## CENTERVILLE HIGH SCHOOL

600 CHS DRIVE - CENTERVILLE, IA 52544

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#### Dear Student and Parent:

This Course Guide has been designed to assist you in making the best possible decisions regarding your educational program at Centerville High School. It is my hope that you will make decisions for your high school courses based on your abilities, interests, aptitudes, and future plans. Currently, throughout the nation, there is a push from the business sector of society for more rigor in the classroom. At the state level, the Department of Education, with the consent of the legislature, is also asking for these changes. Colleges are following suit and requiring even more of the advanced courses (especially in science and math) for acceptance into their schools. If you choose the most challenging courses, you will have more options when ultimately selecting a college to attend.

Please take ample time and give a great deal of thought to your course selections for next year and the following years. The number of teachers and sections for each class is based on the spring preregistration. However, we can make minor adjustments in the fall.

The explanations in this Course Guide are brief. If you have specific questions concerning the content of a course, please feel free to contact the teacher currently instructing the class for further information. Of course, as a counselor, I feel that I can give added insight as well.

My job is not to dictate what courses a student will take other than those required by the Board of Education. I try to make appropriate suggestions, but the ultimate decision rests with the student and parent.

Each student can meet individually with me concerning course selections for the next school year. I am more than willing and pleased with the opportunity to meet with parents to discuss your child's future. Feel free to give me a call with any questions or to set up an appointment for a conference.

Best.

#### **GRADUATION REQUIREMENTS**

\* Note "Concentrations" requirement on the following pages.

English (Eng. 9, Eng. 10, Eng. 11) + 2 more semesters Science (Unified Science, Biology required	8 credits
+ 2 more sem. of science) Mathematics *U.S. History I & II *Government *Behavioral Science *Economics *World History I	6 credits 6 credits 2 credits 1 credit 1 credit 1 credit 1 credit
Social Studies Electives World Religions, World History II	1 credit
Electives	18 credits
Total Credits	48 credits

#### **CLASS LOAD**

Students will need to take at least 6 classes plus P.E. each semester in order to meet the credit requirements of 48. Six subjects and PE are recommended as a load of classes that most students can carry comfortably and still have some study hall time. Only highly motivated students who are willing to take lots of work home should consider taking a full schedule of 7 courses and P.E.

#### **EARLY GRADUATION**

Graduation after 7 semesters is possible provided the student has accumulated 48 credits and has met all other graduation requirements. Early graduation is an individual choice but is not recommended for every student. College-bound students are advised to take advantage of the full 8 semesters of college prep curriculum.

The Board of Education has established some regulations for early graduation:

- 1.) An early graduation form must be completed by December 1 of the senior year.
- 2.) The course work required for graduation under board policy "Graduation Requirements" must be fulfilled. The second semester of PE is waived.
- 3.) All financial and other obligations to the schools must be completed before the early graduation request can be approved. This includes but is not limited to the payment of fees and the returning of all classroom and library books.

Other provisions governing students who choose to graduate early include:

- 1.) Early graduates may participate in prom, senior week, and graduation ceremonies.
- 2.) Early graduates are not eligible for second semester extra curricular activities including baseball and softball the summer after graduation.

If late requests for early graduation are submitted, the student must have the recommendation of the superintendent and the principal and the approval of the board.

#### **MULTIPLE DIPLOMA REQUIREMENTS**

Consistent with its obligations to set standards students must meet to be eligible for high school graduation; the Board of Directors hereby establishes a system of multiple diplomas to encourage educational excellence and to encourage completing course work beyond the minimum requirements.

To receive the "Standard" high school diploma from this school district, a student must have earned a total of 48 credits along with two "concentrations", as defined and explained in board policy Code No. 505.7 "Graduation Requirements".

To receive the "With Distinction" diploma, students must have earned a total of 51 credits, maintain a cumulative grade point average equal to or exceeding a 3.0 and will be required to have at least three "concentrations".

