

IOWA  
MENNONITE  
SCHOOL



*2011-12  
Curriculum Guide*

## Mission Statement

*The purpose of Iowa Mennonite School is to provide a quality high school education that will encourage and enable each student to become a more informed, skilled and compassionate disciple within the body of Christ. In an atmosphere of a caring community of faculty, staff, parents and church, students will be encouraged to follow the teachings and example of Jesus Christ as interpreted in Anabaptist/Mennonite theology.*

## Graduation Requirements

Iowa Mennonite School requests students to plan their courses of study to meet the prescribed requirements for graduation of IMS and the Iowa State Board of Public Instruction. A minimum of 215 units of credit must be earned for graduation. The minimum course requirements are as follows:

Bible	5 units for each year of attendance
English	40 units*
Mathematics	30 units
Science	30 units
Social Studies	30 units
Physical Education	1.25 units for each semester of attendance
Health	5 units
Freshman Art/Music	5 units**
Electives	50 units

\* Yearbook courses will not complete the English requirements.

\*\* Students entering IMS after grade 9 may satisfy the Art/Music requirement by taking one semester of art or music.

The following courses are typically taken in this sequence:

### grade 9

New/Old Testament Survey  
English I  
Physical Education  
Math  
General Science or Biology  
Intro to Art/Music

### grade 10

New/Old Testament Survey  
English II  
Physical Education  
Math  
Science  
Health  
World History

### grade 11

Church/Anabaptist History  
English III  
Physical Education  
American History  
Science\*  
Math\*

### grade 12

Christian Family Living or Christianity in the World Arena  
English IV  
Physical Education  
American Government  
Social Science elective\*\*

\* The third year of Science or Math may also be taken during one's senior year.

\*\* The Social Science elective may also be taken during one's junior year.

All course requirements must be met prior to graduation. Students who are five (5) units or less short of meeting graduation requirements may participate in graduation exercises with a brief comment included during diploma presentation noting the credit needed. Students who need more than five (5) units to complete graduation requirements will not participate in graduation exercises (except in exceptional circumstances determined by the principal and guidance counselor and approved by the *Operating Board*). Non-graduating seniors may participate in the senior class trip.

# **AGRICULTURE**

*Five units of science may include one of the following groupings: Animal Science/Advanced Animal Science; Horticulture/Advanced Horticulture; or Agricultural Precision Technology/Soil & Conservation. Also, each 'group' of courses above is worth 5 units of science; each individual course above is worth 2.5 units of science.*

## **AG100F Ag Science and Leadership**

*Fall: 1 semester: 5 units*

The students will examine the vast agricultural industry and its importance in their daily lives. Students will be introduced to FFA, SAE and leadership skills. The first six weeks of the course will focus on the development of leadership skills. The remainder of the course will emphasize the major career areas in agriculture production, products and processing. Students in this course will learn the essential skills to be successful and will begin developing communication skills through the FFA.

## **AG201S Animal Science**

*Spring: 1 semester: 5 units*

The student will be introduced to the U.S. livestock industry. This course will focus on the types of livestock breeds, environmental concerns, nutritional needs, and management systems of livestock. Students will raise poultry in the classroom (depending on the year) and tour local animal production businesses. Students will have the opportunity to continue their leadership and career development through FFA. There is an articulation agreement with *Kirkwood Community College (KCC)*, which allows students to receive KCC credit for this course and *Advanced Animal Science*. Taking these two courses is equal to three (3) credits at KCC, and applies only if the student attends KCC. There is no charge for college credit awarded through this agreement. *This course meets the IMS graduation science requirements but may not meet college admission requirements.*

*Pre-requisite: Ag Science and Leadership*

## **AG202F Soil and Conservation**

*Fall: 1 semester: 5 units*

Students will have an understanding of soil practices, soil formation, land classification and use and soil fertility. This course will prepare students to be Christian stewards of our land. Protecting our natural resources such as air, soil, water, land, fish and wildlife for economic and recreational use will be studied. Students will investigate animal and plant species that naturally occur in Iowa, and will be able to use the knowledge learned in this course in soil judging contests.

*Pre-requisite: Ag Science and Leadership*

## **AG203S Agricultural Precision Technology**

*Spring: 1 semester: 5 units*

Students will be utilizing agricultural precision technology to analyze information collected from ag/environmental areas to create useable maps that explain and interpret information to help agriculturalists/environmentalists make decisions. This technology is known as GPS (Global Positioning System) and GIS (Geographic Information System). Students will learn by utilizing handheld GPS units and the ArcView software programs. Basic principles of crop science such as plant physiology, soil properties, cultivation practices, disease and pest management will be investigated in this course. Students will identify seeds and plants of crops and weeds in our region so that they will be prepared to scout crop fields. Activities will include field trips to local agricultural businesses to help students make a career/real world connection with the material that is studied in this course. This course is part of the career-focused *Career Edge Academy* through *Kirkwood Community College (KCC)*. This academy experience is currently available at IMS. Students enrolled will receive credit from IMS and three (3) units of college credit from KCC. The college tuition is paid for by the student. The grade earned in this course will be reflected on the student's official college transcript. Students not planning to attend KCC after high school should contact KCC for a transcript to be sent to the college or university to which he/she is applying.

*Pre-requisite: Ag Science and Leadership or by permission of instructor*

## **AG211F Ag Construction/Home Repair**

*Fall: 1 semester: 5 units*

This course is designed to provide students with introductory level experiences in the area of agricultural construction. Introductory wood-working will be the focus of the first nine weeks. Students will construct basic sawhorses and have an independent project that will be displayed at a school event. The second nine weeks will focus on how to make repairs in your own home. Skills used to maintain a home such as framing, electrical wiring, plumbing and concrete construction will be demonstrated. Students will also examine home design and the cost of housing and repairing.

