

Martensdale-St.
Marys
Community Schools
Academic Course
Guide



INTRODUCTION

Dear Students and Parents/Guardians:

The 2009-2010 Course Guide is designed to assist you as you make course selections that will affect your future. This introduction addresses some of the commonly asked questions during the registration process. If there are any other questions regarding registration procedures or graduation requirements, please contact the guidance counselor.

We are proud of our curriculum. We believe the courses outlined in this book can prepare students to meet the challenges of the 21st century. In doing this, we strongly encourage that every student at M.St.M. High School be enrolled in at least the following core courses: (4 years Language Arts, 3 years Mathematics, 3 years Science, and 3 years Social Studies) each semester.

Students should select a combination of courses that will help prepare them for what they plan to do after high school. There is no one combination of courses that is best for everyone.

Students are required to take eight courses each semester. Exceptions to this are students taking courses outside of the district for graduation credit and seniors involved in the School to-Work Program. Students must have approval from the administration prior to enrollment in these programs.

The dropping or adding of classes must be finalized within the first three days of each semester. Changes will be governed by class loads and student needs. Students are expected not to drop full year courses at the end of the semester. Changes in class schedules must have the approval of the teachers involved, guidance counselor, parents, and principal. Dropping a class after the first week of the semester will result in an F for the course.

Seniors are given the option of having one elective course graded on a PASS-FAIL basis per semester, if elected within two weeks of the semester. A course taken under this option would, if passed, be counted toward the credits earned. This option is made available to encourage students to take courses they might normally avoid to protect their grade point average.

Good luck with this important project and best wishes for a great 2009-2010 school year.

Sincerely,

Randy Folkerts, Counselor

It is the policy of the Martensdale-St. Marys Community School District not to illegally discriminate on the basis of race, color, national origin, gender, disability, religion, creed, age (for employment), marital status (for programs), sexual orientation, gender identity, and socioeconomic status (for programs) in its educational programs and its employment practices. There is a grievance procedure processing complaints of discrimination. If you have questions or a grievance related to this policy, please contact the district's Equity Coordinator. MStM's Equity Coordinator is Mike Crozier, secondary principal. His address is MStM Community School, 390 Burlington, Martensdale, Iowa 50160. His phone number is 641-764-2868 and his email address is: mike_crozier@m-stmarys.k12.ia.us

GRADUATION REQUIREMENTS

| | |
|-----------------------|---------------------|
| English | 4.0 credits |
| Mathematics | 3.0 credits |
| Science | 3.0 credits |
| Social Studies | 2.5 credits |
| Government | 0.5 credit |
| PE | 2.0 credits |
| Health | 0.5 credit |
| Business Elective | 1.0 credit |
| Word Processing | 0.5 credit |
| Computer Applications | 0.5 credit |
| <u>Electives</u> | <u>10.5 credits</u> |
| Total required | 28.0 credits |

One half credit is earned for each semester course that is completed successfully.

CAREER PATHWAYS

Career Pathways are clusters of occupations/careers that are grouped because of shared skills and aptitudes. All pathways include a variety of occupations that require different levels of education and training. Selecting a career pathway provides you with an area of focus, along with flexibility and a variety of ideas to pursue.

Deciding on a career pathway can help you prepare for your future. The intent is not for you to decide on a specific occupation for the rest of your life, but to select a career pathway into which you can begin directing your energies. Identifying a career pathway can help you in selecting school courses, activities, and part-time employment. It can also help guide your participation in work-based learning opportunities.

Upon completion of the recommended courses for a selected career pathway, in addition to completion of the M.St.M. graduation requirements, students will receive a special certificate and recognition at their graduation ceremony.

This may be a requirement for the graduating class of 2010 and beyond, pending board approval.

The M.St.M. Career Pathways are:

- Agriscience and Natural Resources
- Arts and Communication
- Business/Information Management
- Marketing
- Engineering/Industrial Technological Sciences
- Family and Human Services
- Health Sciences

COLLEGE BOUND STUDENTS

If you are planning to go to college, but don't know where, the guidelines on the following page will be helpful until a definite school is chosen. If you know what college you wish to attend, check the catalogs in the counseling office for admission requirements.

Art

INTRO TO ART

GRADE: 9-12
SEMESTERS: Fall
CREDIT: .5

Students electing high school art must show basic interest in drawing and painting, because much of the course work requires a degree of ability in these areas to convey ideas. Students will study basic design fundamentals and various media and techniques in order to develop a better foundation in art. They may gear these skills towards a Fine Arts emphasis on Drawing, Painting, Appreciation, etc. or towards Vocational Career related areas such as Advertising, Commercial Art, Design, etc. This course provides a foundation prerequisite to other art courses.

2-D DESIGN

GRADE: 9-12
SEMESTERS: Fall &/or Spring
CREDIT: .5

Students electing 2 Dimensional Design must show basic interest in drawing and painting. The focus of this course is mainly drawing with multimedia applications which include pencil, charcoal, chalk, pastels, paint, and printmaking. This course provides a foundation prerequisite to other art courses.

