

Appleton City High School
2019-2020
Program of Studies



HOME OF THE BULLDOGS

REQUIREMENTS FOR GRADUATION

Twenty-nine (29) total credits

- Four credits of English
- Three credits of Mathematics
- Three credits of Science: Physical Science (9th) and Biology (10th)
- Three credits of Social Studies (American History and American Government required)
- One credit of Fine Arts
- One credit of Physical Education
- One credit of Practical Art
- One-half credit of Health
- One-half credit of Personal Finance
- 12 credits of Electives

GRADING SCALE

Grade cards are issued eight times during the school year: at the mid-term and again at the end of each quarter. The following grading scale is utilized:

100-94.....A	76-74.....C
93-90.....A-	73-70.....C-
89-87.....B+	69-67.....D+
86-84.....B	66-64.....D
83-80.....B-	63-60.....D-
79-77.....C+	59-0.....F

Weighted classes include, Probability & Statistics, Chemistry, Chemistry II, Physics, Spanish II, AP Computer Science Principles, and dual credit courses. The following scale is utilized:

A-	3.667	4.000
B+	3.333	3.667
B	3.000	3.333
B-	2.667	3.000
C+	2.333	2.667
C	2.000	2.333
C-	1.667	1.667
D+	1.333	1.333
D	1.000	1.000
D-	0.667	0.667

(There is no additional weight for grades below C)

GENERAL ELECTIVES

A+ TUTORING

Grade: 10-12

Credit: 1/2

Formalized tutoring of other students in the school setting and authorized by the A+ Schools Program will earn documented hours of A+ Schools compliance. Students will be assigned to a classroom (typically elementary or junior high). All A+ Schools tutoring must be conducted in a school setting and report forms must be signed by certified Appleton City R-II staff.

OFFICE AIDE

Grade: 12 only

Credit: 1

Prerequisite: Application and Principal Approval

Students learn to operate the copy and fax machines, telephone etiquette, mail handling, intercom, and filing. An office aide must be dependable and trustworthy. Grade will be pass/fail. Only one credit will be awarded during the student's high school program of studies. **Students must fill out an application.**

COMMUNICATION ARTS

ENGLISH I

Grade: 9

Credit: 1

This course covers the fundamentals of grammar with emphasis on words, parts of speech, the development of the paragraph, and short essay writing. Short story and poetry units, as well as non-fiction, the novel, and the play, will be covered. Emphasis will be placed on the elements of plot, theme, point of view, climax, resolution, and literary devices.

ENGLISH II

Grade: 10

Credit: 1

Prerequisite: English I

This course is designed to develop and strengthen skills in sentence construction. It will include units in parts of speech, sentence patterns, development of paragraphs and compositions, study of Greek and Latin roots, homonyms, vocabulary, and spelling. This course will also extend the student's knowledge of literature through a study of different genres and literary devices.

ENGLISH III

Grade: 11

Credit: 1

Prerequisite: English II

This is a course in English grammar, usage, sentence structure, mechanics of writing, vocabulary, and composition. A term paper is mandatory. The student will also study American literature from the time of the Pilgrims to the present. Time will be devoted to the study of literary devices and essay writing about literature.

ENGLISH IV

Grade: 12

Credit: 1

Prerequisite: English III

This is a general survey course in English literature from Beowulf to the beginning of Romanticism. Special emphasis is placed upon the reading and analysis of English masterpieces. Research reports are a major component of the course.

FOREIGN LANGUAGE

SPANISH I

Grade: 9-12

Credit: 1

This course will provide the student with a general introduction to the Spanish language: sound system, pronunciation, functional vocabulary related to everyday life, cultural information and basic grammatical structures. Emphasis will be on the acquisition of four skills: listening, speaking, reading and limited writing.

SPANISH II (weighted)

Grade: 10-12

Credit: 1

Coursework builds upon knowledge gained in Spanish I. Emphasis is on perfecting pronunciation, mastery of the basic grammatical structures, and increased communicative proficiency. Acquisition of functional vocabulary is expected. Students will be exposed to the past tenses, future, conditional and subjunctive mood. Students will be expected to apply them in their writing and speaking.

MATHEMATICS

PRE-ALGEBRA

Grade: 9

Credit: 1

This course is an introduction to basic algebra concepts and a review of advanced topics from 8th Grade Math. The course is designed to help students overcome weaknesses in mathematics and emphasizes the concepts necessary to be successful in Algebra I and II. Helping students develop good mathematical study skills and learning strategies as an integral part of this course.