*Pre-requisite: Ag Science and Leadership*

## **AG212S Small Engines/Welding**

*Spring: 1 semester: 5 units*

This course is designed to provide students with introductory level experiences in repairs that would occur at the home or on the farm. The first nine weeks will be devoted to developing arc and mig welding skills. The second nine weeks will be devoted to understanding the fundamentals of small gasoline engine repair. Each student will be provided with his or her own Briggs & Stratton engine to complete the course lab work.

*Pre-requisite: Ag Science and Leadership*

## **AG206F Ag Business**

*Fall: 1 semester: 5 units*

This course will examine the job opportunities that exist in agribusiness. Entrepreneurship, record keeping, business transactions, finance management and marketing will be studied to develop their own individual/class business.. Class activities will include agricultural business computer applications. Business communication will be emphasized through the FFA. This course can cooperatively work with the student's SAE program.

*Pre-requisite: Ag Science and Leadership*

## **AG208F Horticulture**

*Fall: 1 semester: 5 units*

This course will explain the basic plant systems and the careers in the popular horticultural industry. Field trips will be taken to local horticultural businesses. Students will study the growth and production of flowers, plants, fruits and vegetables. Students will also learn about growing media, propagation, germination, transplanting, and maintenance practices. Students will be instructed in practical floral and landscape design. Students will design the floral arrangements for the annual *Appreciation Banquet*. Leadership and communication skills will be emphasized through the FFA. *This course meets the IMS graduation science requirements but may not meet college admission requirements.*

## **AG208S Advanced Horticulture**

*Spring: 1 semester: 5 units*

This course will focus on the advanced areas of horticulture such as landscape design, arrangement of flowers in floriculture and the landscape, and the identification of flowers, foliage plants, bedding plants and woody plants used in the horticulture industry. Practical landscaping on the school grounds or a residential area will be one of the hands-on activities in this course. *This course meets the IMS graduation science requirements but may not meet college admission requirements.*

*Pre-requisite: Horticulture*

## **AG209F Advanced Animal Science**

*Fall: 1 semester: 5 units*

Types of livestock breeds, management practices, small companion animals, alternative livestock and livestock marketing techniques will be studied in this advanced animal science course. Students will visit various local livestock farms to experience what they are learning. Learning activities will include special group projects such as a "how to" animal science video. There is an articulation agreement with *Kirkwood Community College (KCC)*, which allows students to receive KCC credit for this course and *Animal Science*. Taking these two courses is equal to three (3) credits at KCC, and applies only if the student attends KCC. There is no charge for college credit awarded through this agreement. *This course meets the IMS graduation science requirements but may not meet college admission requirements.*

*Pre-requisite: Animal Science*

## **AG302S Ag Projects**

*Spring: 1 semester: 5 units*

This project-based course is designed to prepare students with advanced level experiences in selected major areas of agricultural mechanics technology, which may include small engine maintenance and repair, metal fabrication and woodworking. Students must have a project planned and teacher-approved by the end of the first week of the course.

*Pre-requisite: Ag Construction/Home Repair*

## **FFA**

*Pre-requisite: One semester per year of Agricultural Education*

## **ART**

### **AR001 Introduction to Art (grade 9)**

*Alternates with Introduction to Music: Fall: 1 quarter: 2.5 units*

A required course that presents art history and appreciation by studying major artists and provides actual work experience in the basic art media.

### **AR100 Ceramics**

*Alternate years (10, 12...) Spring: 1 semester: 5 units*

Ceramics students work with the most common methods of hand-building and are introduced to basic skills at the potter's wheel. Students will work with functional forms, decorative forms, and ceramic sculpture. Advanced sculpture problems and additional time on the potter's wheel may be chosen by students taking a Creative Projects in Ceramics.

### **AR101 Drawing and Printmaking**

*Fall: 1 semester: 5 units*

This course is actually two related nine-week courses. Drawing develops skills using the different materials and processes of drawing. In printmaking, students create images using three different printmaking processes: the intaglio, the woodcut and the silkscreen.

### **AR102 Computer Graphics**

*Spring: 1 semester: 5 units*

The *Adobe Illustrator* graphics program will be used for work, utilizing both image and text. Beginning skills in both drawing and *Windows* are helpful.

### **AR103 Painting**

*Fall: 1 semester: 5 units*

Painting students will study a variety of painters and work they produced. Color, composition, processes, and techniques will be studied as the students produce paintings.

### **AR104 Photography**

*Spring: 1 semester: 5 units*

Students will develop practical and creative shooting skills, and will use the *Adobe Photoshop* program to refine and print their photos. Each student must have a digital camera.

## **AR105 Sculpture**

*Alternate years (11, 13...) Fall: 1 semester: 5 units*

Students will work exclusively in three dimensions. The sculptural problems studied will include carving, modeling and assembling, using materials as diverse as wood, clay, plaster and paper.

## **AR106 Creative Project Art**

*Fall/Spring: 1 semester: 5 units*

Students who have excelled in two or more completed art courses may enroll in a semester of *Creative Project Art*, which is defined in conversation with the instructor.

## **BUSINESS**

### **BE100 Keyboarding I**

*Fall: 1 semester: 5 units*

This course is designed especially for those who have never typed before or have not achieved the pre-requisite for Word Processing I (minimum 20 net words per minute). Much emphasis is placed on knowledge of the keyboard and typing techniques. Typing rhythmically and accurately will be stressed. Applications will include typing letters, simplified memorandums, tables and MLA-style reports.

### **BE200 Word Processing I**

*Fall/Spring: 1 semester: 5 units*

This course continues to work on improvement of proper typing techniques and basic skills while increasing typing speed and accuracy. Typing rhythmically and accurately will continue to be stressed. Word processing applications include personal and business letters in several styles, tables, manuscripts and reports, footnotes/endnotes and references.