COMMERCIAL ART

GRADE: 9-12
SEMESTERS: Spring
CREDIT: .5

Commercial Art is a course intended for students that have a basic interest in graphic design and digital imaging. The focus of this course is to learn basic design principles in using art to sell an idea or product. Students will learn and utilize digital images and photography in the process of working with the computer program, Adobe Photoshop.

PAINTING (Offered on alternating year schedule)

GRADE: 9-12
SEMESTERS: Spring
CREDIT: .5

Students explore basic color theory through painting activities using tempera, watercolor and acrylic paint. Assorted subject matter will be explored as well as some historical background in the development of painting styles.

POTTERY (Offered on alternating year schedule)

GRADE: 9-12
SEMESTERS: Fall
CREDIT: .5

This class is an introduction to basic clay construction (pinch, coil, slab), decoration techniques (incising, appliqué, glazing), project firing and basic clay and tool applications. Some wheelwork will be included. Assorted ceramic projects will be explored as well as some historical background in the development of ceramics.

3-D DESIGN (Offered on alternating year schedule)

GRADE: 9-12
SEMESTERS: Spring
CREDIT: .5

This class explores 3-Dimensional design through the use of various mediums. Ideas expressed will deal with basic 3-D concepts such as contour, form, volume, texture, color etc. in space. Students will gain experience in 3D art through sculpture, ceramics, jewelry and other projects. Students will learn about master artists and art history in the mediums that they are working.

DIGITAL IMAGING (Offered on alternating year schedule)

GRADE: 9-12
SEMESTERS: Fall
CREDIT: .5

Digital Imaging is a course intended for students that have a basic interest in photography and digital imaging. The focus of this course is to learn basic composition principles in photography. Students will learn and utilize digital images and photography in the process of working with the cameras and the computer program, Adobe Photoshop.

Business Education

ACCOUNTING I

GRADE: 10-12
SEMESTERS: Fall
CREDIT: .5

Under strict definition, accounting is the system of recording and summarizing business and financial transactions in books and analyzing, verifying, and reporting the results. Accounting I presents the accounting cycle in its simplest form, with journals, ledgers, accounts, posting, and financial data. Simulation sets will be used to give students hands-on experience. Homework is essential for success.

ACCOUNTING II

GRADE: 10-12
SEMESTERS: Spring
CREDIT: .5
PREREQUISITE: Accounting I

Accounting II modifies and expands the concepts of Accounting I. The accounting cycle for a corporation will be studied using special journals and payroll requirements. Simulation sets will be used to give students hands-on experience. Homework is essential for success.

ACCOUNTING III (DMACC ACC111)

GRADE: 11-12
SEMESTERS: Fall
Dual Credit: HS .5, DMACC 3
PREREQUISITE: Accounting II

Accounting 111 is an introductory college course in accounting fundamentals and procedures. It includes capturing and analyzing business data and financial statement preparation. This is a review of the concepts learned in Accounting I&II. DMACC has over 24 Diploma & Degrees and Certificates of Specialization that require ACCT 111 or ACCT 131 for completion.

Dual Credit Students will earn three DMACC credits for completing Accounting 111. A grade will be assigned and figured into student's GPA at DMACC.

ACCOUNTING IV

GRADE: 11-12

SEMESTERS: Spring

CREDIT: .5

PREREQUISITE: Accounting III

Accounting IV is a more demanding course. It is the equivalent to the first-level course required to enter any accounting degree program in the state of Iowa. Students are introduced to the principles of accounting with emphasis placed on the users and uses of accounting information. The double-entry bookkeeping system is presented with a focus on the end result of the accounting cycle, the financial statement.

WORK PLACE BASICS

GRADE: 11

SEMESTERS: Fall and Spring

CREDIT: 1

Work Place Basics is designed to develop basic business and communication skills. Students will develop techniques to learn different forms of oral and written communication, personal management techniques, organizational techniques, career development, and other basic skills necessary to survive in the work world and in preparation for the work world. Job shadowing will be a component of this class.

SCHOOL TO WORK

GRADE: 12

SEMESTERS: Fall & / or Spring

CREDIT: .5

PREREQUISITE: "C" or above in WPB or enrolled concurrently and Approval of Instructor

STW is the application side of learning. The student directly applies classroom learning to a job and job-related learning is brought back into the classroom. The student is allowed to attend school on a part-time basis while maintaining part-time employment under the supervision of an instructor. This is a pass/fail course.

PUBLICATIONS

MASS MEDIA

GRADE: 9-12

SEMESTERS: Fall & / or Spring

CREDIT: .5 per semester

Journalism, photography, radio, film, television, and the media's effect on society are the areas of study in this hands-on lab course. Students will be publishing a newspaper on a monthly basis and completing numerous individual and group projects. The ability to complete tasks independently is essential in this course.

