 Public Speaking <br> Grades: 11-12 <br> Credit: 0.5

This course focuses on the Common Core State Standards of Speaking, Listening, Language, as well as Reading and Writing. It will provide students career readiness skills and prepare them for public speaking in the workplace, college presentations, and many other aspects of life in which people need to speak to small and large groups. The major units for this course will be persuasive, rhetorical, demonstrative, extemporaneous, and oral interpretive.

## 1112 Modern Literature

Grades: 11-12
Credit: 0.5
Modern Literature is designed to look at literature and authors dated from 1950 to the present. We explore social issues, through a variety of genres. Students have an opportunity to understand literary terms and theories and how they apply to modern texts. Students are assessed on the following: short writing responses, longer essays, and class discussions. This course is designed for students who love to read and engage with enthusiasm in discussions of short stories and novels. It requires a large amount of reading and discussion, and a moderate amount of writing.

## 1114 Media Literacy

## Grades: 11-12

Credit: 0.5
This course takes a $21^{\text {st }}$ century approach to education. It provides a framework to access, analyze, evaluate, create and participate with messages in a variety of forms-from print to video to the Internet. Media literacy builds an understanding of the role of media in society as well as essential skills of inquiry, critical thinking and self-expression necessary for citizens of a democracy. It also expands the concept of literacy (reading and writing) to include all forms of media, while recognizing that media are a part of culture and function as agents of socialization.

## 1116 Literary Writing

Grades: 11-12
Credit: 0.5
This foundation course concentrates on creative writing, and is appropriate for students who enjoy writing. Students will write original poems and stories. There is no class textbook. In addition to his or her original work, each student will complete exercises and short papers on the technique and craft of writing; will intensely study literary models; will read poems and stories independently; will compose different poetic forms; and will develop each piece. Original writing is often shared with the class or in small groups.

## 1118 Research Writing

## Grades: 11-12

Credit: 0.5
Instruction in research writing should be very helpful to those students planning to go on to college or into jobs where written reports are required. It also would be beneficial to all students who find themselves faced with term papers required in high school courses. The course provides instruction and experience in the various techniques of research writing, but the student should be aware that there is a significant amount of writing done both in and out of class.

## 1120 Journalistic Writing

## Grades: 10-12

Credit: 0.5
This course covers a wide range of writing styles, skills and issues related to contemporary journalism. Basic news writing, interviewing skills, law and ethics, opinion/editorial writing, feature writing, page design, and historical and factual research are all vital components of the class. Students in the fall will be given an opportunity to attend the Kettle Moraine Press Association conference where they will attend seminars with students from Wisconsin and Illinois. All students will be given the opportunity to submit stories for contests and possible publication in the Norse Star and elsewhere.

Grades are based on numerous writing assignments, including drafts and revisions, current events quizzes, and writing/design projects. This class is a prerequisite for students who plan to take Advanced Journalism (Norse Star) and is recommended for students who plan to take English Publications (Yearbook.)

## 1122/1123 Advanced Journalism

Grades: 10-12
Credit: 1.0
Prerequisite: $\mathbf{1 1 2 0}$ Journalistic Writing or Instructor Consent
Advanced Journalism is a two-semester elective course open to sophomores, juniors or seniors who are interested in being a member of the Norse Star staff. The class size is limited and students should expect a competitive application process. Staffers will produce a $24-30$ page news magazine each month, fulfilling the high standards of the editors and adviser. The class requires a wide range of skills and tasks, including advanced interviewing; news, feature, editorial, in-depth, sports, and review writing; photography; ad sales and business skills; group discussion/planning skills; and the ability to organize drafts and interview notes while meeting weekly deadlines.

The course is recommended for college-bound students who are dependable, self-motivated, and creative. Computer skills are also recommended, including Adobe In Design, Illustrator, and Photoshop. Opportunities for summer journalism programs, as well as state and national competition, will also be available to all Norse Star staff members. The course may be taken two years consecutively but additional expectations and a strong degree of leadership is required for students in their second year.

## 1134/1136 AP English Literature \& Composition

Grades: 11-12
Credit: 1.0
AP English Literature and Composition focuses on reading, analyzing, and writing about literature (fiction, poetry, drama) from various periods. Students engage in close reading and critical analysis to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, and symbolism. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works. Depending on their scores on the AP test, students may earn up to six credits of elective English credit at the colleges they choose. Please visit https://apstudents.collegeboard.org/getting-credit-placement/search-policies to see how universities/colleges accept AP credit. Students are strongly encouraged to take the AP exam in May.

## Grades: 12

## Credit: 1.0

This one-year, elective course is offered to students who want to prepare for college-level reading and writing. Students will gain the skills needed to approach, navigate, and comprehend their course textbooks, as well as other college-level readings (essays, articles, arguments, documents, etc.). The course also focuses on writing skills that are needed in many college classes. By strengthening their reading comprehension skills, students will build their vocabulary, and practice critical thinking. By writing for a variety of purposes and making revisions, students will improve their writing style and grammatical competence. A grade of C or higher is required to earn dual credit ( 6 credits) at Madison College.

## 1144/1145 Advanced Placement (AP) English Language and Composition

## Grades: 11-12

Credit: 1.0
Prerequisite: 1132/1133 Language Arts 10 with B or better, Teacher Consent
From the College Board: The AP English Language and Composition course aligns to an introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based analytic and argumentative essays that proceed through several states or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, student develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods.

## Mathematics

## Why take Mathematics?

"Mathematics is a more powerful instrument of knowledge than any other that has been bequeathed to us by human agency"-- Descartes

Mathematics is the queen of science and the language of nature. The study of mathematics can lead to a variety of exciting professional careers. Basic research, engineering, finance, business, and government service are among the opportunities open to those with mathematical training. Moreover, with the increasing importance of basic science and information technology, prospects for careers in the mathematical sciences are very good. Mathematical analysis and computational modeling are important for solving some of the most pressing problems of our time - new energy resources, climate change, risk management, epidemiology, to name a few. We must strive to maintain our technological edge; mathematical skills will be crucial to this effort.

## Students with a strong interest in Mathematics should consider career in these Clusters:

- Agriculture, Food and Natural Resources
- Architecture and Construction
- Business, Management, and Administration
- Government and Public Administration
- Health Science
- Information Technology
- Manufacturing
- Marketing, Sales, and Service
- Science, Technology, Engineering, and Mathematics
- Transportation, Distribution, and Logistics


## Student placement in Mathematics

Policy: To advance to the next math course, a student must have passed each semester of their previous math course. Teachers will review the list of students not meeting this prerequisite to determine if extenuating circumstances existed and may certify that the student is prepared to advance.

Rationale: Given the sequential nature of mathematical content, a student must demonstrate a firm understanding of base concepts to allow for future success. A student who does not meet the stated requirement will benefit by re-taking a course and increasing their understanding of the mathematical concepts.

## 3100/3101 Algebra 1A

Grades: 9
Credit: 1.0
Requirement: Scientific Calculator
Algebra A emphasizes and develops the same skills as first 2 quarters of Algebra 1 but in a yearlong course. This course is paced appropriately for students who need additional support.

## 3102/3103 Algebra 1B

Grades: 10
Credit: 1.0
Requirement: Scientific Calculator
Algebra B emphasizes and develops the same skills as the remainder of Algebra 1 and concludes with selected Geometry and Advanced Algebra topics. This course is paced appropriately for students who need additional support.

## 3106/3107 Algebra 1

Grades: 9-10
Credit: 1.0
Requirement: Scientific Calculator
Algebra 1 is the critical element in secondary mathematics education. Topics introduced in Algebra 1 provide the foundation students require for future success in high school mathematics, critical thinking, and problem solving. The primary goal in Algebra 1 is to help students transfer their concrete mathematical knowledge to more abstract algebraic generalizations.