*Pre-requisite: Keyboarding I or a minimum of 20 net words per minute on a five-minute timed writing*

### **BE300 Word Processing II**

*Fall/Spring: 1 semester: 5 units*

This course reviews the previous keyboarding applications and introduces new office applications such as letters with special features, special office communications, and business forms. Emphasis is put on increasing keyboarding production speeds. Typing rhythmically and accurately will continue to be stressed.

*Pre-requisite: Word Processing I*

### **BE401 Accounting (grades 11 and 12)**

*Fall and Spring: 2 semesters: 10 units*

This course is designed to help the student develop the ability and desire to keep records for personal use and to interpret and analyze business papers and records. The course provides preliminary training for the advanced study of accounting as well as for personal use. The first cycle begins with the simplest basic concept: a sole-proprietor service business. Each cycle adds new concepts such as a corporation merchandise business, payroll, subsidiary ledgers, etc. Also a federal income tax unit will be included. *This course may be applied toward the IMS requirement of three math credits beginning with the class of 2011 but does not meet college admission math requirements.*

## **BIBLE**

### **BI001 Old Testament Survey (grades 9 and 10)**

*Alternate years (10, 12...) Spring: 1 semester: 5 units*

A required course designed to enable the student to obtain a working knowledge of the Old Testament story. Students will be introduced to methods of Bible study along with memorization of the books of the Old Testament and important texts.

### **BI002 New Testament Survey (grades 9 and 10)**

*Alternate years (11, 13...) Spring: 1 semester: 5 units*

A continuation of Old Testament Survey, this required course enables the student to obtain a working knowledge of the Biblical story continued in the New Testament through the life, death, and resurrection of Jesus Christ, and the beginnings of the early Church. Students will build on their skills of Bible study, and will memorize the New Testament books and important texts.

### **BI003 Church & Anabaptist History (grade 11)**

*Fall: 1 semester: 5 units*

A required course that studies the continuing work of God through the history of the Church. The class begins by focusing on the Church as a whole and then moves to a focus on the Anabaptist movement and its principles.

### **BI005 Christian Family Living (grade 12)**

*Fall: 1 semester: 5 units*

This course is a study of Christian principles related to family living. Self-concept, faith development, and communication skills will be examined in the context of parent-child and husband-wife relationships. Each student will be required to do parental interviews and an in-depth analysis of his or her own faith development, plus present his or her own in-depth study of a selection component of the course.

*Fulfills the Bible requirement for the senior year*

### **BI006F Christianity in the World Arena (grade 12)**

*Fall: 1 semester: 5 units*

A course which enables the student to develop an awareness and understanding of the Christian faith in light of other major world religions. Through group research and projects, the class studies how Christianity, along with Judaism, Buddhism, Islam and Hinduism, addresses important issues in Christianity.

*Fulfills the Bible requirement for the senior year*

## **FAMILY & CONSUMER SCIENCE**

### **FC100 Basic Clothing Construction**

*Fall: 1 semester: 5 units*

This elective course is for students with little or no sewing experience. The student will gain skills in the use of the sewing machine and iron by completing several small projects to be compiled in a binder as a personal resource. The student will complete a garment from a pattern and a recycled project. Materials needed: Sewing kit, 3" 3-ring binder, clear sheet covers, fabric and thread.

### **FC101 Child Development (grades 11 and 12)**

*Fall: 1 semester: 5 units*

The course covers the developing child from conception through the age of six. Areas of study include physical, cognitive, social, emotional, and spiritual development. During the first nine weeks the student will evaluate parenting styles and learn child-care techniques. For the last nine weeks the student will observe on-site day care, preschool and kindergarten settings, evaluate teaching styles in early childhood education, and facilitate several preschool sessions at IMS for area preschoolers.

### **FC104 Introduction to Foods**

*Spring: 1 semester: 5 units*

Students will explore the influences on eating choices and guidelines for good nutrition. They will study the tools, terms, and techniques of food preparation and incorporate them into labs spent cooking and eating. They will learn about nutrition, reading labels, sports nutrition, supplements, fad diets, restaurant dining, food safety and proper etiquette. They will also learn to plan nutritious menus, concluding with the preparation of a family meal.

### **FC105 Trading Spaces (grades 11 and 12)**

*Fall: 1 semester: 5 units*

This course covers the historical aspects of housing, innovative housing trends, elements and principles of design, and style. An emphasis is placed on interior design. A two-night field trip to Chicago includes visiting the Illinois Institute of Art, the Chicago Art Institute, Vogue Fabrics, Design Within Reach, IKDEA and taking a tour of homes. The course is project—and career-oriented, concluding with the redesign of a room of choice and a "professional" class presentation. Materials needed: Refinishing materials. Specials: Chicago field trip will cost \$75—includes transportation, lodging, admission and parking.

### **FC201 Advanced Sewing**

*Fall: 1 semester: 5 units*

This course is designed for those who are ready to work independently on projects of advanced sewing techniques. The course includes textile study and career options. Materials needed: Sewing kit, patterns, fabric and thread.

*Pre-requisite: Basic Clothing Construction*

### **FC205 Culinary Arts (grades 11 and 12)**

*Spring: 1 semester: 5 units*

This course is designed for those interested in attaining higher culinary goals. Daily attire includes a chef's coat and hat. Students will learn cooking and baking methods, nutrition, food safety and sanitation, tools and equipment, knife skills, and plating presentations through work in the kitchen labs. International cuisine will be emphasized. Proper etiquette in the business world will also be covered.