To receive the "With Honors" diploma, students must have earned 54 credits, maintain a cumulative grade point average equal to or exceeding 3.5. Students will be required to take 4 years of English, including either College Composition or English 12, 4 years of math including Pre-Calculus, 3 years of science including either Chemistry or Physics and 3 years of Social Studies.

Students will be informed of the multiple diploma options and requirements at appropriate stages of their high school career, including initial enrollment and course registration.

### English (8 credits) English 9 (2) Mathematics (8 credits) Unified Science (2)

English 10 (2) Algebra I (2)

English 11 (2) Transitions to Algebra A & B (2)

English 12 (2) Geometry (2) Biology (2)

College Comp. I (1) Algebra II (2) Advanced Biology (2)
College Comp. II (1) Pre-Calculus (2) Chemistry (2)
Communications (1) Statistics & Probability (1) Physics (2)
Public Speaking (1) Calculus (3) Our Environment (2)

English Composition 11-12 (1) Consumer Math (1) Human Anatomy & Physiology I (1) Research/Technical Writing (1) Human Anatomy & Physiology II (1)

Spanish (6 credits)

Spanish I (2)

Vocal Music (4 years)

Spanish II (2)

Spanish III (2)

Spanish IV (2)

#### Health Occupations/Nursing (1st Year)

Band (4 years)

Medical Terminology (1)
Computer Essentials (1)
Nursing Essentials, I (2)
Introduction to Psychology (1.5)
Nursing Essentials II (2)
Human Anatomy (1)
Human Anatomy Lab (1)
Pharmacology (1)

#### Industrial Arts (6 credits)

Intro to Welding (1)
Intro to Machining (1)
Machine Metals (2)
Advanced Machine Metals (2)
Advanced Machine Metals II (2)
General Woods (1)
Woods II (1)

Drafting (1)

#### **Vocational Agriculture (6 credits)**

Agri Science I (2)
Agri Science II (2)
Natural Resources (1)
Ag. Products (1)
Horticulture I (1)
Principles of Horticulture (Horticulture II) (1)
Survey of Animal Industry (1)

#### Agriculture Career Academy - Year 2 @ IHCC

Fundamentals of Soil Science (1)
Equine Science (1)
Agrarian Systems and Ecology (1)
Woodland Management (1)
Principles of Agronomy (1)
Beef Cattle Science (1)

#### **General Electives**

Cadet Teaching (1) Character Leadership & Development Drama Drama II

#### Social Studies (8 credits)

U.S. History I (1)
U.S. History II (1)
Economics (1)
Behavioral Sciences (1)
World History (1)
World History II (1)
Government (1)
World Religions (1)
International Relations (1)

#### Health Occupations/Nursing (2nd Year)

Mental Health Nursing I (1)
Nutrition (1)
Developmental Psychology (1)
Nursing of Adults 1A (1)
Nursing Clinical 1A (1)
Human Physiology (1)
Human Physiology Lab (1)
Nursing of Adults 1B (1)
Nursing Clinical 1B (1)

#### Art (6 credits)

Intro to Art (1)
Drawing and Watercolor (1)
Acrylic and Oil Painting (1)
Ceramics (1)
Graphic Design (1)
Independent Art I (1)
Independent Art II (1)

#### **Business (6 credits)**

Foundations of Entrepreneurship (1)
Introduction to Business (1)
Business Law (1)
Computer Applications I (1)
Computer Applications II (1)
Marketing (1)
Accounting (1)
Accounting II (1)

#### COLLEGE AND VOCATIONAL PREPARATION

A number of Centerville High School students go on to four-year colleges after high school. We try to encourage the college-bound student to enroll in and complete the courses, which will give them the soundest academic background for college. The Iowa State Board of Regents (which sets guidelines for our three state universities) has now put into effect new admission standards, which take into consideration the number of core courses a student takes during high school.