Algebra 1 is designed to emphasize the study of multiple representations of linear and non-linear functions. Topics include recognizing and developing patterns using tables, graphs and equations. In addition, students will explore operations on algebraic expressions, apply mathematical properties to algebraic equations. Students will solve problems using equations, graphs and tables to investigate linear relationships. Technology will be used to introduce and expand upon the areas of study listed above. Use of computers and graphing calculators will be incorporated into each module.

## 3108/3109 Geometry AB <br> Grades: 11-12 <br> Credit: 1.0 <br> Prerequisite: 3100/3101 Algebra 1A \& 3102/3103 Algebra 1B and Teacher recommendation Requirement: Scientific Calculator

Geometry students will study the concepts of two and three-dimensional space and connect mathematics to the real, physical world. Coordinates, transformations, and proofs are used to develop the topics studied. Topics include angles, parallel and perpendicular lines, triangles, polygons, area and volume, similarity and congruence, circles, and the right triangle trigonometry. Students will use technology to enhance problem solving skills and mathematical explorations.

This course differs from Geometry as it is taught at an appropriate pace to meet the needs of the students in the course; students should take this course after passing Algebra 1A and Algebra 1B with a teacher recommendation.

## 3110/3111 Geometry

## Grades: 9-10

Credit: 1.0
Prerequisite: 3106/3107 Algebra 1, Requirement: Scientific Calculator
In the content of Geometry students will study of concepts of two and three-dimensional space and connect mathematics to the real, physical world. Coordinates, transformations, and proofs are used to develop the topics studied. Topics include angles, parallel and perpendicular lines, triangles, polygons, area and volume, similarity and congruence, circles, and right triangle trigonometry. Students will use technology to enhance problem solving skills and mathematical explorations. Supplies needed include: protractor, compass, ruler, graph paper, and a scientific calculator. On some tests and quizzes, graphing calculators may not be allowed.

## 3114/3115 Algebra II

Grades: 9-12
Credit: 1.0
Prerequisite: 3110/3111 Geometry, 3106/3107 Algebra I with grade of C or better
Requirement: Scientific Calculator - Graphing calculator TI84 or TI83 recommended
The content of Algebra II is organized around families of functions linear, quadratic, exponential, logarithmic, and trigonometric functions. As students study each family of functions, they will learn to represent them in a multitude of ways- as verbal descriptions, equations, tables and graphs. Student will also learn to model realworld situations using functions in order to solve problems arising from those situations. The focus of this class is on advanced algebra. Students also study topics in geometry, statistics, and probability. Topics include polynomial functions, exponential functions, logarithmic functions, parametric equations, inscribed figures, transforming graphs, vectors, triangle trigonometry, circle trigonometry, variability, standard deviation, sequences and series.

## 3116/3117 Pre-Calculus

Grades: 10-12
Credit: 1.0
Prerequisites: 3114/3115 Algebra II with a grade of B or better or teacher recommendation Requirement: Graphing Calculator - TI84 or TI83 recommended

The areas studied in this course include functions, graphs, trigonometry, analytical geometry, probability, combinatorics, matrices, vectors, parametric and polar equations, determinants, sequences, series, data analysis, limits, and an introduction to calculus. Graphing calculators and computer technologies are used where appropriate to enhance the learning.

## 3126/3127 College Algebra - Dual Credit-MATC <br> MADISON

Grades: 11-12
Credit: 1.0
Prerequisite: 3106/3107 Algebra I with grade of C or below \& 3110/3111 Geometry If Algebra II credit has been earned, not eligible for this course

This entry-level college course is for 11 th $\& 12^{\text {th }}$ graders who are planning to go on to either a technical college or 4 -year university and have struggled in mathematics. The focus is on developing skills and techniques used to simplify and solve linear, polynomial, radical and rational expressions and equations, while solving problems with real-world applications. Seniors who earn a C or better are awarded 1 elective SASD mathematics credit and 3 credits from a Wisconsin technical college. College credits are at no cost to the student.

## 3128/3129 Functions, Statistics, Trigonometry

## Grades: 11-12

Credit: 1.0
Prerequisite: 3114/3115 Algebra II with a C or below in Algebra II or struggled in Algebra II.
This course is designed to reinforce and extend mathematical concepts from previous mathematics courses, in addition to studying advanced topics from algebra, statistics, trigonometry and probability. This course will prepare students for Pre-Calculus.

## 3118/3119 Advanced Placement (AP) Calculus AB

## Grades: 11-12

Credit: 1.0
Prerequisite: 3116/3117 Pre-Calculus
Requirement: Graphing calculator - TI84 or TI83 recommended
This is the first semester of university level calculus. Topics of this course include, but are not limited to, functions, limits, continuity, differential calculus, and integral calculus.

Students are strongly encouraged to take the AP exam. Students who successfully complete the course and examination may receive college credit.

## 3120/3121 Advanced Placement (AP) Statistics

## Grades: 11-12

Credit: 1.0
Prerequisite: 3114/3115 Algebra II grade of B or better Requirement: Graphing Calculator - TI84 or TI83 recommended

The purpose of the Advanced Placement course in statistics is to introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students are exposed to four conceptual themes: Exploring Data, Planning a Study, Anticipating Patterns in Advance, and Statistical Inference.

Students are strongly encouraged to take the AP exam. Students who successfully complete the course and examination may receive college credit.

## 3124/3125 Advanced Placement (AP) Calculus BC

## Grades: 11-12

Credit: 1.0
Prerequisite: AP Calculus AB or 3116/3117 Pre-Calculus
Requirement: Graphing calculator - TI84 or TI83 recommended
This is the second semester of university level calculus. Topics include Functions, Graphs and Limits, Derivatives, Intergrals, and Polynomial Approximations and Series.

Calculus $B C$ is an extension of Calculus $A B$, not an enhancement. This course includes all of the content of Calculus AB as well as additional content corresponding to the second semester of college Calculus. This course is recommended for students who have completed Calculus AB as well as for the most advanced Pre-Calculus students who can handle the challenge of a college level mathematics course taught at full college speed.

Students are strongly encouraged to take the AP exam. Students who successfully complete the course and examination may receive college credit.

## Music

## Why take Music?

Music education is vital to the development of both academic and social skills... such as critical thinking, problem solving, and cooperation to achieve a shared goal. Music requires the integration of many elements that cultivate students' abilities to analyze, synthesize, and evaluate information. Music students tend to be better listeners. The application of concepts learned in music classes enhances the learning in other classes. Music teaches students to internalize information and encourages individual thinking and expression. Music can also be beneficial as a method of selfdiscovery. It helps students to understand and express his or her feelings, and prepares a person for citizenship as a thinking, independent individual; to become an active member of society. Music teaches about cooperation for a collective goal and the importance of individuality and developing opinions. When a student learns through direct experience, the knowledge gained lasts a lifetime.

## Students with a strong interest in Music should consider careers in these Clusters

- Arts, A/V Technology, and Communications
- Education and Training
- Health Science
- Hospitality and Tourism
- Marketing, Sales, and Service


## Fees

- Band instrument maintenance fee - $\$ 90$ for school owned instruments
- Marching Band (not all fees collected yearly)
- Uniform cleaning fee - $\$ 30$
- Shoes - $\$ 38$
- Marching Band Shirt - \$12
- Orchestra instrument maintenance fee - $\$ 40-\$ 70$ for school owned instruments
- Choir dry cleaning fee - \$8

All incoming $9^{\text {th }}$ grade Choir students must register for Chorale. Students will be contacted regarding audition information for Concert Choir, JazzKor, Madrigals, and other auditioned choral ensembles. This pertains to transfer students as well. Contact: Choral Director, Ryan Casey, 877-5746 or Ryan.Casey@stoughton.K12.wi.us.