*Pre-requisite: Introduction to Foods or permission of instructor*

## **FOREIGN LANGUAGE**

### **FL100 Spanish I**

*2 semesters: 10 units*

This course is based on the text *i ven conmigo I* (Holt). The course is designed to teach students beginning Spanish grammar and culture through reading, writing, listening, projects, and speaking activities. Communication in Spanish is the ultimate goal of all activities through an understanding of language and cultural practices. The text is supplemental with realia such as newspapers, magazines, and children's books. Students will be able to read, write, converse, and comprehend, as well as understand the present and past tenses by the end of the year. *Students must maintain a 'C' average or better to advance to Spanish II.*

### **FL200 Spanish II**

*2 semesters: 10 units*

This course is based on the text *i ven conmigo II* (Holt). It builds on the base established in Spanish I and expands into more complex grammar and communication skills. The text is supplemented with realia such as magazines, newspapers and books, and occasional guest lectures in the target language. Spanish II focuses on putting oral and written skills to practical use through activities and projects. Students should be able to understand and use present, past, future, conditional and several of the compound tenses by the end of the year. *Students must maintain a 'C' average or better to advance to Spanish III.*

*Pre-requisite: Successful completion of Spanish I*

### **FL300 Spanish III**

*2 semesters: 10 units*

This course is based on the text *i ven conmigo III* (Holt). Students again review all grammar covered in Spanish I and II, and study advanced Spanish grammar intensely. The focus of Spanish III is communication in all tenses previously studied, expanding into the subjunctive and compound tenses. Each unit also includes an example of Spanish Literature that re-emphasizes grammar studied in the unit. Realia of a more complex nature than previously used is supplementary to the text. Students spend time cooking and sampling authentic foods and discussing current events. Students should be able to communicate in the tenses listed with an expanded vocabulary over Spanish I and II. *Students must maintain a 'C' average or better to advance to Spanish IV.*

*Pre-requisite: Successful completion of Spanish II*

## **FL400 Spanish IV**

*2 semesters: 10 units*

This course focuses on oral and written communication (composition and conversation) and Hispanic literature. Some grammar review will be covered primarily in the context of writing assignments and journaling. The intention of the course is to fine-tune and develop knowledge and skills already acquired. The subjunctive tense will be heavily stressed. The course will require research relating to different aspects of immigration, politics in Central/South America and Hispanic culture. No specific text will be used. Newspapers, magazines, novels, movies, and television programs in the target language will be important sources for projects, discussions, and compositions.

*Pre-requisite: Successful completion of Spanish III*

## **LANGUAGE ARTS**

### **LA001 English I - Fundamentals (grade 9)**

*Fall: 1 semester: 5 units*

The course focuses on the basic principles of English grammar, usage and the general conventions of the written language. Elements of literature are also explored, such as character, plot structure, setting and style.

### **LA002 English I - Literature (grade 9)**

*Spring: 1 semester: 5 units*

This course builds on literary concepts introduced in Fundamentals and focuses on three main units: Shakespeare, poetry and the epic. Works included represent various time periods and provide an introduction to some of the classics, including excerpts from The Odyssey and Romeo and Juliet, as well as a range of poetic works from various cultures and historical periods.

### **LA003 English II - Composition (grade 10)**

*Fall: 1 semester: 5 units*

This course surveys several kinds of writing (persuasive, descriptive, expository and narrative) and gives students practice in writing each of them. Grammar and usage rules from LA001 Fundamentals are briefly reviewed and built upon as students learn what constitutes high quality writing and practice it by writing a series of formal compositions throughout the semester.

### **LA004 English II - Communication (grade 10)**

*Spring: 1 semester: 5 units*

The course introduces students to the basic principles of effective communication. Topics covered include public speaking, speech preparation and delivery, speech purposes, parliamentary procedure; interpersonal communication, conflict management and problem solving, group discussion, and oral interpretation. Many short speeches and communication projects will be given.

### **LA005 English III - Research (grade 11)**

*Fall: 1 semester: 5 units*

Three research papers are required in this course, including a 5-10 page paper covering a current social issue using MLA documentation; a paper on career exploration; and an analytical book review.

### **LA006 English III - American Literature (grade 11)**

*Spring: 1 semester: 5 units*

This course includes a chronological study of the American history of literature, including short stories, novels and plays. Significant time during the semester is devoted to studying a range of novels. Coursework includes but is not limited to: writing short compositions reflecting important aspects of these works, in-depth analysis essays, exams and quizzes.

### **LA011 English IV - Advanced Writing (grade 12)**

*Fall: 1 semester: 5 units*

This elective, one-semester course is designed for the college-bound senior who desires exposure to a variety of writing situations, with an emphasis on creative writing. Samples of writing include but are not limited to: literary explication, personal narrative writing, essays of definition/persuasion, position paper, poetry, short story, flash fiction, and memoir writing. Basic writing skills will be sharpened by reading sample essays, classmates' essays, by free writing, work-shopping and rewriting. The emphasis of writing will be on the continuing process and writing refinement. We will review MLA style and explore APA style. Final grades are based on the student's semester portfolio.

### **LA013 English IV - Advanced English (grade 12)**

*Spring: 1 semester: 5 units*

An elective course developed around World Literature, the emphasis of this course will be placed on reading novels, short stories, essays, poems, and film review. Themes used to develop curriculum include: justice/injustice; the role of men/women within cultures; power; survival; choices, and the Christian response to all these areas. Evaluation will be in the form of tests, projects and papers.

### **LA014 English IV - British Literature (grade 12)**

*Spring: 1 semester: 5 units*

This elective course includes a chronological overview of British history and literature, including active reading of selected plays, poems, stories, and novels. Emphasis is on the Classics, with most evaluation coming through tests, numerous papers, and projects.

*College-prep literature survey course*

*Pre-requisite: English III Research*

**LA016 Novel I (grade 11/spring only/and 12)***Fall or Spring: 1 semester: 5 units*

Students wishing to venture into the novel as literary form by reading and analyzing the classics of world literature would enjoy this course. Content will consist of independently reading eight novels selected from a master list, writing extensive analysis papers about each novel, and weekly discussions with the instructor. Terms studied in relation to the novels will include the following: plot, characterization, setting, theme, point of view, realism, symbolism, style, and tone.