YEARBOOK

GRADE: 11-12

SEMESTERS: Fall and Spring

CREDIT: 1

This class revolves around the completion of the school's on-line yearbook. Journalistic writing, photography, and page design will be incorporated in the yearbook as well as additional publication assignments will be completed. Each student will be responsible for creating and completing several yearbook sections based on the design concepts determined by the design team. Each student will also be responsible for taking photographs at different school events, selling advertisements, and working fundraising events outside of class time. Having a flexible schedule and having access to a digital camera are essential to success in this class. All core skills are taught first semester, so students may not enter the class spring semester unless they have taken the class the previous year.

Computer Education

WORD PROCESSING I

GRADE: 9-12

SEMESTERS: Fall

CREDIT: .5

Required Course

Keyboarding has become a necessary skill in the work place as well as in our personal lives. This course is designed to learn/review the alphabetic and numeric keyboard reaches. The student will develop speed and accuracy by routine practices. Emphasis will be placed on letter, report, and table formatting. Students will operate a ten-key calculator using the touch method.

COMPUTER APPLICATIONS I

GRADE: 9-12

SEMESTERS: Spring

CREDIT: .5

PREREQUISITE: Word Processing

Required Course

Computer Applications I is designed to provide students with a foundation in basic Microsoft Windows, how computers work, and spreadsheet applications. Students will explore the history of computers with the use of the internet and PowerPoint presentation

ADVANCED COMPUTER APPLICATIONS

GRADE: 10-12

SEMESTERS: Fall

CREDIT: .5

PREREQUISITE: Computer Applications I

Computer Applications II is a continuation of Computer Applications I. Class will use Word, Excel, and Microsoft Access, a database program, in detail. They will study PowerPoint and explore computer careers.

WEB DESIGN

GRADE: 10-12

SEMESTERS: Spring

CREDIT: .5

PREREQUISITE: Successful completion of Computer Applications I & II

Class will study the Internet and web pages. The class will learn web page design techniques. Students will design and create web pages.

Family and Consumer Sciences

FOOD AND NUTRITION I

GRADE: 9-12
SEMESTERS: Fall
CREDIT: .5

This course is designed for students who are interested in understanding the principles of nutrition, food selection and maintaining a healthy lifestyle. Attention will be given to the selection and preparation of food and personal health and well-being.

FOOD AND NUTRITION II

GRADE: 9-12
SEMESTERS: Spring
CREDIT: .5
PREREQUISITE: FOOD AND NUTRITION I

Food and Nutrition II focuses on nutrition and the knowledge and skills used to prepare healthy, economical meals. Students will research and interpret common health concerns currently affecting our population. Planning a family food budget, selecting appropriate tableware, and identifying international cuisine will also be discussed.

ADVANCED FOODS

GRADE: 9-12
SEMESTERS: Spring
CREDIT: .5
PREREQUISITE: FOOD AND NUTRITION I & II

Advanced Foods focuses on the preparation of food. Students will demonstrate skills necessary for career opportunities in the food service/culinary arts industry. Students will learn and practice safety and sanitation procedures. They will perform quantity food preparation as it relates to catering, bakery, restaurant, hospitality, and fast food business operations.

ARTICULATION: Advanced foods can earn college credit through the state wide articulation program.

LIFE SKILLS

GRADE: 9-12

SEMESTERS: Spring/Fall

CREDIT: .5

Life Skills is a course designed to prepare students with skills to live independently. Skills are developed to help students manage their needs in the areas of interpersonal relationships, housing, clothing, nutrition, and food. Management of time, money, and resources are emphasized in each area allowing students to be successful at home and in the workplace.

FAMILY LIVING

GRADE: 9-12

SEMESTERS: Fall

CREDIT: .5

This course prepares students to understand the nature, function, and significance of human relationships involving individuals and families. Topics include family relationships, communication, conflict resolution, relationships, love and dating, marriage and parenting.

CHILD DEVELOPMENT

GRADE: 9-12

SEMESTERS: Fall

CREDIT: .5

This course provides students with an understanding of the aspects of human growth and development. Parenting skills are developed as positive guidance techniques and child-related issues are studied. Learning activities, observation techniques, and lab experiences in working with young children may be included.

ARTICULATION: Child Development can earn college credit through the state wide articulation program.

SCHOOL-AGE CHILD

GRADE: 9-12

SEMESTERS: Spring

CREDIT: .5

PREREQUISITE: CHILD DEVELOPMENT

This course prepares individuals for child related careers and/or more extensive parenting skills through personal interaction with children. Instruction is given in developing positive relationships with and learning experiences for children, childcare policies and management, guidance techniques, and health and safety concerns. On-site school and/or child care experiences will be a major component of the course.

Foreign Language

SPANISH I

GRADE: 9-12

SEMESTERS: Fall and Spring

CREDIT: 1

This course will mainly consist of learning basic Spanish vocabulary and grammar, and talking in Spanish. Students will learn through written work, use of computer programs, and a variety of vocabulary games. Students will also participate in a variety of activities pertaining to cultural aspects of Spanish-speaking countries.