ALGEBRA I

Grade: 9-10

Credit: 1

Algebra I provides a formal development of the algebraic skills and concepts necessary for students to succeed in advanced math courses. The concept of function is emphasized throughout the course. Topics include: operations with real numbers, linear equations and inequalities, relations and functions, polynomials, algebraic fractions, and nonlinear equations.

GEOMETRY

Grade: 10-11

Credit: 1

Prerequisite: Algebra I

Geometry is designed to develop skills in the principles of logic, inductive reasoning and deductive reasoning in both mathematical and non-mathematical situations. The parts, properties, areas and volumes of basic geometric figures are studied. This course will also strengthen students' basic algebraic skills.

ALGEBRA II

Grade: 11-12

Credit: 1

Prerequisite: Geometry

Algebra II is designed to extend concepts previously learned in algebra I and introduce new topics that will serve as a foundation for more advanced courses. Quadratic functions, graphing, complex numbers, exponential functions, conic sections, logarithms, and matrices are covered. Students will also be introduced to statistics and data analysis.

PROBABILITY & STATISTICS (weighted)

Grade: 12

Credit: 1

Prerequisite: Algebra II (grade of C or better)

This course is designed to introduce the methods used in the field of applied statistics. Emphasis is given to basic concepts and techniques for collecting and analyzing data, drawing conclusions, and making predictions. The major focus of this course is to provide students with experience in using the computer to solve problems using mathematical models.

SCIENCE

PHYSICAL SCIENCE

Grade: 9

Credit: 1

The purpose of this required freshman course is to provide students with an investigative approach in the development of concepts related to chemistry and physics, as well as earth and space science. Students will develop skills in the use of scientific equipment and the investigative approach to solve real world problems. This course will include various group and individual projects related to the above areas of instruction.

BIOLOGY I

Grade: 10

Credit: 1

Prerequisite: Physical Science

Biology I will study the general characteristics of microorganisms, plants, and fungi. In addition, Biology I will study the structure and function of the cell and the fundamentals of genetics. Activities will include oral discussion, note taking, scientific investigation, projects, and dissection labs.

BIOLOGY II

Grade: 11-12

Credit: 1

Prerequisite: Biology I

This course is a continuation of Biology I and is an in-depth study of biological principles. Students will spend the first semester studying the general characteristics of amphibians, reptiles, and mammals. During the second semester students will study the structure and function of the human body. Activities will include oral discussions, note taking, oral presentations, and various dissections that relate to the subject matter.

CHEMISTRY (weighted)

Grade: 11-12

Credit: 1

Prerequisite: Enrollment in or completion of Algebra II and 86% or higher in Algebra I

This course covers basic principles of atomic theory, atomic structure, the nature of elements and compounds, and the relationship of chemistry to everyday living. Students will learn to use dimensional analysis as an integral part of problem solving strategies, and they will learn basic analysis techniques through lab work.

CHEMISTRY II (weighted)

Grade: 12

Credit: 1

Prerequisite: Chemistry I

This course will revisit basic Chemistry information then advance into the study of Stoichiometry, the Mole, Gas Laws, and work in the lab developing natural products for everyday use.

PHYSICS (weighted)

Grade: 12

Credit: 1

Prerequisite: Chemistry and 86% or higher in Algebra II

This course targets basic physics and engineering concepts addressed in college physics. Problem-solving skills are stressed with application to derivatives and integrals for mathematical calculations involving work. Four fields will be studied including mechanics, gases, electricity, and nuclear physics.

SOCIAL SCIENCES

AMERICAN HISTORY

Grade: 9

Credit: 1

This course will involve the study of industrialization of the U.S. and its role in world affairs from 1900 to the present. Emphasis is placed on the Progressive movement, Theodore Roosevelt, Woodrow Wilson, and World War I from the U.S. perspective. Study will continue through the Great Depression and FDR, World War II, as well as post war years as the U.S. assumed global leadership. Study will also include political developments in the Cold War Era, including the Eisenhower, Kennedy, Johnson, and Nixon years.

Specific emphasis is also placed on the Vietnam War and Watergate.

WORLD HISTORY

Grade: 10

Credit: 1

Topics surveyed will include the Tudor Dynasty, the English Civil War, the French Revolution, and the Napoleonic Era. Forces unleashed in Europe (liberalism, nationalism, industrialism, imperialism, and democracy) in the late nineteenth century will be covered. World War I (causes and effects), the Russian Revolution and the Stalin Era, as well as topics in post war Europe and Asia will be covered. Geography will be incorporated through the use of maps, worksheets, and other supplemental materials.