*Pre-requisite: Successful completion of English III Research and permission of instructor.*

**LA017 English IV - Rhetoric***Fall: 1 semester: 5 units*

This practical English course is intended primarily for seniors who plan to attend a two-year post-secondary school or enter the workplace upon completion of high school. Life communication, such as in the workplace, participating in groups, following and writing directions, electronic communication, and all forms of everyday English skills will be emphasized. Final reviews of usage, mechanics, writing skills, comprehension, and vocabulary skills will also be included. Students will hone their reading tastes and work toward comprehension and analysis. Opportunities for speaking, writing, and extensive project work are also included.

**LA500 Advanced Placement (AP) English: Lit/Composition***Fall and Spring: 2 semesters: 10 units*

This is a year-long course that provides an intensive examination of a wide variety of literature and highly specialized literary concepts. AP English is a challenging college-level course designed to cover a range of materials typically found in a college literature or rhetoric survey course, and will conclude with the AP exam, taken at the end of the year. The score earned by the student on the AP exam determines whether college credit is earned by taking the course. This course is open to seniors expecting to attend college the following year.

*Pre-requisite: permission of instructor*

**LA900 English IV - Applied Writing***Fall and Spring: 2 semesters: 10 units*

This elective course includes the basics of practical/applied writing for historical purposes. Layout, copy, photography and organization will be learned. This class meets during SST. Students will learn succinct wording, how to encapsulate events in words and design with *Adobe PageMaker 6.5*. Evaluation is based on mini-project assignments and cooperative group efforts completing historical documents.

*Pass/fail evaluation*

*This course does not fulfill English core requirements.*

## **MATHEMATICS**

**MA002 Pre-Algebra***Fall and Spring: 2 semesters: 10 units*

This course builds a strong foundation for further study in algebra, geometry and statistics. Topics covered include problem solving, order of operations, work with decimals and fractions, solving and graphing equations and inequalities, proportion and percent, probability and statistics, and introduction to geometry.

**MA100 Algebra I***Fall and Spring: 2 semesters: 10 units*

This course covers the basics of algebraic reasoning including writing, graphing, and solving equations and inequalities with variables, real numbers, exponents, and square roots. Other topics covered include work with ratios, proportions, percents, and polynomials. Much emphasis is given to the study of slope and y-intercepts of linear functions, but also quadratic, exponential and radical functions are introduced (for further study in Algebra II). The graphing calculator is used as a tool for graphing any type of function quickly, as well as for data analysis (histograms, scatterplots, and line graphs) and probability (random numbers, combinations, and permutations). Upon completion of this course the student will be prepared to take Geometry.

*Pre-requisite: Successful completion of Pre-Algebra*

**MA200 Geometry***Fall and Spring: 2 semesters: 10 units*

The focus of this course is on reasoning with logic and geometric shapes, starting with the basic foundation of points, segments and angles. Also covered are properties of parallel and perpendicular lines, circles, and triangles, quadrilaterals, and other polygons. Formulas for perimeter, circumference, area and volume of both two and three dimensional figures are studied. Trigonometry is introduced with the study of right triangles. Transformations (reflections, translations, and rotations) are explored and geometric reasoning and proof is encouraged throughout the year. Upon completion of the course the student will be prepared to take Algebra II.

*Pre-requisite: Successful completion of Algebra I*

**MA300 Algebra II***Fall and Spring: 2 semesters: 10 units*

This course addresses the basic properties of functions (domain, range, zeros, and local extrema). The main functions studied are polynomial, exponential, logarithmic, rational, and radical. Other topics include curve fitting, linear systems, matrices, sequences, and an introduction into complex numbers, probability and statistics, trigonometry, and conic sections. Upon completion of the course the student will be prepared to take Pre-Calculus or a similar-level course.

*Pre-requisite: Successful completion of Algebra I and Geometry*

## **MA302 Life Skills Math**

*Fall: 1 semester: 5 units*

This course includes math skills for everyday living, covering topics such as proportions, percents, fractions, decimals, and problem solving. It also builds a solid foundation for further study in algebra, geometry, and statistics. *This course does not meet standards for regents university entry requirements.*

## **MA303 Personal Finance**

*Spring: 1 semester: 5 units*

This course teaches students how to save and invest money, create and maintain a budget, manage credit, control debt, and set financial goals. The course also helps students develop consumer awareness of all types of insurance, renting and buying a home, and paying taxes.

## **MA400 Pre-Calculus**

*Fall and Spring: 2 semesters: 10 units*

This course guides students through an in-depth analysis of the basic types of functions (polynomial, power, rational, exponential, logistic, logarithmic, and trigonometric). The analysis addresses continuity, extrema, asymptotes, symmetry, transformations, and end behavior. Other topics include complex numbers, limits, writing mathematical proofs, vector manipulation, conic sections, combinatorics, discrete mathematics and statistics. Upon completion of the course the student will be prepared for AP Calculus or any college-level calculus course.

*Pre-requisite: Successful completion of Algebra II or a similar course*

## **MA500 Advanced Placement (AP) Calculus**

*Fall and Spring: 2 semesters: 10 units*

This course covers the topics of limits of functions, continuity, derivatives and their applications, integrals and methods of integration, and simple differential equations. Upon completion of the course, the student will be prepared to take the Advanced Placement Calculus AB Exam. *The AP exam fee is \$84. Pre-requisite: Successful completion of Pre-Calculus or a similar course and the consent of the instructor*

## **MUSIC**

### **MU001 Introduction to Music (grade 9)**

*Fall: 1 quarter: 2.5 units*

This one-quarter course is required for all freshmen. It includes a study of the fundamentals of music theory, an overview of music history and examines the role of music in our lives.