SPANISH II

GRADE: 10-12

SEMESTERS: Fall and Spring

CREDIT: 1

PREREQUISITE: Spanish I

Students will build on the skills and knowledge obtained in Spanish I, increasing proficiency in the areas of reading, writing, listening and speaking. Student will review basics from last year and will be introduced to the reflexive and preterit tenses. Student will be expected to carry on simple conversations in Spanish.

SPANISH III

GRADE: 11-12

SEMESTERS: Fall and Spring

CREDIT: 1

PREREQUISITE: Spanish I & II

This course is designed to use the basics of Spanish I and II, to build upon skills obtained in the first two years, toward a greater level of proficiency. The course will include more Spanish grammar, the future and present progressive tenses, continued oral conversations and written work of a greater variety of Hispanic cultures.

SPANISH IV

GRADE: 12

SEMESTERS: Fall and Spring

CREDIT: 1

PREREQUISITE: Spanish I, II, III

The students will use the skills and vocabulary learned in Spanish I, II, III and will build upon those skills to obtain a greater level of proficiency. Special emphasis will be placed on Hispanic literature and oral communication. Students will also be expected to present research on different Spanish-speaking countries.

Physical Education

PE

GRADE: 9-12

CREDIT: .5

SEMESTERS: Fall or Spring

The PE program will function entirely co-ed. Students are expected to have proper gym attire whenever the activity requires. All students are expected to participate and cooperate to the best of their ability. Grades will be based on use of ability, not solely on ability alone. Grades will also be determined by participation and semester tests. Emphasis will be placed on working together in a group or team setting, improving fitness, motor skills, and self-esteem. Through the physical education program the students will learn to pursue leisure activities which contribute to healthy daily functioning, physical growth, future wellness and "just plain having fun."

Health Education

HEALTH

GRADE: 9

CREDIT: .5

SEMESTERS: Fall or Spring

This course will help the student examine lifestyles, select goals and make plans to achieve and maintain optimum health. Students will practice decision-making skills in effort to prepare them for challenges that lie ahead. Students will apply their knowledge by completing various projects this semester. Health activities will also provide students with additional learning. Students will be studying nutrition, fitness, drugs & alcohol education and personal motivation to maintain a healthy lifestyle.

HEALTH II
GRADE: 10-12
CREDIT: .5
SEMESTERS: Fall

This comprehensive health course will provide you with essential knowledge and decision-making skills for a healthy lifestyle. Students will analyze aspects of emotional, social, and physical health and how these realms of health influence each other and influence your life. Students will study behavior change and set goals to work on throughout the semester.

Health Occupations

INTRODUCTION TO HEALTH CAREERS
GRADE: 11-12
Dual Credit: HS .5, DMACC 3.0
SEMESTERS: Fall

Students will discover the main options available, including roles and responsibilities, in health career options. This course is designed to provide the student with the information necessary to make their health career choice.

EMERGENCY CARE/FIRST AID
GRADE: 11-12
Dual Credit: HS 0.5, DMACC 1.0
SEMESTERS: Fall

This class offers students the chance to learn and practice first aid skills. Students will also have an opportunity to be certified in CPR and First Aid through the American Red Cross.

SURVEY OF HEALTH CAREERS
GRADE: 11-12
Dual Credit: HS 0.5, DMACC 1.0
SEMESTERS: Spring

Students will explore a wide variety of health career possibilities. This class is designed to show the many and often not considered options available to students interested in a medical career

MEDICAL TERMINOLOGY I
GRADE: 11-12
Dual Credit: HS .5, DMACC 3
SEMESTERS: Spring

This course builds a medical vocabulary through an understanding of anatomic roots for words denoting body structures, prefixes, suffixes, and body functions.

Industrial Technology

AUTO CARE AND MAINTENANCE

GRADE: 9-12
SEMESTERS: Spring
CREDIT: .5

The class will develop a safety first attitude when working around the automobile. This will include basic hand tool usage. The class is a good start for students who want to perform basic maintenance on their own automobile while learning more about car ownership.

WELDING I

GRADE: 9-12
SEMESTERS: Fall
CREDIT: .5

The class will help the student develop a background in the area of oxy-acetylene welding. Areas to be studied in the class include: safety, start-up and shut down, welding with and without filler rods, bronze welding, and flame cutting.

ARTICULATION: Welding I will earn college credit through the welding program at DMACC. (WELD 473)

WELDING II

GRADE: 9-12
SEMESTERS: Spring
CREDIT: .5
CLASS LIMIT: 16

The class will help the student develop a background in the area of shielded metal arc welding. Areas to be studied in the class include: safety, start-up and shutdown, AC and DC currents, surface welds, and electrode classification.

ARTICULATION: Welding II will earn college credit through the welding program at DMACC. (WELD 474)

WOODWORKING

GRADE: 9-12

SEMESTERS: Fall and/or Spring

CREDIT: .5

The course is an introduction to basic woodworking skills. The class will start in the area of project design and development, this by covering the steps in mechanical drawing related to woodworking. The second part of the class will cover the area of hand tools and their usage. The third area of the class will include machine tools and their safe usage. The last area to be covered will be the area of manufacturing.