These admissions standards also include other factors, which include a student's cumulative grade point, class rank and ACT score. These factors are combined in the following formula:

#### **RAI Score**

(2 x ACT composite score)
+ (1 x percentile high school rank)
+ (20 x high school GPA)
+ (5 x number of high school core courses
Regent Admission Index Score

After plugging an individual student's data into the formula, the total score of 245 has been designated as the number declaring that, students are automatically accepted (as long as they have also completed specified coursework) to any of the state universities.

A minimum recommended high school background for entry into a four-year college would include the following:

SUBJECTS C.H.S. courses that would meet

4 years english Eng. 9, Eng. 10, Eng. 11, Eng. 12. Or College Composition

3-4 years mathematics Algebra I, Geometry, Algebra II, Pre-Calculus

3-4 years science Biology, Earth Science/Integrated Science/Unified Science, Chemistry,

Physics, Advanced Biology, Anatomy/Physiology

3 years social studies U.S. History I & II, Government, World History I & II,

World Religions, Behavioral Science or Economics

2-4 years foreign language Spanish I, Spanish II, Spanish III, Spanish IV

Courses in the fine arts, performing arts, computers, or technology will help round out your high school experience.

Many students are interested in applied or technical training at two-year colleges. We also try to provide a broad high school curriculum for the student who plans for employment or vocational training after high school.

You as students and parents need to take a careful look at your long-term goals and decide what would be the best program of study for you.



#### **ENGLISH 9 (full year - 2 credits)**

**GRADES 9-10-11-12** 

English 9 is a one-year required course. Students develop and improve their skills to think clearly and logically. Students will communicate through writing, listening, reading and speaking. Each semester students read short stories, informational texts, speeches, seminal documents, and poems. Also, English 9 exposes students to the Shakespearean play Romeo and Juliet.

#### **ENGLISH 10 (full year - 2 credits)**

**GRADES 10-11-12** 

English 10 is a one-year required course. This course is designed so students may continue to organize and present their analysis and ideas clearly and logically through reading, writing, speaking and listening within course units that contain short stories, poetry, cinema, and non-fiction works. Students will respond to these units primarily through claim-driven essays. Students will also have a chance to investigate future career possibilities as they research and write a formal research essay using MLA style documentation. Finally, students will also read their second Shakespearean drama, *Julius Caesar*, and the short drama *12 Angry Men*.

#### **ENGLISH 11 (full year - 2 credits)**

**GRADES 11-12** 

English 11 is a one- year required junior course suggested for the college-bound, though any junior may enroll. The course blends the study of American Literature and composition. Students will experience formal writing including techniques of expository, descriptive, and persuasive writing. The literature core is multicultural and nonsexist and includes Native American, African American, Spanish, and Puritan literature as well as the female perspective and those with handicapping conditions. The time period of the literature studied ranges from 1500 to present. The content also includes American classics such as *The Crucible* and *The Great Gatsby*.

#### **ENGLISH 12 (full year - 2 credits)**

GRADE 12

College English is a class designed for students who contemplate continuing their formal education. This course includes study of major English authors and the ideas they contributed to our civilization. Students will have an opportunity to perfect their writing ability so that they can write in a concise, knowledgeable way about literary and non-literary subjects. Attention will be given to vocabulary building and competent research paper techniques.

#### **COLLEGE COMPOSITION I (1 semester— 1 credit)**

**GRADE 12** 

IHCC Course ENG105 (3 IHCC credits)

This course emphasizes competent writing skills, focusing on analytical writing. Particular attention is given to the analysis of social issues and/or literary works. Students will write four to six 500 - 1,000 word essays. Instruction also includes clarity, punctuation, and style.

Number of students accepted in class will be determined by success in English 11, standardized test scores and GPA.

#### **COLLEGE COMPOSITION II (1 semester-1 credit)**

**GRADE 12** 

PREREQUISITE: College Composition I IHCC Course ENG106 (3 IHCC credits)

This course introduces students to the process of research writing using the Modern Language Association documentation style. A thesis-driven report paper and a thesis-driven argumentative essay, both documented in MLA style, will demonstrate the student's proficiency with the research process.