### **MU100 Chorale**

*Fall or Spring: 1 semester: 2.5 units*

This is a choir available to any interested freshman, sophomore, junior or senior. The course is designed to introduce basic singing skills to beginners and advance the skills of experienced musicians. Sight-singing, vocal development and musicianship are all integral to this course. The *Chorale* performs in several public concerts (on and off campus) throughout the year and participates in IHSMA large group contest each May.

### **MU101 Symphonic Band**

*Fall and Spring: 2 semesters: 5 units*

This is an elective opportunity for any student seeking to improve skills on a musical instrument. Students participating in Symphonic Band will develop a documented practice routine. Performances are scheduled throughout the year, including the *Midwest Regional Mennonite Orchestra Festival* hosted by three schools on a rotating basis.

### **MU102 Advanced Music**

*Spring: 1 semester: 5 units*

This is an elective course in music theory, music history, and basic conducting techniques. Music theory will include a study of chord construction, learning to write and harmonize melodies, and the creation of original compositions. Music history will be studied chronologically, and will emphasize a study of forms of music and the principle composers, together with analysis of and listening to representative musical examples.

### **MU200 Concert Choir**

*Fall: 1 semester: 2.5 units*

Concert Choir is open to juniors and seniors who have completed at least one semester of Chorale. A principal goal is to improve singing within a choral setting. Teamwork is an important emphasis as a means to achieving a healthy choral sound.

*Pre-requisite: minimum of 1 semester of Chorale*

### **MU300 Touring Choir**

*Spring: 1 semester: 2.5 units*

This is an ensemble of approximately 40 members, selected by audition in late November. Membership in the choir reflects a commitment to excellence in the choral art. Touring Choir performs a series of concerts in churches of the local area in the spring of the year, and participates in the MSEC Choral Festival.

*Pre-requisite: Concert Choir the previous semester*

# PHYSICAL EDUCATION AND HEALTH

## **PE100 Physical Education**

*Fall or Spring: 1 semester: 1.25 units*

There is a rotating schedule for Physical Education classes. This allows students to be exposed to numerous activities to create interest in some individual or team sport that may become life-long activities.

All students physically able shall be required to participate in physical education activities during each semester they are enrolled in school except as otherwise provided in this paragraph. A minimum of one-eighth unit each semester is required. A 12th-grade student who meets the requirements of this paragraph may be excused from the PE requirement by the principal, if the parent/guardian requests in writing that the student be excused from the PE requirement. A student wishing to be excused from the PE requirement must seek to be excused in order to enroll in academic courses not otherwise available to the student, or be enrolled or participating in one of the following:

- a cooperative or work-study program or other educational program authorized by the school which requires the student to leave the school premises for specified periods of time during the day
- an organized and supervised athletic program which requires at least as much participation per week as one-eighth unit of PE

A student is not required to enroll in either PE or Health courses if a parent/guardian files a written statement with the principal that the course conflicts with religious beliefs. Students in grades 9-11 may be excused from the PE requirement in order to enroll in academic courses not otherwise available to the student if the board of directors or authorities of the school determine that students may be permitted to be excused from the PE requirement. A student may be excused by the principal, in consultation with the guidance counselor, for up to one semester per year, if the parent/guardian requests in writing that the student be excused from the requirement. The student seeking to be excused must, at some time during the period for which the excuse is sought, participate in physical activity for 120 minutes per week *and* sign off on the *Healthy Kids Act* waiver form.

Physical Education activities shall emphasize leisure time activities which will benefit the student outside the school environment and after graduation from high school.

## **PE005 Health I (grade 10)**

*Fall: 1 semester: 5 units*

This course is required for graduation, and recommended in the sophomore year. It includes the study of spiritual, emotional, intellectual, environmental and social health, as well as infectious diseases and preventive measures. Reproductive health, mental disorders, nutrition and illegal substances will also be discussed.

## **PE006 Health II (grade 10)**

*Fall: 1 semester: 5 units*

This course, not required for graduation, includes elements of Health I but with the option of more individualized reading and research. It also includes units on safety, first aid, consumer health and health-related careers.

# SCIENCE

*Five units of science may include one of the following groupings: Animal Science/Advanced Animal Science; Horticulture/Advanced Horticulture; or Agricultural Precision Technology/Soil & Conservation. Also, each 'group' of courses above is worth 5 units of science; each individual course above is worth 2.5 units of science.*

## **SC001 General Science (grade 9)**

*Fall and Spring: 2 semesters: 10 units*

This course is recommended for freshmen. It will consist of 18 weeks of introductory chemistry; the second 18 weeks will be focused on environmental and life science. Students will perform chemistry labs and explore the world around us by observing our local environment and the organisms that cohabitate in that environment.

## **SC002 General Biology (grade 9 or 10)**

*Fall and Spring: 2 semesters: 10 units*

This course is required for graduation. It is recommended in the sophomore year, but is open to freshmen with a strong interest in science. First semester topics: The common characteristics of living things and molecular processes of biology from atoms to cells. How cells divide, obtain nutrients and capture the energy from the sun. Inheritance patterns and genetic diseases. Second semester topics: The discovery of the genetic material. How information is passed from DNA to RNA to proteins and how mutations sometimes occur in that process. The variety of species on Earth from bacteria to humans. Plant growth and development. Ecology and how all living things are dependent on the natural cycles of nature and a healthy environment.

## **SC003 Chemistry (grade 10, 11 or 12)**

*Fall and Spring: 2 semesters: 10 units*

An elective course covering the principles, methods, concepts, and applications of chemistry, employing a discovery approach. The nature of matter and reactions thereof are studied based on observations and data taken experimentally.