MANUFACTURING

GRADE: 9-12

SEMESTERS: Fall and/or Spring

CREDIT: .5

Manufacturing will be emphasized with the students establishing a company, designing and developing a product, producing jigs and fixtures, and marketing student's projects. This will include both wood and metal projects. The areas of drafting and design, woodworking machine safety and usage, metal working equipment safety and usage will be covered.

POWER AND ENERGY

GRADE: 9 -12

SEMESTERS: Fall

CREDIT: .5

The class will study two areas of energy used today. The first half of the class will be studying and working with the area of the internal combustion engine. This will include tear down and rebuild of a 4-cycle engine. In the second half of the class, the students will be studying the area of electricity and electronics.

Language Arts

ENGLISH 1

GRADE: 9 (Required)
SEMESTERS: Fall and Spring
CREDIT: 1

This yearlong course is required of all ninth graders. Students begin to make connections between literature, writing, speaking and their present-day situations as they are introduced to various genres of literature and types of writing.

ENGLISH II

GRADE: 10-12 (Required)
SEMESTERS: Fall and Spring
CREDIT: 1
PREREQUISITE: English I

This course is required of all sophomores. The fall semester is devoted to elements of public speaking. Students deliver 6-7 formal speeches including personal narratives, oral interpretations, persuasive and informative speeches. Coursework is complemented by use of a textbook to study the theoretical elements of public speaking. The spring semester focuses on the study of literary styles such as the short story, novel, and drama. Each unit has an accompanying essay exploring the thematic elements of each text as well as a focus on critical thinking, literary elements, and plot summaries. Throughout the year, students are instructed in grammar, spelling, and usage according to their needs.

CREATIVE WRITING

GRADE: 9-12; recommended for upper grades
SEMESTER: Fall or spring (opposite Theatre: Films)
CREDIT: .5 per semester

This course is designed for students who wish to improve and further develop their existing writing skills. The first half of the course is devoted to intensive study of the fiction and poetry genres using modeling, writing prompts, and workshops. Emphasis is on developing and understanding the creative process, and time spent in the classroom will be used mostly as a writing workshop. The second half of the course is dedicated to student-designed projects of significant depth and breadth (novellas, screenplays, poetry collections, etc.) with the possibility of publication or submission to writing contests.

COMPOSITION

GRADE: 11-12

SEMESTERS: Fall & / or spring

CREDIT: .5 per semester

This course is the final preparation in composition for college-bound students. Included is a review of standard English and the implementation of stylistic devices for effective writing with emphasis on application in expository writing, literary analysis, and research-based projects. Writing is viewed as a process, and the class format is based on a workshop design.

AMERICAN IDEAS

GRADE: 10-12

SEMESTERS: Fall & / or spring

CREDIT: .5 per semester

This course deals with predominant ideas of American thought as reflected in our literature from the era of the Puritans to the present day. Students will use close reading to understand various genres of American literature, literary movements, and influential writers' perspectives. Through analysis of literature, students will become aware of the influence of strong ideas which still permeate our thinking.

THEATRE: FILMS

GRADE: 9-12

SEMESTER: Fall or spring (opposite Creative Writing)

CREDIT: .5 per semester

Theatre: Films allows students to further hone and practice their analytical and interpretive skills by studying film history, production, and varied genres. Film is viewed and studied as a text, incorporating literary devices and linear thematic interpretations in its coursework. Students engage in small- and large-group discussions, writing analytical and comparative essays, and completing projects.

Marketing

BUSINESS MANAGEMENT

GRADE: 10-12

SEMESTERS: Spring

CREDIT: .5

Business Management will introduce planning, organizing, directing, and controlling materials, labor, and capital in the successful operation of a business enterprise. As well, this course encourages students to explore career opportunities and various business and management principles.

SALES

GRADE: 10-12
SEMESTERS: Fall
CREDIT: .5

Sales is a course in human relations and communications. "To be successful, a student must know how to sell themselves and their ideas." The course will introduce students to various careers in retail sales and marketing. Students will gain knowledge and skill in merchandising, promotions, effective and persuasive selling techniques and consumer buying motives and habits.

ARTICULATION: Sales will earn you DMACC 3 cr. hr. for MKT140.

ENTREPRENEURSHIP

GRADE: 10-12
SEMESTERS: Fall
CREDIT: .5

Entrepreneurship is the study of the decisions that affect the ownership and management of a business enterprise. This course will give students instructions into the decisions and activities that have to be made and completed to start a new business enterprise or become an owner of some type of existing business. This course is especially useful to student that someday will work in the business world, someday have the dream of owning his/her own business, or for those students who will continue further study in any type of business area at a post-secondary school.

MARKETING

GRADE: 10-12
SEMESTERS: Spring
CREDIT: .5

The course examines marketing's role in the economy and in the company, what effect it has on a company's products, prices, types of promotion, and forms of distributions. The student will also study the impact consumers have on these activities. Over 60% of United States' employment is in areas that require an understanding of and skill in marketing. Students will demonstrate their knowledge by producing a product, creating a package, determining a price, promoting the product, and selling it to the student body.