All incoming $9^{\text {th }}$ grade Band students must register for Concert Band. Students will be contacted regarding placement information for Symphonic Band. This pertains to transfer students as well. Contact: Band Director, Dan Schmidt, 8775745 or Dan.Schmidt@stoughton.k12.wi.us

All incoming $9^{\text {th }}$ grade Orchestra students must register for String Choir. Students will be contacted regarding audition information for Symphony Orchestra and the Chamber String Ensemble. This pertains to transfer students as well. Contact: Orchestra Director, Rachel Lam, 877-5747 or Rachel.Lam@stoughton.k12.wi.us

Any student interested in taking the audio recording class must meet with the Choir Director, Mr. Casey, to set up an interview. This class is only open to 2 students per semester.

## 7100/7101 Concert Band <br> Grades: 9-12 <br> Credit: 1.0 <br> Prerequisite: Non-auditioned (Held in March of preceding year)

The Concert Band plays and performs concert music at a variety of levels and styles. Students in this ensemble will also learn pep tunes for home football games. Concert Band members also have the opportunity to create and compose music. In addition, students will be able to participate in many extra ensembles, such as Solo \& Ensemble, Brass Quintets, Instrument Choirs, Jazz Band, and others. Course requirements include, but are not limited to: 1) Attendance at all performances, 2) daily participation and lesson attendance, 3) personal practice time, 4) playing tests, 5) care of equipment, 6) formal wear purchase.

All 9-12 band students will have the opportunity to audition for Symphonic Band. These auditions take place during March of the preceding year. All students are expected to be in attendance at the annual high school band camp, which will be held July 20-24. All 9-12 students also have the opportunity to audition for Viking Marching Band which prepares and performs the annual field show production.

## 7102/7103 Symphonic Band

Grades: 9-12
Credit: 1.0
Prerequisite: Auditioned (Auditions held in March of preceding year)
The Symphonic Band is open to all high school students and meets during the school day. The Symphonic Band plays and performs music at an advanced high school and college level. Students in this ensemble are also members of Viking Marching Band. Symphonic Band members will also have the opportunity to create and compose music. In addition, students will have the opportunity to participate in many extra ensembles and events such as honor bands, Solo \& Ensemble, Brass Quintets, Instrument Choirs, Jazz Band, and others. Course requirements include, but are not limited to: 1) participation at all performances, 2 ) daily participation, 3 ) lessons, 4) practice time, 5) playing tests, 6) written assignments and quizzes, 7) formal wear purchase.

All students are expected to be in attendance at the annual high school band camp, which will be July 20-24 and Viking Marching Bad Rehearsals will be held in July and August.

## 7110/7111 Advanced Placement (AP) Music Theory <br> Grades: 11-12 <br> Credit: 1.0

This course is designed to prepare students for college music theory. Students will also create music in a variety of styles and genres. Through composition, listening, and the active process of creating music, students will learn the building blocks of Western Music. At the conclusion of the course, students will have the option to take the AP Music Theory Exam.

## 7200/7201 Chorale Grades: 9-12 <br> Credit: 1.0 <br> Prerequisite: Non-auditioned

Chorale meets daily and focuses on beginning and intermediate choral literature and sight-reading. Course requirements include, but are not limited to: Participation at all performances, daily formative performance assessments, occasional formative quizzes (both vocal and written), and summative voice exams.

## 7202/7203 Concert Choir

Grades: 9-12
Credit: 1.0
Prerequisite: Auditioned (Held in Spring for the following year)

Concert Choir meets daily and focuses on a wide variety of advanced choral literature/sight reading. Students have the opportunity to participate in the Madrigal Singers by being a member of this ensemble. Requirements for this ensemble include, but are not limited to: participation at all performances, daily formative performance assessments, occasional formative quizzes (both vocal and written), and summative voice exams.

## 7205 Mentorship-Audio Recording

Grades: 11-12
Credit: 0.5
Prerequisite: By Application only
Audio Recording is a mentorship class available to students by application only. This class focuses on the audio recording process and uses Pro Tools software. Subjects covered include microphone selection, microphone placements, digital/external plug-ins, song production, multi-track recording, mixing, and mastering. Please see teacher for an application if you are interested in taking this class.

## 7310/7311 String Choir

Grades: 9-12
Credit: 1.0
Prerequisite: Non-auditioned
(Students can audition for section leader at the beginning of the school year.)
Orchestra meets one period each day for both semesters, and receives full credit. This ensemble offers a variety of concert performances, studying all types of musical genres and styles. Students will also study chamber music and participate in the Badger Conference Solo and Ensemble Festival. Course requirements include but are not limited to: 1) attendance at all performances, 2) class participation, 3) individual improvement/practicing, 4) occasional quizzes (both playing and written).

## 7300/7301 Symphony Orchestra

Grades: 9-12
Credit: 1.0
Prerequisite: Auditioned (Auditions held in Spring for the following year)

The Symphony Orchestra is an auditioned group that is open to all students' grades 9-12 who have previously played a string instrument. Orchestra meets one period each day for both semesters, and receives full credit. This ensemble offers a variety of concert performances, studying all types of musical genres and styles, including String and Full orchestra as well as participation in the Badger Conference Large Group Festival. Students will also have the opportunity to study chamber music by participating in the Solo and Ensemble Festival. There will be several performances scheduled outside of the school day, including weekends and tours. Course requirements include but are not limited to: 1) attendance at all performances, 2) class participation, 3) individual improvement/practicing, 4) occasional quizzes (both playing and written).

## 7302/7303 Chamber String Ensemble

Grades: 9-12

## Credit: 1.0

Prerequisite: Auditioned (Auditions held in Spring for the following year)
The Chamber String Ensemble is an auditioned group that is open to all students' grades 9-12 who have previously played a string instrument. The Chamber String Ensemble will have both large and small group rehearsals, and will study, in-depth, true chamber music of various genres and styles. This ensemble participates in the Badger Conference Honors Orchestra, Solo and Ensemble Festival, and several combined performances with the Stoughton High School Choirs. There will be several performances scheduled outside of the school day, including weekends and tours. Course requirements include but are not limited to: 1) attendance at all performances, 2) class participation, 3) individual improvement/practicing, 4) occasional quizzes (both playing and written).

## Physical Education \& Health

## Why take Physical Education?

Regular fitness activity is beneficial in many ways and contributes to students' overall physical and emotional health. These benefits include:

- Regular fitness activity leads to a healthy lifestyle, develops muscular strength and improves cardiovascular health.
- Physical activity builds self-confidence and provides a positive influence on a student's personality, character and self-esteem. It also enhances communication skills and cooperation.
- Eye-hand coordination, reflexes and body movements are improved through physical activity.
- Regular fitness activity relieves stress and contributes to one's emotional health, which helps a person make educated decisions about their own health, safety and well-being.
- Every career requires a healthy employee.


## Students with a strong interest in Science should consider careers in these clusters:

1. Arts, AV Technology \& Communications
2. Health Sciences
3. Education and Training
4. Hospitality and Tourism

The Skills and Benefits learned above: Fitness, Self-Confidence, Motor Skills, Health and Nutrition, and Stress Management are necessary for careers in all of these Clusters.

The Wisconsin Department of Instruction requires that all students take one and one-half (1.5) credits of physical education. All students are also required to take Health. All ninth ( $\left.9^{\text {th }}\right)$ and tenth ( $\left.10^{\text {th }}\right)$ grade students are required to take a physical education class each year. Juniors may take a physical education course or, if they participate in a schoolsponsored extracurricular sport, Norwegian Dancers or Cheerleading, their participation may satisfy the last . 5 PE credit. The student must also take an additional upper level math, social studies, science course, or advanced health coursework.

All students may elect to take additional physical education classes beyond their required 1.5 credits. If a student is repeating a Physical Education course (except PE 9) the student must have earned a C or better and/or have Administrative approval.

Students may not take the same Physical Education course in consecutive semesters of a school year. Exception to this rule is the Strength and Conditioning course, where students may take it in consecutive semesters of a school year.

Proper footwear is required for all classes. A change of clothes is highly recommended for health and safety reasons. Lockers are provided, but students must provide their own locks. STUDENTS ASSUME ALL RESPONSIBILITY FOR THEIR PERSONAL ITEMS.