*Pre-requisite: Successful completion of Integrated Algebra I*

**SC004 Physics (grade 10, 11 or 12)***Fall and Spring: 2 semesters: 10 units*

This is an elective course covering the classical physics areas of mechanics, properties of matter, heat, sound, and light. Some time is also given to the modern physical areas of atomic and nuclear physics. *Pre-requisite/Co-requisite: Successful completion of Integrated Algebra II*

**SC201 Advanced Placement (AP) Chemistry (grade 11 or 12)***Fall and Spring: 2 semesters: 10 units*

Students who are planning to study chemistry in college will benefit from this class, which will expose them to areas of chemistry that could not be adequately covered in the first year. Topics include stoichiometry, oxidation-reduction, electrochemistry and organic chemistry. *The AP exam fee is \$84. Pre-requisite: Successful completion of Chemistry*

**SC102S Anatomy and Physiology (grade 11 or 12)***Spring: 1 semester: 5 units*

This is a college preparatory course for students with an interest in life science careers, particularly in the health care field. It includes readings and labs in human anatomy and physiology, DNA and genetic technology, the chemistry of living organisms, cell physiology, organ systems and two or more field trips. *Pre-requisite: Successful completion of General Biology & consent of instructor Co-requisite: Successful completion of or progress in Chemistry*

**AG201S Animal Science***Spring: 1 semester: 5 units*

The student will be introduced to the U.S. livestock industry. This course will focus on the types of livestock breeds, environmental concerns, nutritional needs, and management systems of livestock. Students will raise poultry in the classroom (depending on the year) and tour local animal production businesses. Students will have the opportunity to continue their leadership and career development through FFA. *This course meets the IMS graduation science requirements but may not meet college admission requirements.*

*Pre-requisite: Ag Science and Leadership***SC202 Advanced Placement (AP) Physics (grade 11 or 12)***Fall and Spring: 2 semesters: 10 units*

This is for students considering engineering or physics in college. Topics are covered in more depth than in first year physics. Topics include: mechanics, thermodynamics, optics, electricity and magnetism, and nuclear physics. *The AP exam fee is \$84.*

*Pre-requisite: Successful completion of Physics***AG208F Horticulture***Fall: 1 semester: 5 units*

This course will explain the basic plant systems and the careers in the popular horticultural industry. Field trips will be taken to local horticultural businesses. Students will study the growth and production of flowers, plants, fruits and vegetables. Students will also learn about growing media, propagation, germination, transplanting, and maintenance practices. Students will be instructed in practical floral and landscape design. Students will design the floral arrangements for the annual *Appreciation Banquet*. Leadership and communication skills will be emphasized through the FFA. *This course meets the IMS graduation science requirements but may not meet college admission requirements.*

**AG208S Advanced Horticulture***Spring: 1 semester: 5 units*

This course will focus on the advanced areas of horticulture such as landscape design, arrangement of flowers in floriculture and the landscape, and the identification of flowers, foliage plants, bedding plants and woody plants used in the horticulture industry. Practical landscaping on the school grounds or a residential area will be one of the hands-on activities in this course. *This course meets the IMS graduation science requirements but may not meet college admission requirements.*

*Pre-requisite: Horticulture***AG209F Advanced Animal Science***Fall: 1 semester: 5 units*

Types of livestock breeds, management practices, small companion animals, alternative livestock and livestock marketing techniques will be studied in this advanced animal science course. Students will visit various local livestock farms to experience what they are learning. Learning activities will include special group projects such as a "how to" animal science video. *This course meets the IMS graduation science requirements but may not meet college admission requirements.*

*Pre-requisite: Animal Science***SOCIAL STUDIES****SS001 World History (grade 10)***Fall and Spring: 2 semesters: 10 units*

This is a required course that surveys the history and cultures of the world. An emphasis is placed on developing an understanding of cultures, geography, and historical events.

**SS002 American History (grade 11)***Fall and Spring: 2 semesters: 10 units*

This is a required general survey of the history of the United States from colonial times to the present, with an emphasis on the Civil War to the present. It stresses relevancy of U.S. History to American life today, and the development of historical thinking skills.

**SS003 American Government (grade 12)** *Spring: 1 semester 5 units*  
This is a required course that analyzes the organization and function of our national, state, and local governments with an emphasis on relationship of government to American life. The student will be encouraged to explore the relationship between faith and politics.

**SS100 Economics (grade 11 and 12)** *Fall: 1 semester: 5 units*  
This is an elective course in which students learn the fundamental concepts of micro-, macro-, and international economics and apply them in practical and intellectually engaging ways to their everyday lives. The study of economics will deal with the many ways in which individuals, households, firms, industries and governments decide to employ their given talents and material resources to best satisfy society's many desires.

**SS102 Readings in 19th & 20th Century World History (grade 11 and 12)** *Fall or Spring: 1 semester: 5 units*  
This individualized elective course requires extensive reading of biographies, historical works and historical fiction. Book reports are to evaluate the historical significance of each book. Each book is then discussed with the instructor, with an emphasis on its relevance for today's world.

**SS103 Studies in Current Events (grade 11 and 12)** *Fall: 1 semester: 5 units*  
Students will analyze through discussion and further study, major current issues in the world today. Students are asked to consider these events in view of Christ's teaching and discuss how we should react to or be involved in these changes in our world. Current newspapers will be used as resource materials. Students will be asked to subscribe to a news magazine for the semester.

**SS104 Sociology (grade 11 and 12)** *Fall or Spring: 1 semester: 5 units*  
This course involves a study of the social organizations which regulate American life today. Emphasis is placed on understanding society and how research is conducted to gain more knowledge. Students will be introduced to the major theoretical approaches to sociology and to the basic concepts of sociology.