Mathematics

The math department will recommend which level of math students should take after 6th grade. Students will also take an Algebra Aptitude test to help the math department determine when a student is ready for Algebra 1. If a student does not agree with his/her recommendation, they may choose to not follow the placement and go on to a different level of math. Students need to have a note signed from their parent/guardian stating what level of math they would like to see their child in if they disagree with the recommendation. Students going to any Regent University must take at least Algebra 1, Geometry, and Algebra 2 to be eligible for placement.

INTRO TO ALGEBRA/GEOMETRY

GRADE: 9
SEMESTERS: Fall and Spring
CREDIT: 1
PREREQUISITE: Successful completion of Junior High Math

This course will focus upon connecting Arithmetic and Algebra, introducing Algebra by working with integers, rationales, and irrational number operations. Time will also be devoted to solving one and two-step equations and graphing in a coordinate plane. Also, an introduction to Geometry will be discussed.

Emphasis will also be placed on number concepts and fraction theory. In addition time will be devoted to ratio, rate, unit rate, unit price, proportions, and percents. An introduction to probability and statistics, time permitting, will be discussed.

ALGEBRA I

GRADE: 8-12
SEMESTERS: Fall and Spring
CREDIT: 1
PREREQUISITE: Successful completion of Junior High Math and/or recommendation of Math Department.

This course will help students build an understanding of real numbers by using symbolic, graphic, and numeric representations as they solve equations and inequalities. In addition, students will work with rational and radical expressions, equations, and functions to build a wide base of experience with rational and irrational numbers.

Students begin to use geometric models with proportions, percent, and probability. They make decisions about appropriate scales with graphical representations of data and also use formulas for the perimeters and areas of figures. Problem solving skills with real-world examples will be studied. Stress will be placed on the fact that more than one method for solving a problem may exist. Emphasis will be placed on students being able to write, speak, and think mathematically.

GEOMETRY

GRADE: 9-12

SEMESTERS: Fall and Spring

CREDIT: 1

PREREQUISITE: Successful completion of Algebra I.

This course will introduce students to more advanced geometrical concepts as well as give them many opportunities to prove geometrical theorems. Students will study the properties of parallel lines, congruent polygons, triangle trigonometry, and properties of circles and angles. Students will use flow proofs, paragraph proofs, and two-column proofs to prove many of the theorems used in this class. Logical reasoning and spatial thinking are very important to the concepts taught in Geometry.

ALGEBRA 2

GRADE: 9-12

SEMESTERS: Fall and Spring

CREDIT: 1

PREREQUISITE: Successful completion of Algebra 1 and/or Geometry.

Students will continue exploring mathematical problems, thinking critically, and working cooperatively with others. This class will consist of reviewing Algebra 1 concepts, exploring graphs of different functions, solving systems of equations algebraically and using matrices. We also work a lot with quadratic functions and that includes graphing, factoring, finding the zeros, and translating those functions. We will spend some time on combinations and permutations to prepare students for statistics. We also introduce and explore exponential and logarithmic functions. We will use graphing calculators to help students visualize the different mathematical concepts.

ADV. MATHEMATICAL CONCEPTS

GRADE: 11-12

SEMESTERS: Fall and Spring

CREDIT: 1

PREREQUISITE: Successful completion of Geometry and Algebra 2.

This course will prepare students for college-level mathematics and calculus. Topics to be covered include linear relations and functions, systems of equations and inequalities, polynomial and rational functions, trigonometric functions, graphs, inverses and identities, vectors and polar coordinates. We will use graphing calculators to help students visualize the different mathematical concepts.

STATISTICS

GRADE: 11-12

SEMESTERS: Fall and Spring

CREDIT: 1

PREREQUISITE: Successful completion of Algebra 2 with a minimum grade of B-.

This course will explore statistical models and how and what statistics are. We will discuss probability, distributions, the normal curve, confidence intervals as well as the ways we gather statistics and make inferences from the data we gather. This course resembles a college level statistics course and will be challenging for students.

AP CALCULUS

GRADE: 11-12

SEMESTERS: Fall and Spring

CREDIT: 1

PREREQUISITE: Successful completion of Advanced Mathematical Concepts with a minimum grade of B-

This course will be equivalent to a 1st year calculus course at college. We will study limits, derivatives and their applications, integrals and their applications, and explore more logarithmic and exponential functions. Students will have an option to take the Calculus AB test at the end of the year to receive college credit for the class if they meet the requirements of the tests.

BASIC ALGEBRA

GRADE: 10 - 12

SEMESTERS: Fall and Spring

CREDIT: 1

PREREQUISITE: Teacher's Recommendation

This course is for the students that have completed Intro to Algebra/Geometry and need to build on their algebraic concepts at an intermediate pace different than that of Algebra 1. Students will be working with integers, rational/irrational numbers, solving equations, and graphing on the coordinate plane.