AMERICAN GOVERNMENT

Grade: 10-12

Credit: 1

This course involves contemporary concerns and historical development of the American government. Emphasis is placed on the organization and function of the federal, state, and local governments.

PSYCHOLOGY

Grade: 11-12

Credit: 1

This course introduces the basis of human behavior by helping students understand psychological problems, increasing their ability to live harmoniously with others, and providing instruction in the principles of psychology.

GEOGRAPHY (semester)

Grade: 11-12

Credit: 1/2

This course will study the locations and mappings of the world as students study the physical characteristics of what makes each area unique and their relationship to changes in society and the environment.

ECONOMICS (semester)

Grade: 10-12

Credit: 1/2

Satisfying society's diverse needs and wants is limited by time, money, energy, and resources. Find out how economic systems manage these limitations by developing systems of exchange and balancing the use of scarce resources. Examine the local and global consequences of economic decisions, the role of technology in economics and the function of government in shaping economic policy.

HEALTH / PHYSICAL EDUCATION

HEALTH (semester)

Grade: 10-12

Credit: 1/2

This course is designed to develop an understanding of the body, its needs and functions. Students will study

basic anatomy and physiology, as well as causes, prevention, and cure of diseases. Healthful living, pollution control, and consumer health will also be emphasized.

PHYSICAL EDUCATION

Grade: 9-12

Credit: 1

Physical education is designed to help each student build and maintain a high level of physical fitness with an emphasis in sportsmanship. Additional areas of emphasis include coordination, strength, endurance, flexibility, and the development of athletic skills. Attention is also given to the development of lifetime recreational skills and attitudes.

WEIGHT TRAINING

Grade: 10-12

Credit: 1

Weight training is designed to help each student build and maintain a strength training program. Weight lifting is paired with other physical activities to help students develop strength, endurance, flexibility, coordination and general athletic skills.

FINE ARTS

ART I

Grade: 9-12

Credit: 1

Art I is a course introducing the basic principles of art including basic techniques in a wide variety of two dimensional and three dimensional media. Students will also be given an introduction to art history.

ART II

Grade: 10-12

Credit: 1

Prerequisite: Art I

Art II includes an intensive art history curriculum emphasizing the development of art theory skills, critical thinking skills, and individual creativity.

ART III

Grade: 11-12

Credit: 1

Prerequisite: Art II

Art III emphasizes the individual creative approaches to art projects, original concepts and the development of technical skill.

ART IV

Grade: 12

Credit: 1

Prerequisite: Art III

This course concentrates on the student's strengths as an artist, including assigning a general topic to a student and allowing creative interpretation in media of the student's choice. Independent projects are emphasized, with students actively involved in choosing projects. Students will complete units in composition, illustration, theme drawing, enlargements, and series assignments. In

most of these units, students will choose their own media.

CHOIR

Grade: 9-12

Credit: 1

This diverse vocal music course includes the basics of vocal technique, music theory and sight reading, as well as an exploration of music from a variety of cultures throughout history. The course curriculum also emphasizes dance, theater, skits and set design. Students are expected to participate in the winter and spring concerts, special occasion concerts, as well as music contests in the spring.

ART APPRECIATION

Grade: 9-12

Credit: ½

This course introduces the origins and historical development of art. Emphasis is on the relationship of design principles to various art forms including but not limited to sculpture, painting, and architecture. Upon completion, students should be able to identify and analyze a variety of artistic styles, periods, and media.

MUSIC APPRECIATION

Grade: 9-12

Credit: ½

This course introduces students to the history, theory, and genres of music. The course explores the history of music, from the surviving examples of rudimentary musical forms through to contemporary pieces from around the world.

BAND

Grade: 9-12

Credit: 1

Band is a course open to any student (grades 9-12) with previous instrumental music experience. Students will participate in pep band, marching band and concert band performances. Students will also have individual opportunities to participate in optional district and state contests. Attending all full band performances is a course requirement.

PRACTICAL ARTS

COMPUTER APPLICATIONS

Grade: 9-12

Credit: 1

This course is designed to help students master beginning and advanced skills in the areas of word processing, database management, spreadsheet applications, desktop publishing, presentation software, and Internet usage.

PERSONAL FINANCE (semester)

Grade: 10-12

Credit: 1/2

This course focuses on a student's role as a citizen, student, family member, consumer, and active participant in the business world. The intent of the course is to inform students of various financial responsibilities and to

provide them with opportunities for self-awareness, expression, and satisfaction in a highly technical and competitive society. This course will help students investigate areas of interest that will enhance their financial knowledge, responsibility, and security. The course includes daily applications and several individual and group projects. Students will be asked to complete hands-on, real-life work utilizing critical thinking skills and will challenge each student to "think outside the box."