#### **COMMUNICATIONS (1 semester – 1 credit)**

**GRADES 11-12** 

Students will learn to communicate effectively and clearly. They will study people and situations and understand how to emulate speaking strategies. They will understand the practices and principles of interpersonal communication in both dyadic and group settings. Emphasis is on the communication process; issues addressed include perception, listening, self-disclosure, speech apprehension, ethics, nonverbal communication, conflict, power, and dysfunctional communication. Upon completion, students should be able to demonstrate interpersonal communication skills, apply basic principles of group discussion, and manage conflict in interpersonal communications situations.

#### PUBLIC SPEAKING (Student Research Labs) (full year - 2 credits) GRADES 10-11-12

The PBS NewsHour Student Reporting Labs initiative is building the next generation of public media with a unique digital journalism curriculum, local PBS station mentors and the opportunity to tell important community stories to the world. The program creates transformational education experiences for middle and high school student in classrooms and after-school environments. Students engage in a powerful form of journalistic inquiry, media production and student-centered learning that build critical thinking, problem-solving, teamwork, news literacy and communication skills. By giving them a voice and the opportunity to reach millions of people via the PBS NewsHour broadcast and digital platforms, the program inspires youth to speak up and be part of the solution. Skills include: News literacy/digital media curriculum focused on storytelling and citizenship. Mentoring model that matches youth with media professionals. Job-ready digital credentials for college applications, resumes and social media. Student Reporting Labs builds lifelong learning skills that translate to other areas of life, both academic and personal, and has been shown to boost intellectual curiosity and shift teen attitudes away from apathy about the news towards active civic engagement.

#### **ENGLISH COMPOSITION/APPLIED ENGLISH 11-12 (1 semester – 1 credit) GRADES 11-12**

Students will learn how to analyze and produce typical business communication, office documents, and social media feeds, including but not limited to letters of application, resumes, memos, scripts for incoming and outgoing business calls, press releases, website scripts, office presentations, and social media feeds. Students will also work on interview skills, speaking and listening, and audience analysis. Lastly, students will have the opportunity to work on scholarship essays.

#### RESEARCH/TECHNICAL WRITING (YEARBOOK) (full year – 2 credits) GRADES 10-11-12

Students are responsible for creating and publishing the yearbook and all responsibilities that come with the yearbook, including but not limited to photography, marketing, design, meeting deadlines, writing captions and articles, collaborating, etc.

# **General Electives**

#### **CADET TEACHING (1 semester – 1 credit)**

**GRADES 11-12** 

Prerequisite: Instructor's Approval

Cadet Teaching is designed for students who have an interest in learning about teaching as a profession. Cadet teaching provides students opportunities to use their acquired skills and knowledge to help younger students.

Criteria for acceptance into this course will be based on the student's past attendance record, previous grades, applicable subject knowledge and approval of the principal and cooperating teacher.

#### CHARACTER DEVELOPMENT AND LEADERSHIP (1 semester - 1 credit) GRADES 9-10

Character Development and Leadership is a researched-based curriculum that emphasizes reading, writing, speaking and listening. This character leadership class is designed to provide students with the necessary skills to be successful in their lives through the study of character traits: attitude, preparation, perseverance, respect, honesty, integrity, composure, tolerance, compassion, gratitude, courage, appreciation, responsibility, empathy, etc. Students will *use Role Models: Examples of Character and Leadership* textbook, read informational pieces, write essays, role-play dilemmas, apply employability skills to lessons, present information to groups, complete assessments, and participate in daily lessons.

#### **SKILLS LAB (Required for Special Needs Students)**

**GRADES 9-10-11-12** 

This course is designed for students who are served in special education. Students will meet daily to work on skill deficit areas identified in their IEP.