## 5100 Physical Education 9

## Grades: 9

Credit: 0.5
A basic skills program for freshmen will be offered. Through team, dual and individual activities students will develop strength, endurance, agility, cooperation and an appreciation of physical recreation. Fitness Assessments will be utilized to promote individual fitness awareness. Units include: badminton, fitness, soccer, basketball, softball, swimming, volleyball, light weight training and conditioning, ultimate frisbee and football.

## 5102/5103 Strength \& Conditioning

## Grades: 10-12

Credit: 0.5
Prerequisite: 5100 Physical Education 9 or Teacher Consent
This is an elective course designed to develop student's injury resistance and enhance athletic performance, and set a course for life-long healthy living. Emphasis will be placed on the development of strength, flexibility, balance and dynamic movement. Students will also gain practical knowledge about rest, nutrition and training principles.

## 5104 Individual Activities

Grades: 10-12
Credit: 0.5
Prerequisite: $\mathbf{5 1 0 0}$ Physical Education 9
Cost: $\mathbf{\$ 2 5 - 3 0}$ fee is charged for bowling
Emphasis in Individual Activities is on advanced skill development, fitness, game play/strategies, and individual sport activities. Fitness assessments will be utilized to promote individual fitness awareness. This course will include many of the following activities: tennis, cross country, track and field, individual fitness including the fitness center, swimming, badminton, bowling, table tennis, nutrition, walking and backyard games. Students may be using a Heart Rate Monitor for some activities. A fee of $\$ 100$ will be charged for lost or broken monitors. A competitive spirit is necessary for tournament play and activities.

## 5108 Team Activities

Grades: 10-12
Credit: 0.5
Prerequisite: 5100 Physical Education 9
Cost: $\mathbf{\$ 1 4 - 1 6}$ fee is charged for bowling
Emphasis in Team Activities is on advanced skill development, fitness, teamwork and communication. Fitness assessments will be utilized to promote individual fitness awareness. This course will include many of the following activities: volleyball, basketball, water polo, speedball, kickball, ultimate frisbee, team handball, soccer, softball, football, bowling, rugby, lacrosse, floor hockey and water games. A competitive spirit is essential.

## 5110 Lifetime Fitness

Grades: 10-12
Credit: 0.5
Prerequisite: 5100 Physical Education 9
Cost: \$20 fee is charged for self-defense
Activities enjoyed throughout the lifetime are emphasized in this class, as are the characteristics of successful people. Activities include: walking/jogging, swimming for fitness, self-defense (activity part), weightlifting and conditioning. Time will also be spent exploring how goal setting, nutrition, time management, and organization influence lifetime wellness. Fitness assessments will be use to promote individual fitness awareness.

## 5112 Outdoor Activities

Grades: 10-12
Credit: 0.5
Prerequisite: 5100 Physical Education 9
Requirement: Bike and helmet
Emphasis in Outdoor Activities will be on individual outdoor activities and advanced skill development and game play. Fitness assessments will be utilized to promote individual fitness awareness. Activities will include many of the following: biking, orienteering/compass/geocaching, swimming/scuba, tennis, sand volleyball, golf, sledding, badminton, aerobic fitness and lifetime sport activities. A desire to be outdoors is essential.

## 5118 Lifeguard Training/CPR/First Aid

Grades: 10-12
Credit: 0.5
Prerequisite: Student must be $\mathbf{1 5}$ years old; swimming pre-test will be required Cost: $\$ 85$ fee will be charged to cover the costs of books, pocket mask and certifications

Lifeguard Training, CPR and First Aid certifications may be earned in this class. The purpose of this course is to teach you the skills needed to help prevent and respond to aquatic emergencies. This class will be limited to 12 students.

5500 Health
Grades: 9-12 (Required for all $\mathbf{9}^{\text {th }}$ or $\mathbf{1 0}^{\text {th }}$ grade student)
Credit: 0.5
Offered each semester, Health Education is a graduation requirement. Emphasis in this course focuses on many aspects of health information including decision-making skills that emphasize a healthy lifestyle now and in the future.

## Science

## Why take Science?

Science is for everyone. Every day we face decisions that depend on us understanding and collecting information from a variety of sources. Science provides the tools with which to reason through the information and make better decisions. From deciding what to eat, whether to smoke, or voting for a public office candidate that supports the environment, you need to be scientifically educated. Science is necessary for a strong economy, education system, and for society to exist. By choosing a career in science, you will be able to apply your knowledge to solving earth's future problems or dream of ways to further develop our technological society. By studying science, you will be able to understand and have confidence in making informed decisions as a citizen.

## Students with a strong interest in Science should consider careers in these Clusters:

- Science, Technology, Engineering, and Mathematics
- Agriculture, Food, and Natural Resources
- Education and Training
- Health Science
- Manufacturing
- Art and Design


## 4348/4349 iSTEM

## Grades: 9

Credit: 1.0
Requirement: Calculator
This yearlong, lab-based course will integrate the concepts of science, technology, engineering and mathematics relating to the study of introductory physics, Earth and space science. This class is designed to help students develop the critical thinking skills needed in a STEM-based society.

## 4304/4305 Biology

Grades: 10
Credit: 1.0
Prerequisite: 4348/4349 iSTEM
This is a yearlong, lab-based course that gives students an introductory knowledge of science concepts relating to biology. Biology is the study of life and living organisms and covers the topics of ecology, cells, genetics, and natural selection. Within the year students will examine organisms' structure, function, growth, heredity, evolution, distribution and taxonomy. This course is designed to serve as a solid foundation for student understanding of science interactions in the living world.

## 4312 Chemistry Grades: 11-12 <br> Credit: 0.5 <br> Prerequisite: 4348/4349 iSTEM and 4304/4305 Biology <br> Requirement: Scientific Calculator

This one semester lab-based course will introduce students to the concepts of chemistry that are part of their everyday life and that are relevant to career paths in the liberal arts. This course with teach students critical thinking and problem-solving skills in the context of chemistry. This course is equally as rigorous as Chemistry (Sci/Eng) and will incorporate the use of mathematics in the study of chemistry.

## 4310/4311 Chemistry (For Science/Engineering Careers)

## Grades: 10-12

Credit: 1.0
Requirement: Scientific Calculator
Prerequisite: 4348/4349 iSTEM, 4304/4305 Biology, 3106/3107 Algebra I and 3110/3111 Geometry

This yearlong, lab-based, course will introduce students to the concepts of chemistry that are part of their everyday life and specifically used in science and engineering-related career paths. This course will teach students critical thinking and problem-solving skills in the context of chemistry. This course is equally as rigorous as Chemistry and will incorporate the use of mathematics in the study of chemistry. This course is intended for students pursuing careers in the areas of Science, Technology, Engineering, and Mathematics; Agriculture, Food, and Natural Resources; Health Science; and Science Education.

## 4314/4315 Physics

Grades: 11-12
Credit: 1.0
Prerequisite: Enrollment in 3114/3115 Algebra II and strong math skills Requirement: Calculator

Physics deals with the relationship between matter and energy. Mechanics, sound, light and nuclear energy all lie within the area of Physics. First semester is devoted largely to a study of force and motion. This leads to a better understanding of energy and matter. Second semester topics are wave motion, nature of light, optics and nuclear energy.

## 4322 Human Anatomy \& Physiology

Grades: 11-12
Credit: 0.5
This is a semester long course that provides an overview of some of the major systems of the human body. The material is presented in a combination of lecture, lab exploration, reading, audiovisual, discussion and computer assisted formats. Because the course is only one semester the pacing is rapid. There will be frequent quizzes to assess your comprehension along with topic tests and written assignments and lab activities. The course will prepare you for future studies in this subject area and will provide you with a more solid understanding of how your body works.