ACCOUNTING I

Grade: 10-12

Credit: 1

This course presents the fundamental principles of accounting and is designed to emphasize the theory of accounting. The accounting cycle is presented as it pertains to proprietorships, partnerships, and corporations. Extensive accounting vocabulary and theory challenges students to develop skills they will use in life as well as a career in the business or accounting field. An accounting simulation evaluates students' mathematical accuracy, work ethic, and understanding of the accounting cycle. College credit is available through State Fair Community College for juniors and seniors.

ACCOUNTING II

Grade: 11-12

Credit: 1

Prerequisite: Accounting I

This course is designed to help students acquire a more thorough, in depth knowledge of accounting procedures and techniques utilized in solving business problems and making financial decisions. Students will develop skills in analyzing and interpreting information common to partnerships and corporations, preparing formal statements and supporting schedules, and using inventory and budgetary control systems.

GRAPHIC DESIGN (Yearbook)

Grade: 9-12

Credit: 1

Students will learn journalism principles as they plan and create the yearbook. Students will be expected to sell ads to local and neighboring businesses and to take pictures at school events outside the regular school day. Students must have a working knowledge of computer applications.

INTRO TO COMPUTER SCIENCE

Grade: 9-12

Credit: 1

This course is designed to offer an introduction to computer science. Students will learn the basics of computer programming through text based python programming along with the basics of computer science. The material emphasizes computational thinking and helps develop the ability to solve complex problems. It gives a foundation in the tools used in computer science

and prepares students for further study in computer sciences.

AP COMPUTER SCIENCE PRINCIPLES (weighted)

Grade: 11-12 **Credit: 1**
This rigorous course introduces students to the foundational concepts of computer science and explores the impact computing and technologies have on society. The course covers a broad range of foundational topics, including programming, algorithms, the Internet, big data, digital privacy and security, and the societal impacts of computing. The AP curriculum, administered by The College Board, consists of standardized high school courses that are roughly equivalent to undergraduate college courses. After completing an AP class, students typically take the AP exam in that subject, which can earn them credits and accelerated placement in college.

AGRICULTURE SCIENCE I

Grade: 9-12 **Credit: 1**
This course is designed as an introduction to general agriculture and horticulture. Units of instruction include animal breeds, animal reproduction, animal nutrition and health, agribusiness, ag processing and food science. In the first unit students will be introduced to the National FFA Organization, supervised agriculture experience programs, leadership development, and over 300 career opportunities. Record keeping using the MO FFA Record Book System will be taught at the beginning of the second semester.

AGRICULTURE SCIENCE II

Grade: 10-12 **Credit: 1**
This course is an introduction to plan sciences, conservation and the horticulture field. Instructional units include plant growth, plant reproduction, crop science, land use and regulations, forestry and entomology. Leadership development, goal setting and SAE development will also be instructional units.

AGRICULTURE CONSTRUCTION

Grade: 11-12 **Credit: 1**
Prerequisite: Agriculture I & II
This course is designed to help students improve their shop skills using ARC welders, MIG welders, oxyacetylene torches, plasma cutters, as well as hand and power tools. Students will complete safety tests and welding/cutting skills tests. An end-of-year assignment will involve completing a project.

AGRICULTURE BUSINESS

Grade: 11-12 **Credit: 1/2**
Prerequisite: Agriculture I & II
This course combines economic principles of business with sales, management, and service skills. Economic principles will include supply/demand, fixed/variable cost, and time value of money, futures/options/stock market, business management and price forecasting. Sales units will include human relations, personal inventory, careers, sales presentations, customer relations, marketing, purchasing, grading and transporting.

ADVANCED LIVESTOCK MANAGEMENT

Grade: 11-12 **Credit: 1/2**
This course will include intensive study in livestock production, management, marketing, nutrition, breeding, production records, selection, animal health, waste management and conservation practices.

ADVANCED CROP SCIENCE

Grade: 11-12 **Credit: 1/2**
This course is designed as advancement to plan sciences, conservation and the horticulture field. Instructional units include plant growth, plant reproduction, crop science, land use, soil management and different farming practices. This course will also expand students' knowledge into the diverse technologies and practices used in crop production.