#### **STUDENT WELLNESS (1semester - 1 credit)**

**GRADES 10-11-12** 

(Upper classmen will be given priority in the event that class is full) \*Limited enrollment\*

In Student Wellness, students will examine and assess the positive and negative personal choices they will make in their lifetime, along with their benefits and consequences. This is a discussion based class that will focus on helping students acquiring knowledge to make healthy choices in their lives. Topics covered will include: mental health, stress, and stress relief, nutrition, food choices, personal care, physical activity, substance abuse, and diseases. Students will examine the effects of cultural norms on their health and well-being, as well as the well-being of their community.

Course work will include: participation in class discussion, written reports on various health topics, tests, quizzes, projects on assigned topics.



Four years of Spanish are taught at Centerville High School. Students should consider studying a foreign language to benefit in travel, to help understand other cultures, as an aid in vocations in an expanding global society, and as a preparation for advanced study. Students planning to go on to college should consider taking at least two years of foreign language study. Students must have a strong desire to learn and willingness to take responsibility for their own work.

#### **SPANISH I (full year - 2 credits)**

**GRADES 9-10-11-12** 

Students will learn the basics of Spanish through speaking, writing, listening and reading. In addition to the basics of grammar, students will learn about the diverse cultures of Spanish speaking people. No prerequisites are necessary to take this course, but successful Spanish students have very strong English skills. Well-developed study habits are essential as is good attendance since daily work is crucial to student success.

#### **SPANISH II (full year - 2 credits)**

**GRADES 10-11-12** 

PREREQUISITE: Spanish I or Equivalent

A more detailed and continuous study of Spanish is involved in Spanish II. Speaking and writing are essential in learning along with listening and reading. Students will also learn more about the culture and life of Spanish people. Daily work is essential for successful completion of this course.

#### **SPANISH III (full year - 2 credits)**

**GRADES 11-12** 

PREREQUISITES: Spanish I and II

Students will learn more about the Spanish language, life and customs. Short readings are introduced to acquaint the student with literature written in Spanish. Using Spanish is emphasized. Daily work is essential for successful completion of this course.

#### **SPANISH IV (full year - 2 credits)**

**GRADE 12** 

PREREQUISITE: Spanish I, II and III

Literature selections along with magazines and newspaper articles are chosen as topics for discussion. Demonstrative speeches, skits and role-playing are examples of other activities. Problem areas in grammar are revised and discussed. Using the language is greatly emphasized. Daily work is essential for successful completion of this course.

# **SOCIAL STUDIES**



#### U. S. HISTORY I (1 semester - 1 credit)

**GRADES 9-10-11-12** 

This course will deal with the time period starting at the end of the Civil War (1865), and cover topics such as the Trans-Mississippi West, Industrialization, Imperialism, the Gilded Age, the Progressive Era, and finish up with World War I. This course is required for all 9<sup>th</sup> graders and will be offed 1<sup>st</sup> semester only.

#### U.S. HISTORY II (1 semester – 1 credit)

**GRADES 9-10** 

Continuing where U.S. History I left off, this course starts in 1920 and will cover topics such as the Great Depression, World War II This course will be for 9<sup>th</sup> graders and will be offered during the 2nd semester only.

#### **WORLD HISTORY I (1 semester -1 credit)**

**GRADES 10-11-12** 

This course introduces the student to the early civilizations of the ancient world advancing through the classical green and Roman periods, the fall of Rome, the rise of the major world religions, the emergence of the feudal system in medieval Europe, and terminate with the Renaissance. The course incorporates the Iowa Core for Social Studies Essential Concepts and Skills for Geography as well as the Iowa Core for Social Studies Essential Concepts and Skills for History. This course is suggested for all 10<sup>th</sup> graders and will be offed both 1<sup>st</sup> and 2<sup>nd</sup> semester.

#### **WORLD HISTORY II (1 semester – 1 credit)**

**GRADES 10-11-12** 

Beginning with the period immediately following the Renaissance, students will move through absolutism, the Scientific Revolution, the Enlightenment and Early Modern period, the French Revolution, Mercantilism, and Imperialism, up to the First World War This is an elective that is offered 2<sup>nd</sup> semester only.