## 4334/4335 Human Anatomy \& Physiology for Health Professions

Grades: 11-12
Credit: 1.0
Recommended: 4304/4305 Biology with B or better, Teacher Consent
This year long course provides a comprehensive study of the major systems of the human body for students with a strong interest in a health science career. The material is presented in a combination of lecture, lab exploration, dissections (sheep brain, heart, fetal pig, or cat), reading, audiovisual, and discussion. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. Laboratory work includes dissection of preserved specimens, microscopic study, physiologic experiments, computer simulations, and multimedia presentations. This is a fast paced, rigorous course building a foundation for students aspiring to go into a medical profession. One of the goals of this course is to prepare students with the skills necessary to be successful in future science classes in college.

## 4328 <br> Environmental Science

Grades: 11-12
Credit: 0.5
Environmental Science is an elective semester course open to juniors and seniors. Completion of Biology is recommended but not required. Environmental Science examines the interrelationships between people and their environment. Students will study ecological environments and relationships, population dynamics, pollution, and energy. A majority of the time will be spent in lab investigations and research.

## 4330 Biotechnology

## Grades: 11-12

## Credit: 0.5

Cost: $\mathbf{\$ 1 5}$ fee for supplies, materials and lab notebook
This one semester course is designed to explain how "living tools" such as cells, DNA, RNA and proteins can be used to improve human health, ecology and agriculture. Students will also learn how DNA is analyzed to either predict the inheritance of a genetic disorder or identify a suspect at a crime scene. Not only will students learn how this is done, but students will also gain valuable lab skills during actual biotechnology experiments such as gel electrophoresis, restriction enzyme analysis, genetic transformation of cells, DNA purification, PCR, and microarrays. Students will also develop critical thinking and communication skills currently used in the biotechnology industry. The course will also examine ethical, legal and social issues that surround biotechnology such stem cells, cloning, genetic testing, gene therapy and genetically modified foods. This lab intensive course will prepare you for a career or major study in: forensic science, pharmaceuticals, agricultural research, genetic testing and genomic research.

## 4338/4339 Advanced Placement (AP) Physics C: Mechanics

Grades: 11-12
Credit: 1.0

## Prerequisites: 3116/3117 Pre- Calculus

The Physics C: Mechanics course is equivalent to a one-semester, calculus-based, college-level physics course. It is especially appropriate for students planning to specialize or major in physical science or engineering. The course explores topics such as kinematics; Newton's laws of motion; work, energy and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. Introductory differential and integral calculus is used throughout the course.

## 4324/4325 Advanced Placement (AP) Biology

## Grades: 11-12

## Credit: 1.0

## Prerequisites: 4304/4305 Biology with B or better

Recommended: Completion or concurrent enrollment in 4310/4311 Chemistry
Advanced Placement Biology is part of the College Board's mission to provide an opportunity for high school students to pursue and receive credit for college-level course work. This year long course is designed to be the equivalent of a college introductory biology course usually taken by biology majors during their first year of college. The pacing and rigor of this course matches that of a biology course taken in college. The newly revised AP Biology course addresses the challenge of increasing speed of scientific discovery by shifting from a traditional "content coverage" model of instruction to one that focuses on enduring, conceptual understandings and the content that supports them. The key concepts and related content that define the revised AP Biology course and exam are organized around a few underlying principles called the big ideas, which encompass the core scientific principles, theories and processes governing living organisms and biological systems.

Laboratory experiences are an important component to the AP Biology curriculum with many required labs. Students will develop advanced inquiry and reasoning skills, such as designing a plan for collecting data, analyzing data, applying mathematical routines, and connecting concepts in and across domains. The result will be readiness for the study of advanced topics in subsequent college courses. This course is designed to prepare students for the College Board's Advanced Placement Biology Exam given in May. Students are strongly encouraged to take the AP exam.

## 4326/4327 Advanced Placement (AP) Chemistry

Grades: 11-12
Credit: 1.0
Prerequisites: 4310/4311 Chemistry with B or better
This course is designed to be the equivalent of a general chemistry course usually taken during freshman year in college. It is an introduction to the general concepts of chemistry including matter and energy, atomic and molecular structure, bonding, reactions and stoichiometry, gas laws, changes of state, thermochemistry, acidbase theory, solutions, colloids, kinetics, equilibria and electrochemistry. This course is rigorous and timeintensive.

## Social Studies

## Why take Social Studies?

Today's social studies courses teach students:

- to understand cultures-systems of beliefs, knowledge, values, and traditions-so they can relate to people in our nation and throughout the world.
- to develop historic perspective and understand how things change and develop-so they can make informed choices and decisions in the present.
- to understand geography and space beyond their personal locations-so they can be effective decision makers regarding the relationship between human beings and their environment.
- to understanding the historical development of structures of power, authority, and governance and their evolving functions in contemporary society-so they can develop civic competence.
- to understand how the production, distribution, and consumption of goods and services is organized-so they can function effectively in an interdependent world economy.
- to understand civic ideals and practices across time and in diverse societies-so they can participate fully in our society.


## Students with a strong interest in Social Studies should consider careers in these Clusters:

- Government \& Public Administration
- Law, Public Safety, Corrections, \& Security
- Hospitality \& Tourism

Three and one-half credits ( $31 / 2$ ) of social studies are required to graduate. The social studies program consists of two full-year required courses for freshmen and sophomores, while juniors and seniors take three required individual semester courses.

## 2014/2015 Modern United States History

Grades: 9
Credit: 1.0

American History is a required one-year course for all freshmen students. This course will be taught in a chronological sequence. Students will begin the year with a brief review of United States history up through Reconstruction. Topics to be covered in this course over the full year include: Growth in the West, Industrialization and Immigration, The Progressive Era, Imperialism, World War I, the Roaring Twenties, the Great Depression, and the New Deal, the Rise of Dictators and World War II, the Cold War Era, the Civil Rights Era, the Vietnam War Years, and America in a Changing World (modern day).

## 2020/2021 Ancient World History

## Grades: 10

Credit: 1.0
Ancient World History is a required one year survey course for sophomores. This course will be taught in a chronological sequence. Students will start with prehistory and move into the earliest civilizations that developed in the River Valleys of Africa, Asia, and Europe. The students will then work their way through the classical civilizations of Egypt, early China, India, Greece, and Rome. Next, they will study the Middle Ages, the Renaissance, the Reformation, and the Age of Exploration and Conquest. The class will finish up with the Age of Enlightenment and Revolution.

## 2054 Modern World History

## Grades: 11

Credit: 0.5

Modern World History is a required one semester course for juniors. This course will be taught in chronological sequence. This course is a comparative survey of World history as related to the development of the modern world. Students in grade eleven study major turning points that shaped the modern world, from the late eighteenth century through the present, including the cause and course of the two world wars. They will trace the rise of democratic ideas and develop an understanding of the historical roots of current world issues, especially as they pertain to international relations.

## 2250/2251 Advanced Placement (AP) World History

Grades: 11-12

## Credit: 1.0

## Cost: Students are responsible for the costs of the College Board exam offered in May

Advanced Placement World History is a challenging year-long course that is structured around the investigation of selected themes merged into key concepts covering distinct historical periods from 1200 CE to present. The course provides balanced global coverage, with Africa, the Americas, Australia, Oceania, and Europe all represented, with no more than $20 \%$ of the time devoted to European history. AP World History is equivalent to an introductory college survey course.

AP World History serves as a substitute for the junior level Modern World History course. If, however, a student drops AP World History at semester, that student must still take Modern World History in order to fulfill school credit requirements.

## 2200 American Government <br> Grades: 11-12 <br> Credit: 0.5

American Government is a required one-semester course offered to juniors and seniors. American Government is designed to encourage active and positive citizenship by increasing students' appreciation of the tools required for effective citizenship. It provides students with factual information necessary to understand institutional and political aspects of local, state and national government in the United States. In addition, the course will leave students with a better understanding of the dynamics of political decision-making in this country. Units of study will include the Constitution, Federalism, Congress, the Presidency, and Wisconsin state and local government.