GENERAL MATH

GRADE: 9 - 12

SEMESTERS: Fall and Spring

CREDIT: 1

PREREQUISITE: Teacher's Recommendation

This course is directed towards students who need to review basic math skills that might benefit them on standardized tests and everyday life skills. Students will be doing basic fundamentals of adding, subtraction, multiplication, division, fractions, decimals, percents, ratios, measurements, and some geometrical and algebraic concepts.

Music

CHORUS

GRADE: 9-12

SEMESTERS: Fall and spring

CREDIT: 1

The goal of high school chorus is to sing music of various genres, alone and with others, using correct posture, breathing, pitch, rhythm, diction, expression, and building the skill of independent music reading through sight-singing. Historical background and other related information, as well as music theory will be included in rehearsals. Performance is also a goal of high school chorus, giving students performance opportunities throughout the year in large groups, as well as solo and small ensembles. Lessons are included in the course which students are expected to attend.

Chorus members are required to perform in several concerts at school, as well as Large Group Festival, sponsored by the Iowa High School Music Association. High school chorus is included in the student's cumulative grade point average.

Chorus membership is open to all High School students.

Ensembles offered to chorus students are:

MIXED CHORUS - Study of mixed chorus literature-SATB

TREBLE CLEF - Study of treble clef choral literature-SSA.

BASS CLEF - Study of bass clef choral literature TTBB.

CHAMBER CHOIR/SHOW CHOIR - This choir will be an extracurricular activity. We will meet before school and in the evenings. This will be a select group chosen by the director.

SENIOR HIGH BAND

GRADE: 9-12

SEMESTERS: Fall and Spring

CREDIT: 1

FEES: Related fees for lesson books and instrument supplies, and repair of privately owned instruments as needed

PREREQUISITE: Students must be a previous member of the high school band or have completed two semesters of band by the eighth grade. Students not meeting these criteria must demonstrate their proficiency of the standards and benchmarks approved for 5-8th grade instrumental music on their specific instrument. Those students may take individual study with the band instructor until standards are met, at which time they may join the ensemble at the starting of the next semester.

High school band is an advanced performing ensemble class continued from the elementary and junior high instrumental music programs. Students will learn about fine tuning, rhythm, dynamics, concert scales, ensemble balance and blend, and technique on their individual instrument. Students will also be educated on related music theory, history and styles of music as relating to instrumental music.

Students are expected to perform in pep band, concert band, marching band, and smaller ensemble playing performances throughout the year. Jazz band is **available for those playing** instruments used in this medium. There are also opportunities to attend honor bands, solo contest and other competitions. All students are required to attend large group marching and concert band performances and contests.

Science

EARTH SCIENCE

GRADE: 9 (Required)

SEMESTERS: Fall and Spring

CREDIT: 1

Students will be introduced to the features and characteristics of the Earth and the universe around it. With these ideas and concepts, they will learn about the solar system as well as our own planet. Topics will include the dynamic Earth and how it is changing, Earth's weather, Earth's history, Ecology, our natural resources, and the universe and solar system.

PHYSICAL SCIENCE

GRADE: 11-12

SEMESTERS: Fall and Spring

CREDIT: 1

A one year class. This course will cover one semester of Chemistry and one semester of Physics. Fall semester will cover Chemistry and the spring semester will cover Physics. Students will expand on prior knowledge from previously completed science courses and discover new concepts as well, as well as applying chemistry and physics into our everyday lives.

BIOLOGY

GRADE: 10

SEMESTERS: Fall and Spring

CREDIT: 1

THE SCIENCE OF BIOLOGY IS THE STUDY OF LIFE. Modern biology stresses the vital connection between biological principles and the processes of science. As new discoveries are announced with increasing frequency, students are confronted with new social, political and ethical choices. Students are given the solid foundation they need to understand the expanding role of biology in modern society and the skills to excel in future courses in science. This course provides a detailed introduction heavily emphasizing the vocabulary of biology, it provides the student with a strong background in the scientific method, the five-kingdom classification scheme, microscopy, biochemistry, cellular biology, molecular and Medellin genetics, evolution, dissection and a brief look at ecosystems. Inquiry based learning and labs are incorporated into the curriculum to enhance learning.

CHEMISTRY

GRADE: 11-12

SEMESTERS: Fall and Spring

CREDIT: 1

This college-prep chemistry class gives students a solid introduction to the science of chemistry as well as its history. The course covers significant figures, SI units, classification, the mole concept, organic and inorganic chemistry, molecular bonding, atomic structure atomic and molecular orbitals, intermolecular forces, Lewis structures, molecular geometry, chemical reactions, nuclear chemistry, balancing of chemical equations, Periodic Table of the Elements, properties of metals, nonmetals and metalloids, chemical equilibrium, thermodynamics, acids and bases, quantitative and qualitative analysis, stoichiometry, limiting-reagent stoichiometry, solutions, solubility, and the gas laws. Inquiry based learning and labs are incorporated into the curriculum to enhance learning.