#### **WORLD RELIGIONS (1 semester – 1 credit)**

**GRADES 10-11-12** 

This course will focus on the 5 major World Religions, as well as numerous cults and alternative methods of worship. This class will be taught from historical and factual point of view. There will be no focus on any one religion, but a broad overview of each one. We will research each religions creation, evolution and major ideas. Religions studied will be the following; Hinduism, Judaism, Buddhism, Christianity and Islam.

#### U. S. GOVERNMENT (1 semester - 1 credit)

**GRADE 12** 

U. S. Government is a required one-semester course for seniors only. As opposed to a traditional course on the structure of government, this course seeks to explain how and why people behave politically in the various aspects of life. Specific topics include the use of scientific polls, political culture and socialization, the three branches, the nature of political parties, and state and local governments.

#### **ECONOMICS (1 semester - 1 credit)**

**GRADES 11-12** 

Economics is a one-semester course available to juniors and seniors. It touches on many aspects of the discipline with a special concentration in supply/demand/price relationships, money, inflation and Austrian business cycle theory, and entrepreneurship in the marketplace.

#### **BEHAVIORAL SCIENCE (1 semester-1 credit)**

**GRADES 11-12** 

Behavioral Science is a required course for juniors or seniors that will include the disciplines of sociology and psychology. One-half of the semester will be dedicated to sociology and the other half dedicated to psychology. The sociology component will look at socialization of the individual, the role of institutions (family, education, and religion) in society, as well as social stratification (social class and minority groups.) The psychology component of the course will include the history of the discipline, behavioral science research techniques, personality, intelligence, human development, and mental disorders.



#### **General Math (FULL YEAR – 2 CREDITS)**

#### **GRADES 9-10**

Transition to Algebra A curriculum along with S.O.A.R math concepts will be taught in this course. Topics include: logic puzzles, problems, and explorations to help build students' mathematical ways of thinking. It invites students to experience the coherence and meaning of mathematics. Content includes the language and logic of algebra, geography of the number line and coordinate plane, area and multiplication of polynomials.

#### **Pre-Algebra (FULL YEAR – 2 CREDITS)**

#### **GRADES 9-10-11**

Pre-Algebra uses logic puzzles, problems and explorations to help build students' mathematical ways of thinking. It invites students to experience the coherence and meaning of mathematics. Content includes the logic of fractions, points lines and slopes, area models and factoring, multiplying polynomials, operations with exponents and algebraic habits of mind.

#### **GEOMETRY** (full year - 2 credits)

**GRADES 9-10-11-12** 

PREREQUISITE: Algebra I

Geometry is the study of shape. In Geometry students will examine the properties of and relationships among shapes (including two and three-dimensional shapes), location of shapes, transformations of shapes, special shapes (such as circles and triangles, leading to trigonometry), and reasoning about shape including geometric proof. It is suggested to have a compass, protractor, straight-edge and/or ruler, which are tools of Geometry. Students will learn to use these tools and to perform investigations with them. A scientific or graphing calculator will be necessary.

#### **ALGEBRA I (full year - 2 credits)**

**GRADES 9-10-11-12** 

Algebra I guide students through the process of developing their mathematical abilities by helping them experience a pattern of successful learning that builds self-confidence. Students review fundamental concepts: variables, properties of operations and integers and their opposites. Algebra also places emphasis on functions, equations & inequalities, algebraic expressions, rate of change and recursion. A graphing calculator is suggested for this course.

#### **ALGEBRA II (full year - 2 credits)**

PREREQUISITES: Algebra I, Geometry

**GRADES 10-11-12** 

Algebra II is a two-semester course, which meets daily and is for those students who have successfully completed Algebra I and Geometry. A graphing calculator is required for this class. This course is designed to build on algebraic and geometric concepts. It develops advanced algebra skills such as systems of equations, advanced polynomials, imaginary and complex numbers, quadratics, and concepts and includes the study of trigonometric functions. It also introduces matrices and their properties. The content of this course are important for students' success on both the ACT and college mathematics entrance exams. Students who complete Algebra II should take Pre-Calculus or Statistics and Probability with Consumer Math next.