## 2204/2206 Advanced Placement (AP) US Government and Politics

Grades: 11-12
Credit: 1.0
Cost: Students are responsible for the costs of the College Board exam offered in May
AP U.S. Government and Politics is a one-year elective open to juniors and seniors. This course explores the political theory and everyday practice that directs the daily operation of our government and shapes our public policies. The express purpose of this course is to prepare students to take the AP Exam for U.S. Government and Politics. This course is for all intents and purposes taught at a college level and it requires a substantial amount of reading and preparation for every class. The objectives of this course go beyond a basic analysis of how our government "works". Students will develop a critical understanding of the strengths and weaknesses of the American political system, as well as their rights and responsibilities as citizens.

Advanced Placement US Government and Politics is a yearlong course that is a replacement for the semester long required government course. If you choose to take Advanced Placement US Government and Politics you are choosing to take government as a year-long course. If it is dropped at semester time the student will need to take regular government second semester in order to meet the graduation requirement. Students are strongly encouraged to take the AP exam. Those students who score 3 out of 5 on the exam will likely receive college credits.

## 2300 Economics

## Grades: 11-12

Credit: 0.5
Economics is a required one-semester offered to juniors and seniors. Economics is the study of how individuals and nations allocate their scarce resources. In this course students will learn the following:

1. Basic Economic Concepts: study of markets, supply and demand, competition, scarcity, and types of economic systems.
2. Investment: participate in statewide stock and investment competition (Wisconsin Stock Market Simulation), learn the definitions of various investment vocabularies, and describe the different types of investments and their pros/cons.
3. International Economics: define and discuss basic concepts involved in international trade such as trade restrictions and international currencies, describe and discuss the pros and cons of international trade.
4. Money and Banking: overview of the role of money in the economy, study of origins, characteristics, and functions of money, overview of banks and the Federal Reserve.
5. Comparative Economics: overview of economic systems (capitalism, command system, traditional economic systems).
6. Macroeconomics: study of key economic indicators such as Gross Domestic Product, unemployment, inflation, and interest rates, study of aggregates and ways economists try to understand economies.
7. Personal Finance: study of personal finance topics such as loans, credit cards, and money management.

## 2110 Introduction to Psychology <br> Grades: 10-12 <br> Credit: 0.5

Psychology is a semester long elective offered at the sophomore, junior and senior levels. This class offers insight into the human (and animal) psyche, explaining at an introductory level, how and why we do what we do physically, socially and cognitively. Psychology is designed to help students gain a better understanding of themselves and the world they must interact with every day and help prepare those who intend to take Advanced Placement Psychology in the future. Units include but are not limited to: psychologies founders, the brain, sensation and perception, memory, mental illness and therapies, states of consciousness (sleep, hypnosis), personality, and social psychology. Other student interest topics are discussed as well. Activities include but are not limited to mini-projects, vocabulary, videos, formative assessments, online activities, and summatives.

Credit: 0.5
This course is a semester long elective open to sophomores, juniors, and seniors. Throughout the semester students will be studying: women's history and liberation; women's issues in contemporary society; sex role stereotyping and changing societal roles; advertising, societal body images, and eating disorders; sexual harassment, rape, and battery; and teen pregnancies and birth control. These are some of the suggested topics and discussions are not limited to these topics. Teaching methods include lectures, discussion, small group work, films, projects, and guest speakers.

## 2800 U.S. \& World Geography <br> Grades: 10-12 <br> Credit: 0.5

This course is a semester long elective open to sophomores, juniors, and seniors. This course will examine the physical geography of the United States and the world as well as the interaction between humans and their environment. This course aims to provide students with a wide range of social studies skills through the study of the physical environment and human activities, and the way in which these affect each other. Students will learn and practice geographic skills extensively throughout the course by working with maps, research, discussion, and analysis. The goal for the course is to provide students with the understanding of how to read and create a map, as well as a comprehension of the physical geography and layout of the United States and the world itself.

## 2700/2701 Advanced Placement (AP) U.S. History

Grades: 10-12
Credit: 1.0
Cost: Students are responsible for the costs of the College Board exam offered in May.
Advanced Placement U.S. History (APUSH) is a yearlong, elective, college level course, open to sophomores, juniors and seniors. APUSH covers the period of early European exploration of the Americas to the present. It is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States history. There is major emphasis on reading and writing skills. In particular, students will read and analyze primary source materials. Students are strongly encouraged to take the AP exam. Those students who score 3 out of 5 on the exam will likely receive college credits.

## 2112/2113 Advanced Placement (AP) Psychology

Grades: 11-12
Credit: 1.0
Cost: Students are responsible for the costs of the College Board exam offered in May. Students are required to purchase a \$22 AP Psychology prep book.

Advanced Placement Psychology is a one-year elective course offered to juniors and seniors, which provides students with the opportunity to earn up to five college credits in Psychology at the secondary school level. Sponsored by the College Board, the program is based on the premise that college-level material can be taught successfully to secondary school students. Topics to be studied include: Psychology History, the Brain, the Developing Child, Adolescence and Adulthood, Thinking and Language, Stress and Health, Sensation and Perception, Learning, Memory, Intelligence, States of Consciousness, Personality Theories, Emotions, Social Issues and Abnormal Psychology. Students will participate in numerous research projects throughout the year. Students are strongly encouraged to take the AP exam. Those students who score 3 out of 5 on the exam will likely receive college credits.

## Technology and Engineering Education

## Why take Technology and Engineering Education (TEE)?

- Understand why and how people design, engineer and invent to meet human needs and wants
- Develop and apply critical thinking and problem solving skills
- Safely use, manage and evaluate technological systems and engineering processes
- Relate technology with science, mathematics, and other subjects
- Communicate technology content and processes individually as well as in teams.
- Understand the past and future significance of engineered designs and impacts of technological solutions.


## Students with a strong interest in Technology and Engineering Education should consider careers in these clusters

- Arts, AV Technology and Communications
- Architecture and Construction
- Manufacturing
- Science Technology and Engineering
- Transportation Distribution and Logistics


## 8510 Engineering Drafting \& Design

## Grades: 9-12

Credit: 0.5
This course is concerned with the preparation of drawings that are typically used by industries such as architecture, engineering, interior design, landscaping, mechanics, plumbing, electricians and others that develop, manufacture, repair or produce any product. Students will learn how to develop mechanical drawings using traditional hand drawing equipment and with the Computer Aided Design (CAD) software programs, AutoCAD and SolidWorks.

Topics covered include sketching, the use of drafting equipment, geometric construction, orthographic projection, dimensioning, 3 view drawings, working drawings, assemblies, section views, auxiliary views, pictorial and isometric drawings. Product design and problem solving using creativity, science, math along with CAD technology to design unique, dependable and cost effective products will be covered. This course provides an excellent foundation for Fab Lab.

## 8512 Introduction to Architecture

Grades: 10-12
Credit: 0.5
Prerequisite: $\mathbf{8 5 1 0}$ Engineering Drafting \& Design
Architectural drawings will be the main focus of the class. All facets of developing a complete set of architectural drawings needed to construct a building will be covered. AutoCAD will be used for all assignments. This course focuses on building skills that are applicable to many careers such as architecture, interior and landscape design and engineering. Class may be repeated for credit with teacher approval.

Grades: 10-12

## Credit: 0.5

## Prerequisite: 8510 Engineering Drafting \& Design

This course introduces the concepts of 3D architectural design. Students will use, become familiar and competent with Revit, the standard 3D modeling software used by architects, engineers and designers for 3D representation of architectural projects. We will cover basic modeling techniques of residential and commercial buildings. By the end of the course, students will have developed a set of typical drawings necessary for the construction of the building. Additional topics could include specialty trades such as structural engineering, mechanical, electric, plumbing, landscaping, interior design and construction of physical 3D models of the design. Employment in this area is strong and projected to grow at an above average pace.

## 8500 Intro to Woods \& Construction

## Grades: 9-12

Credit: 0.5

## Requirement: Safety glasses

## Cost: Materials fee \$30

In this hands-on, introductory level woodworking course, students will develop skills to use hand and power tools and equipment safely and appropriately. Materials and calculation of costs will be covered. Students will complete a series of prototypes and projects before an introduction to CAD, CNC and Fab Lab equipment related to woods.