## **OTHER**

**SU000 Study Hall** *Fall or Spring: 1 semester: 0 units*  
*By permission only*

**SU100 Library Aide (grade 12)** *Fall or Spring: 1 semester: 0 units*  
*By permission only*

**SU102 Peer Tutor (grade 12)** *Fall or Spring: 1 semester: 0 units*  
This is designed for students who demonstrate mastery over course materials and are interested in providing assistance to other students. Students would work under the direction of the guidance counselor and/or the resource instructor. *By permission only*

**SU400 Creative Projects (grade 12)** *Fall or Spring: 1 semester: 5 units*  
This class is designed for seniors who are self-motivated and wish to explore a project of personal interest in any academic subject area. Students are required to express interest to the guidance counselor, submit three teacher recommendations, and write an essay explaining the scope, depth, and outcome of the chosen semester-length project. A faculty committee will then determine his or her acceptance or rejection into the class. A faculty proctor will be selected to meet with the student once a week. Grading is pass/fail. Areas of choice could include robotics, computer design, technology, consumer science, writing, business management, agriculture, fashion, journalism, etc. The only limit is the student's desire and imagination.

**SU900 Directed Studies** *Fall or Spring: 1 semester: 0 units*  
This is a course geared to student needs for remedial work in a particular area. Special emphasis is given to study skills.

## **IOWA COMMUNICATIONS NETWORK (ICN)**

**SS101 Psychology (grade 11 and 12)** *Spring: 1 semester: 5 units*  
This is a course which meets daily for a block period. Areas of study will include theories of learning, motivation, emotions, personality development, mental illness, and abnormal psychology. Students will participate in a counseling skills workshop, research one theorist, and read current research on a topic of their choice. Through this course, the student will come to better understand the larger field of psychology as well as him/herself.

- *students are expected to be in class regardless of whether IMS is in session or on break*
- *though these options are available, the administration of IMS does not promote them as alternatives to the actual classroom situation in which a teacher is physically present*

# IOWA ONLINE AP ACADEMY

A variety of Advanced Placement (AP) courses are available to students online through the University of Iowa's AP Academy. Course materials and AP exam fees are paid for by a grant received by the University of Iowa; there is, therefore, no cost for students who take the online AP courses. Students may designate a period of the day to work on the online course. Students taking the AP courses may earn both high school and college credit. High school credit is awarded based on the completion of work for the course; college credit is based on the score obtained on the AP exam and is awarded at the discretion of the institution upon enrollment.

## **APELAC AP English Language and Composition**

*Fall and Spring: 2 semesters: 10 units*

AP English Language and Composition explores the richness of our language, including syntax, imitation, word choice, and tone. Students learn about their own composition style and process, starting with exploration, planning and writing, and continuing through editing, rewriting, and polishing. The equivalent of an introductory college-level survey course, AP English Language and Composition prepares students for the AP Exam and for further study in communications, creative writing, journalism, literature, and composition. *The AP exam fee is \$84.*

*Pre-requisite: At least a B in most recent English course*

## **APMIE AP Microeconomics**

*Fall or Spring: 1 semester: 5 units*

Learn how to spot patterns in economic behavior and how to use those patterns to explain buyer and seller behavior under different economic conditions. AP Microeconomics studies the economic way of thinking, understanding the nature and function of markets, the role of scarcity and competition, the influence of factors such as interest rates on business decisions, and the role of government in promoting a healthy economy. The equivalent of an introductory college-level course, this course prepares students for the AP Exam and for further study in business, history, and political science. *The AP exam fee is \$84.*

*Pre-requisite: Basic Algebra (Algebra I)*

## **APMAE AP Macroeconomics**

*Fall or Spring: 1 semester: 5 units*

Macroeconomics explains how to identify trends in our economy and how to use those trends to develop performance measures and predictors of how our economy will grow or decline. Examine how individuals, institutions, and influences affect one's own economic status, and how these factors can change one's life through employment rates, inflation, government spending, taxes, and production. The equivalent of an introductory college-level course, AP Macroeconomics prepares students for the AP Exam and for further study in business, history, and political science. *The AP exam fee is \$84.*

*Pre-requisite: Algebra II (or Math Analysis)*

## **APSTAT AP Statistics**

*Fall and Spring: 2 semesters: 10 units*

AP Statistics gives students hands-on experience collecting, analyzing, graphing, and interpreting real-world data. Students will learn to effectively design and analyze research studies by reviewing and evaluating real research examples taken from daily life. Statistics focuses on the uncertainties and compromises of the real world and plays an important role in many fields. The equivalent of an introductory college-level course, AP Statistics prepares students for the AP Exam and for further study in science, sociology, medicine, engineering, political science, geography, and business. *The AP exam fee is \$84.*

*Pre-requisite: Algebra II or Math Analysis*

## **APGOVS AP U.S. Government and Politics**

*Fall or Spring: 1 semester: 5 units*

U.S. Government and Politics studies the structure and operations of the U.S. government and the behavior of the electorate and politicians. Students will gain the analytic perspective necessary to critically evaluate political information, hypotheses, concepts, opinions, and processes. Along the way, students will develop the skills needed to examine general hypotheses, concepts, opinions, and processes. Along the way, students will develop the skills needed to examine general propositions about government and politics, and to analyze the specific relationships between political, social, and economic institutions. The equivalent of an introductory college-level course, AP U.S. Government and Politics prepares students for the AP Exam and for further study in political science, law, education, business, and history. *The AP exam fee is \$84.*

*Pre-requisites: U.S. History and good writing skills*

## **APUSHI AP U.S. History**

*Fall and Spring: 2 semesters: 10 units*

Mastery of historical knowledge and critical analysis are the cornerstones of AP U.S. History. Students will learn how decisions and events of the past continue to have profound effects on the world today and how knowledge of the causes behind past events can influence future decisions. They will put factual knowledge to work by weighing evidence and interpreting problems presented by historians. The equivalent of an introductory college-level course, AP U.S. History prepares students for the AP Exam and for further study in history, political science, economics, and sociology. *The AP exam fee is \$84.*

*Pre-requisites: At least a B in most recent social studies course and good writing skills*