LANDSCAPING & GREENHOUSE MANAGEMENT

Grade: 11-12 **Credit: 1**
Prerequisite: Agriculture I & II
This course includes careers, the basic techniques of landscape design and selection of plant materials. Developing bids and cost estimates, landscape installation, and landscape maintenance is also included. A major landscape project is required for the class. The greenhouse portion of the class will develop basic skills needed in the operation and management of a production greenhouse. Units of instruction include career opportunities, an introduction to the floriculture industry, plant anatomy and propagation, growing media, pest control/management and marketing. Leadership training and record keeping skills will also be addressed in the course.

CHILD DEVELOPMENT

Grade: 9-12 **Credit: 1**
This course is designed for students to learn more about children. Students will explore the physical, mental, emotional, and social growth development, as well as the

care and guidance of children. Observations and actual experiences are part of this course.

FAMILY LIVING (semester)

Grade: 9-12 **Credit: 1/2**

Understanding human relationships is the basis of this course. Students will become familiar with the concepts and principles related to various family living conditions, including abuse prevention, the establishment and maintenance of relationships, the preparation of marriage, parenthood and family life, and the socialization and development needs of individuals.

NUTRITION AND WELLNESS (semester)

Grade: 9-12 **Credit: 1/2**

This course helps students understand the use of nutrition principles in basic meal planning. Students use the scientific method to study the biological and chemical basis for food fermentation, preservation, processing, and preparation. Students develop laboratory, writing, and reasoning skills through measuring, recording, and graphing data; writing laboratory and short research projects and predicting and evaluating laboratory results.

ADVANCED NUTRITION AND WELLNESS (semester)

Grade: 9-12 **Credit: 1/2**

Prerequisite: Nutrition and Wellness

Advanced Nutrition is a sequential course that builds on concepts from Nutrition and Wellness. This course addresses more complex concepts in nutrition and foods, with emphasis on contemporary issues, or on advanced special topics such as International, Regional, and/or Cultural Foods; Food Science, Nutrition, or Dietetics; or with emphasis on a particular aspect of the food industry, such as Baking, Catering, or Entrepreneurial Endeavors. Higher order thinking, communication, leadership and management processes will be integrated in classroom and laboratory activities.

HOUSING/INTERIOR DESIGN (semester)

Grade: 9-12 **Credit: 1/2**

This course is designed to teach students to make wise decisions about housing. Topics covered include factors influencing the form and use of housing, the varied types of housing, costs, exterior and interior design, home furnishings and equipment, and the careful selection of resources for achieving improved living space to meet individual and family needs.

MATERIALS AND PROCESSING

Grade: 9-12 **Credit: 1**

This course is a study in the basic areas of industrial arts and developing technologies. Students will be required to construct projects in each area of study, including manufacturing and materials processing, wood, plastics,

power, and energy and modern industry. Students will be evaluated on safety tests, worksheets, notebooks, and completion and quality of assigned projects. The course consists of approximately eighteen weeks of classroom work and eighteen weeks of laboratory work.

WOODS I

Grade: 10-12 **Credit: 1**

Prerequisite: Materials and Processing

This course is a study of the development of the basic skills of woodworking. Areas of study include wood resources, project planning, safety, power tools, fasteners, joinery, and modified wood products. Students will complete a small- and a medium-size project of their choice; however, all projects must be approved by the instructor prior to construction. Students will be expected to pass safety tests, objective tests, worksheets, and notebook assignments. The course consists of approximately nine weeks of classroom work and twenty-seven weeks of laboratory work.

WOODS II

Grade: 11-12 **Credit: 1**

Prerequisite: Woods I

This course is a study and development of advanced skills in woodworking. Students will be required to construct a medium-to-large-sized project of their choice; however, all projects must be approved by the instructor prior to construction. Students will be evaluated on project completion. Areas of study include design and planning, wood properties and characteristics, fasteners, advanced joinery, lumbering, and advanced finishing.

WOODS III

Grade: 12 **Credit: 1**

Prerequisite: Woods II

This course is a study and development of advanced skills in woodworking. Students will be required to construct a large-sized project of their choice; however, all projects must be approved by the instructor prior to construction. Students will be evaluated on project completion. Areas of study include design and planning, wood properties and characteristics, fasteners, advanced joinery, lumbering, and advanced finishing.

DRAFTING

Grade: 10-12 **Credit: 1**

This course is a study and development of the basic skills of mechanical drawing. Areas of study include single- and multi-view orthographic projection, dimensioning, auxiliary views, sectional views, pictorials, architectural drafting and computer-aided drafting. Students will be evaluated on the completion and quality of daily drawings and tests.