#### **CONSUMER MATH (1 semester - 1 credit)**

**GRADE 12** 

Consumer Math is a one-semester class designed to give students practical financial skills encountered in everyday life. Course content follows the Financial Literacy standards on topics that include checking accounts, borrowing money and figuring interest, savings and personal investments, and home and transportation expenses.

#### PRE-CALCULUS (full year – 2 credits)

PREREQUISITES: Algebra, Geometry, Algebra II

Pre-Calculus is a two-semester course, which meets daily and is designed for juniors and seniors. Prerequisites are successful completion of Algebra, Geometry and Algebra II (a performance of C- or better is suggested but not required). Advanced mathematics is the foundation for higher-level courses in math related fields. In our technological society, many vocations and careers require the knowledge of advanced mathematics.

The goal of this course is to prepare students with a sound background directed towards the study of Calculus as the student prepares to enter college. Pre-calculus combines the trigonometric, geometric, and algebraic techniques needed to prepare students for the study of calculus, and strengthens students' conceptual understanding of problems and mathematical reasoning in solving problems. Grasping these topics is especially important for students intending to study calculus, physics, and other sciences, and/or engineering in college.

#### **STATISTICS AND PROBABILITY (1 semester – 1 credit)**

**GRADE 11-12** 

Statistics and Probability is a one-semester course, which meets daily and is designed for juniors and seniors, especially those not pursuing or needing Calculus in a post-secondary setting. This course can be scheduled in consecutive semesters. Students will work with probability, dada collection, descriptive and inferential statistics, probability, and technological tools to analyze statistics. The mail focus of the course will be exploring data, planning a study, producing models using probability theory, and making statistical inferences. Students will work with statistical measures of centrality and spread, methods of data collection, methods of determining probability, binomial and normal distributions, hypothesis testing, and confidence intervals. Students will use multiple representations to present data including written descriptions, numerical statistics, formulas, and graphs.

**CALCULUS** (full year - 3 credits)

**GRADE 12** 

PREREQUISITES: All high school math courses

#### 3 High School credits and 12 semester hours of College credit - taught @ Indian Hills

The class will meet Mon. - Tues. - Wed. - Thurs. beginning before 8:00 AM and running through the high school 1st hour.

The Calculus class is designed for students who took Algebra I in 8<sup>th</sup> grade and have completed all of the high school math classes including Trigonometry and Pre-Calculus. The course is divided into three college quarters and is called "Geometry and Calculus". A detailed description of each quarter's course content is given in the Indian Hills catalog.



# **SCIENCE**



#### **UNIFIED SCIENCE (full year - 2 credits)**

**GRADES 9-10-11-12** 

This course is an introductory level course aimed at 9t grade students. The course will introduce topics to students that they will learn in more detail throughout their high school careers. This is done through a variety of teaching methods which include: labs, group and individual activities as well as discussions. Assessment of students will be done through class participation, group and individual projects, labs, homework, quizzes and tests.

#### **BIOLOGY** (full year - 2 credits)

**GRADES 10-11-12** 

PREREQUISITE: Earth Science/Integrated Science/Unified Science

Biology is the study of living things. This course will provide the basic knowledge for all students to understand the main characteristics of living things by learning concepts. The scientific method will be used throughout the course. Biological molecules and functions of cells will be discussed in detail. Also, genetics, ecology and evolution will be addressed. This study will prepare students for Advanced Biology, Anatomy, Physiology, and Chemistry.