PHYSICS

GRADE: 11-12

SEMESTERS: Fall and Spring

CREDIT: 1

This college-prep physics class is geared to students planning on going to college or entering a mechanical /technical field. It provides a detailed introduction to the methods and concepts of general physics. Emphasis is placed on vector analysis. It provides the student with a strong background in one-dimensional and two-dimensional motion, Newton's laws and their application, gravity, work and energy, momentum, periodic motion, wave motion and sound, optics, electrostatics, electrodynamics, electrical circuits, and magnetism. Inquiry based learning and labs are incorporated into the curriculum to enhance learning.

HUMAN ANATOMY

GRADE: 11-12

SEMESTERS: Fall

CREDIT: .5

This college-prep anatomy class provides the groundwork to familiarize students with the functions of their own bodies and to prepare those who are interested for further specialized work in this field. Human Anatomy covers topics beyond those already covered in standard biology. Areas of study include a detailed look at the human body systems. It covers both the anatomy and the physiology of the human body's 11 organ systems. Topics covered include: histology: study of tissues, skin and bones (integumentary and skeletal systems), nervous system: central and peripheral nervous system, endocrine system, circulatory system, lymphatic system, digestive system, respiratory system, urinary system, and reproductive system. Inquiry based learning and labs are incorporated into the curriculum to enhance learning.

ECOLOGY

GRADE: 11-12

SEMESTERS: Spring

CREDIT: .5

Ecology covers topics beyond those already covered in standard biology and looks at the relationship between organisms and their environments. Areas of study include: biomes, ecosystems, populations, conservation, and current environmental topics. An emphasis will be placed on the examination of the environment and man's impact on it. The students will develop an understanding of what an ecosystem is and the elements that determine the types and numbers of organisms that live there. They will look at the atmosphere (air), the hydrosphere (water) and the lithosphere (soil) and how they sustain the biosphere (life), and how the biospheres interact. We will also look at the role humans have had in changing each of these spheres and the impact these changes have had on the world. Students will be asked to define different problems facing the world today. They will research the problem and propose possible solutions and potential obstacles to the implementation of these solutions. These activities and projects will be oriented towards collecting data, analyzing the information and drawing conclusions that are supported by the data in order to create their own solutions. Inquiry based learning and labs are incorporated into the curriculum to enhance learning.

Social Studies

WORLD HISTORY

GRADE: 10 (Required)
SEMESTERS: Fall and Spring
CREDIT: 1

An investigation into key concepts, events, and developments in World History. Course format will center on the birth, growth, and fall of great nations and important figures or leaders who have shaped our lifestyle and heritage.

AMERICAN HISTORY

GRADE: 11 (Required)
SEMESTERS: Fall and Spring
CREDIT: 1

American History consists of a chronological study of the development of the United States as a world power. Basic historical concepts as well as the interrelationship of past and present will be explored. This class has a research paper requirement.

MODERN WORLD CULTURES

GRADE: 9
SEMESTERS: Fall or Spring
CREDIT: .5

A developmental study of Modern World cultures including key concepts directly related to political, economic, and social complexes. Issues of today will be integrated into the study of each geographic region.

CONTEMPORARY ISSUES

GRADE: 11-12 (Elective)
SEMESTERS: Fall & / or Spring
CREDIT: .5 per semester
CLASS SIZE: Limited to 15

Contemporary Issues is designed to develop and assist students in interpretation and evaluation of current, political, social, and economic events while applying a historical perspective to propose solutions and understanding of these timely events. Each student is required to do one bulletin board each quarter.

SOCIOLOGY

GRADE: 11-12 (Elective)
SEMESTERS: Fall and Spring
CREDIT: .5 per semester
PREREQUISITE: Must take 1st semester before 2nd semester.

Sociology deals with the development of human motive, group interaction, group organization, social institutions, and the development of cultural norms as well as acceptance or deviation from these norms by individuals or groups in our society.

AMERICAN GOVERNMENT

GRADE: 12 (Required)
SEMESTERS: Fall or Spring
CREDIT: .5
PREREQUISITE: Senior Classification
The study of the historical basis and development of our modern government, including basic theory of government as used today.

ANCIENT WESTERN CIVILIZATION (Prehistory-Middle Ages)

GRADE: 11-12 (Elective)
SEMESTERS: Fall
CREDIT: .5

Ancient Western Civilization is a study of the cultures and people that have created a foundation for our modern world. An emphasis will be placed upon individualized study and cooperative learning.

MODERN WESTERN CIVILIZATION (Renaissance-Present)

GRADE: 11-12 (Elective)
SEMESTERS: Spring
CREDIT: .5

Modern Western Civilization is a study of the cultures and people that have shaped our world today. A variety of teaching and learning strategies are implemented to examine the content of the course.

PSYCHOLOGY

GRADE: 11-12

SEMESTERS: Fall or Spring

CREDIT: .5

Psychology is the scientific study of human behavior. This course is designed to better understand human nature and actions through hands-on activities, daily assignments, research, and discussions.