## 8502 Cabinetmaking \& Millwork- Dual Credit-MATC Grades: 10-12 <br> Credit: 0.5 <br> Prerequisite: $\mathbf{8 5 0 0}$ Intro to Woods \& Construction <br> Requirement: Safety glasses <br> Cost: Materials cost is based on project choices

The outcome of this course mirrors MATC's Woods1A course and the The Woodwork Career Alliance (WCA) skill standards by introducing the learner to the operation of traditional woodworking equipment. Demonstration of the minimum woodwork knowledge and skills needed for and required by the industry for entry level employees are the focus of the numerous exercises students perform to gain familiarity with portable power tools and industrial woodworking machinery while focusing on precision, detail and accuracy. Units include layout, sawing, surfacing, boring, sanding and assembly. Time permitting students will have the option to complete a project of their choosing or a school project. This is a dual credit class and students will have opportunity to earn 2 college credits at no cost in addition to the WCA sawblade certificate.

## 8522 Fundamentals of Construction - Dual Credit MATC

 Grades: 11-12MADISON
Credit: 0.5
COLLEGE
Prerequisite: 8500 Intro to Woods \& Construction Cost: Materials fee $\mathbf{\$ 2 0}$

This is a great course for students interested in the construction industry. Through hands-on activities, students will become familiar with techniques and tools used in construction industry. Students will demonstrate their skills as they complete a variety of projects, which include building a sawhorse, creating a corn hole game, and framing a wall. This is a Dual Credit course and allows juniors and seniors to earn 3 Madison College credits at no cost.

## Information applicable to all welding classes:

Lab safety is the highest priority and is covered during the first 10 days of class. Students must complete the required safety curriculum and safety demonstrations; those who miss this required curriculum must make arrangements to complete the safety concepts outside of class time.
Cost: Welding gloves are required and available from the school for $\$ 10.00$
Safety glasses are required and available from the school for $\$ 5.00$
A fee is charged based on the type and amount of material used. See instructor if fees are problematic.

## 8514 Shielded Metal Arc Welding - Dual Credit - MATC

Grades: 10-12
MADISON
Credit: 0.5
COLLEGE
Cost: Materials fee $\mathbf{\$ 1 0}$
The Shielded Metal Arc Welding or ARC welding class is spent developing the manipulative skills necessary for producing high quality arc welding examples on steel in the common positions and joints used by industry following the MATC curriculum. Welding fundamentals, safety and welding procedures will be stressed. Other processes that are covered include: Oxygen-Fuel Cutting and Plasma Arc Cutting. This class also covers related technologies such as soldering, various cutting, grinding techniques and use of hand/power tools. This is a dual credit class and students will have opportunity to earn 2 college credits at no cost.

## 8516 Gas Metal Arc Welding- Dual Credit-MATC

## Grades: 10-12

$\frac{\text { MADISON }}{\text { AREA TECHNICAL }}$
Credit: 0.5
Cost: Materials fee \$10
The Gas Metal Arc Welding or MIG welding is the most common form of welding. The class is spent developing the manipulative skills necessary for producing high quality welding examples on steel, stainless steel and aluminum in the common positions and joints used by industry following the MATC curriculum. The use of flux and metal core wire are also included along with CNC plasma cutting. Students will use prior knowledge of machine set up to perform more advanced welds in other positions not covered in the other courses. This is a dual credit class and students will have opportunity to earn 2 college credits at no cost.

## 8517 Gas Tungsten Arc Welding

Grades: 10-12
Credit: 0.5
Prerequisite: 8514 Shielded Metal Arc Welding or 8516 Gas Metal Arc Welding Cost: Materials fee $\mathbf{\$ 1 0}$

Gas Tungsten Arc Welding (GTAW) or TIG welding of mild steel, stainless steel and aluminum will be covered in this class. The class is spent developing the manipulative skills necessary for producing high quality welding examples in the common positions and joints used by industry following the MATC curriculum.

## Credit: 0.5

## Prerequisite: 8514 Shielded Metal Arc Welding or 8516 Gas Metal Arc Welding Cost: Materials fee \$30

Students will be introduced to and demonstrate the equipment, operations and techniques common to metal fabrication. Units include layout, cutting and bending, welding and finishing. Time permitting students will have the option to complete a project of their choosing or a school project. This class is an opportunity for students to further refine and advance their welding and their metal working skills and is designed for the student who is serious about entering a field related to welding. Employability skills such as team work, problem solving and quality workmanship will be developed through the projects. This is a dual credit class and students will have opportunity to earn 2 college credits at no cost.

## 8600 Power \& Transportation Technology

## Grades: 9-12

Credit: 0.5
Requirement: Safety glasses
Cost: Student pays for any individual project replacement parts
Ever wonder what makes a lawnmower run? Learn how to repair, troubleshoot, and rebuild small engines. Students will gain an understanding of the operation of the internal combustion engine. In addition to the theory of operation, students will perform disassembly, measuring, testing, diagnosis, repair, and reassembly of aircooled engines. A large segment of time will be spent on small engines. After successfully rebuilding the "school engine" students will have an opportunity to "tune-up", perform maintenance, or rebuild an engine from home. Students will also explore other areas of power and transportation through a variety of learning activities, which may include: pneumatics, hydraulics, alternative energy, electricity, mechanisms, space and creative problem solving.

## 8602 Car Care

Grades: 10-12
Credit: 0.5
Prerequisite: Students currently enrolled in or have taken 8604 Intro to Auto, 8606 Auto Service, or 8610/8612 Advanced Auto are not eligible to take this course.
Requirement: Safety glasses
Cost: Student pays for any individual project replacement parts
Owing a car can be expensive! In this hands-on course, students learn the skills needed to maintain and repair their own car and the types of service needed to make it last a long time. Students also learn how to talk with a mechanic to make sure they are getting the proper service at the right price. Units of study include: buying and financing a car, ownership responsibilities, automobile systems and parts, emergency preparedness, and preventative maintenance. This lab-based course is for both guys and girls whose knowledge of cars is limited. You do not have to have a car to take this class.

## Information applicable to all automotive classes:

The Stoughton High School Automotive program is accredited by, and meets the program standards of, the National Automotive Technicians Education Foundation (NATEF). By completing the sequence of courses \#8604, 8606 \& 8610/8612 (listed below), students receive training that is relevant to the industry, are eligible to take Automotive Service Excellence (ASE) certification exams, and broaden their career opportunities.

## 8604 Introduction to Automotive Technology



Grades: 10-12
Credit: 0.5
Requirement: Safety glasses

## Cost: Student pays for any individual project replacement parts

In this course, students will learn how to take care of a motor vehicle, explore its basic components and operation and the service that is required to sustain it. Safety and appropriate tool usage is stressed. All are encouraged to explore this general overview course. Learn how to utilize hand and power tool to perform various tasks in car care. Units that will be covered are: lubrication, cooling, tires, batteries, information in buying autos and many other maintenance operations involved in normal auto care. This course is a requirement for Automotive Diagnostics and Service.

8606 Automotive Service \& Diagnostics Technology Grades: 10-12
Credit: 0.5
Prerequisite: $\mathbf{8 6 0 4}$ Introduction to Automotive Technology
The student will learn diagnostic procedures involving the use of professional test equipment such as oscilloscopes, digital volt-amp-ohm meters, computer scan tools, precision measuring tools, and a variety of pressure, vacuum, leakage, temperature and sound testing devices. There is as much theory as there is hands-on emphasis in this course. It is designed for the student seriously considering a career in some type of repair, engineering, or testing of automobiles and their systems.

## 8610/8612 Advanced Automotive Technology

Grades: 11-12
Credit: $\mathbf{2 . 0}$
Prerequisite: $\mathbf{8 6 0 4}$ Introduction to Automotive Technology, $\mathbf{8 6 0 6}$ Automotive Service \& Diagnostics Technology
Requirement: Safety glasses

## Cost: Student pays for any individual project replacement parts

This course is designed for the student that has chosen to pursue a career in Automotive Technology or a related field or has a high interest in the advanced study of the Automobile. Course content includes: the auto service industry, advanced diagnosis and repair of engines and drivelines, steering and suspensions systems, cooling systems, lubrication system, ignition systems, fuel delivery systems, brakes, starting and charging systems and computerized controls. Students are encouraged to provide a vehicle for lab activities, but training stations are available. Hands-on learning accounts for $60 \%$ of class time. This class is scheduled for a two-hour block of time for one year in length. Students are encouraged to provide coveralls or protective clothing for lab activities.

## World Language

## Why take a World Language?

- Students are more able to apply the thinking, organization and communication skills gained while learning a second language to other subjects and be more successful in their overall studies.
- Most colleges and universities recommend at least $\mathbf{2}$ years of a second language for admission. Colleges without this requirement often give admission preference to students who have studied a language over those who have not.
- Learning another language develops skills required for today's workforce, which include critical thinking and problem solving.
- You are a more marketable job candidate if you can communicate with coworkers and customers from other parts of the world.
- Learning a language increases students ability to interact and work in a global society.

Students with a strong interest in world languages should consider careers in these Clusters: In today's global society, knowing another language will give you an edge in almost ANY professional path you choose. Of the 16 nationally recognized career clusters, here are a few that will benefit the most from the skills and knowledge gained through a World Language course.

- Education and Training
- Government and Public Administration
- Health Science
- Hospitality and Tourism
- Human Services
- Law, Public Safety, Corrections, and Security


## PLACEMENT TESTING:

Students with language experiences other than those offered through the Stoughton World Language program (i.e. family use of a language, transfers from other schools, study abroad, etc.) should consider a placement test to determine the appropriate level course to register for. To schedule a placement test, please contact Amber Little (World Language Department Coordinator) at (608) 877-5711 or amber.little@stoughton.k12.wi.us as soon as possible.

## 6100/6101 German 1

Grades: 9-12
Credit: 1.0
German 1 is an introductory course in which students will begin to practice meaningful communication in the German language. The course is structured around seven thematic units: getting acquainted, the German speaking world and population, free time activities and personal technologies, family and home, school, mealtime, and personal identity. Class will be conducted in German, with support provided. Students will be asked to do a variety of tasks in German using basic speaking, listening, reading and writing skills. Students will also explore aspects of the German culture. Focus will be placed on using the language in meaningful ways.

## 6102/6103 German 2

## Grades: 9-12

Credit: 1.0
Prerequisite: 6100/6101 German 1
In German 2, students will review and build upon the skills developed in German 1. The course is structured around six thematic units: getting acquainted, home life, communities, shopping and sustainability, travel, and entertainment and media. Class will be conducted in German, with support provided. Students will increase their communication fluency by practicing basic speaking, listening, reading and writing skills in German. Students will also explore aspects of the German culture. Focus will be placed on using the language in meaningful ways.

## 6104/6105 German 3

Grades: 10-12
Credit: 1.0
Prerequisite: 6102/6103 German 2
In German 3, students will build upon the skills developed in German 1 and 2. The course is structured around six thematic units: getting acquainted, health and personal wellness, heroes and historical figures, legends and tales, education and careers, food preparation and cuisine. Class will be conducted in German, with support provided. Emphasis will be placed on increasing fluency and ease of expression in the language through speaking, listening, reading and writing in German. German 3 students will also explore aspects of the German culture. Focus will be placed on using the language in meaningful ways.

## 6106/6107 German 4

Grades: 11-12
Credit: 1.0
Prerequisite: 6104/6105 German 3
In German 4, students will work to refine and build upon the language and skills learned in levels 1-3. The course is structured around six thematic units: getting acquainted, relationships, alienation and assimilation, political conflicts, art, and personal technologies. Class will be conducted exclusively in German. Emphasis will be placed on increasing fluency and ease of expression in the language through speaking, listening, reading and writing in German in several different contexts. Students will also explore aspects of the German culture. Focus will be placed on using the language in meaningful ways.

## 6112/6113 AP German Language \& Culture

Grades: 12
Credit: 1.0
Prerequisite: 6106/6107 German 4
The Advanced Placement Program® enables willing and academically prepared students to pursue college-level studies - with the opportunity to earn college credit, advanced placement, or both - while still in high school. AP Exams are given each year in May. Students who earn a qualifying score on an AP Exam are typically eligible, in college, to receive credit, placement into advanced courses, or both. AP German Language and Culture course emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP German Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in German.

This course is structured around six themes: Beauty and Aesthetics, Contemporary Life, Families and Communities, Global Challenges, Personal and Public Identities, and Science and Technology. Themes facilitate the integration of language, content, and culture and promote the use of the language in a variety of contexts. The themes may be combined, as they are interrelated.

## 6200/6201 Spanish 1

Grades: 9-12
Credit: 1.0
Spanish 1 is an introductory course in which students will begin to practice meaningful communication in the Spanish language. The course is structured around seven thematic units: getting acquainted, the Spanish speaking world and population, free time activities and personal technologies, family and home, school, mealtime, and personal identity. Class will be conducted in Spanish, with support provided. Students will be asked to do a variety of tasks in Spanish using basic speaking, listening, reading and writing skills. Students will also explore aspects of the Spanish-speaking culture. Focus will be placed on using the language in meaningful ways.

## 6202/6203 Spanish 2

Grades: 9-12
Credit: 1.0
Prerequisite: 6200/6201 Spanish I
In Spanish 2, students will review and build upon the skills developed in Spanish 1. The course is structured around six thematic units: getting acquainted, home life, communities, shopping and sustainability, travel, and entertainment and media. Class will be conducted in Spanish, with support provided. Students will increase their communication fluency by practicing basic speaking, reading, writing, and listening in Spanish. Students will also explore aspects of the Spanish-speaking cultures.

## 6204/6205 Spanish 3 <br> Grades: 10-12 <br> Credit: 1.0 <br> Prerequisite: 6202/6203 Spanish 2

In Spanish 3, students will build upon the skills developed in Spanish 1 and 2. The course is structured around six thematic units: getting acquainted, health and personal wellness, heroes and historical figures, legends and tales, education and careers, food preparation and cuisine. Class will be conducted in Spanish, with support provided. Emphasis will be placed on increasing fluency and ease of expression in the language through speaking, listening, reading and writing in Spanish. Spanish 3 students will also explore aspects of the Spanishspeaking cultures. Focus will be placed on using the language in meaningful ways.

## 6206/6207 Spanish 4

Grades: 11-12

## Credit: 1.0

Prerequisite: 6204/6205 Spanish 3
In Spanish 4, students will work to refine and build upon the language and skills learned in levels 1-3. The course is structured around six thematic units: getting acquainted, relationships, alienation and assimilation, political conflicts, art, and personal technologies. Class will be conducted exclusively in Spanish. Emphasis will be placed on increasing fluency and ease of expression in the language through speaking, listening, reading and writing in Spanish in several different contexts. Students will also explore aspects of the Spanish-speaking cultures. Focus will be placed on using the language in meaningful ways.

## 6212/6213 AP Spanish Language \& Culture

## Grades: 12

Credit: 1.0
Prerequisite: 6206/6207 Spanish 4

The Advanced Placement Program® enables willing and academically prepared students to pursue college-level studies - with the opportunity to earn college credit, advanced placement, or both - while still in high school. AP Exams are given each year in May. Students who earn a qualifying score on an AP Exam are typically eligible, in college, to receive credit, placement into advanced courses, or both. The AP Spanish Language and Culture course emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP Spanish Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Spanish.

This course is structured around six themes: Beauty and Aesthetics, Contemporary Life, Families and Communities, Global Challenges, Personal and Public Identities, and Science and Technology. Themes facilitate the integration of language, content, and culture and promote the use of the language in a variety of contexts. The themes may be combined, as they are interrelated.