#### **HUMAN ANATOMY & PHYSIOLOGY I (first semester - 1 credit)**

**GRADES 11-12** 

PREREQUISITE: Satisfactory Completion (B+ or Better) of Biology

#### **HUMAN ANATOMY & PHYSIOLOGY II (second semester – 1 credit)**GRADES 11-12

PREREQUISITE: Human Anatomy & Physiology I (Chemistry can be taken concurrently)

This course provides a basic study of the structure and function of the human body. Students should be able to demonstrate a basic understanding of the fundamental principles of anatomy and physiology and their interrelationships from the chemical and cellular levels through the organ systems.

Lab covers the lecture topics to confirm anatomical structure of tissues, bones and muscles and the physiological processes of the cardiovascular, respiratory, urinary, and nervous and digestive systems.

## ADVANCED BIOLOGY (full year - 2 credits) Teacher Recommendation Required

**GRADES 11-12** 

PREREQUISITE: Successful Completion (C+ or better) in Biology. This course can be taken concurrently with chemistry.

This course includes an introduction to science, the characteristics of life, ecology, cell structure and function, chemistry of life, metabolism, cell division and reproduction, genetics and heredity and evolution by natural selection. Laboratory work includes the use of laboratory tools and metric system measurements, use of the light microscope, observations of cells and studies of the scientific method, ecology, enzyme activity, cellular respiration, molecular biology and Mendelian genetics.

#### **OUR ENVIRONMENT (full year - 2 credits)**

**GRADES 11-12** 

PREREQUISITE: Biology

The aim of this course is to increase student knowledge of the environmental challenges of today, while continuing to cultivate scientific critical thinking skills. A year long course designed to show thematic connections between a variety of science disciplines. It gives students a coherent and realistic picture of a variety of scientific concepts and how they manifest in our environment.

#### **CHEMISTRY** (full year - 2 credits)

**GRADES 11-12** 

PREREQUISITE: C or Better in Algebra I – Class will have supply expenses.

An introductory course where the subject matter is both descriptive and theoretical. The modern atomic theory includes information concerning the structures and properties of atoms, the kinds of compounds they form, and the properties of these compounds.

Chemistry is a subject taught with the ultimate objective of stimulating in the student intellectual development at the formal operational level, to grasp complex relationships within mathematics and science.

Chemistry is a laboratory science to use techniques in handling chemicals safely. Experiments for comparing, correlating, or interrelating new information with existing mental structures.

This course requires a commitment from the student to take relevant notes, attend class consistently, and allow time daily for completion of assignments.

#### PHYSICS (full year - 2 credits)

**GRADES 11-12** 

PREREQUISITES: Algebra II and successful completion or concurrently taking Pre-Calculus.

Physics is the science that deals with the interactions of matter and energy. Mechanics, acoustics, optics, heat, electricity, magnetism, radiation, force, work, and energy, are all topics dealt with in physics.

The course uses logic and mathematics as tools to quantify and describe everyday events like electricity, pressure, force, and light into formulas that can be used to predict results and make decisions. Labs are designed to show how the formulas apply to what actually happens.



#### **COMPUTER APPLICATIONS I (1 semester - 1 credit)**

**GRADES 9-10-11-12** 

PREREQUISITE: None

Computer Applications is a course designed to teach students how to use the computer as a business and personal tool through the use of applications software. Appropriate software (Microsoft Office) for database management, word processing, graphics, and spreadsheets will be used. Students will also perform activities using Google Docs, a free Web-based application in which documents and spreadsheets can be created, edited and stored online. Files can be accessed from any computer with an Internet connection and a full-featured Web browser.

#### **COMPUTER APPLICATIONS II (1 semester - 1 credit)**

**GRADES 9-10-11-12** 

PREREQUISITE: Computer Applications I

Computer Applications II is a course designed to build off concepts taught in Computer Applications I. Students will use their knowledge of the application software to complete integrated business/academic projects. Students will also learn basic Web Page design and computer coding.

#### INTRODUCTION TO BUSINESS (1 semester - 1 credit)

**GRADES 9-10-11-12** 

PREREQUISITE: None

This is a basic business course designed to acquaint students with the activities associated with a business. Students will gather a basic understanding of general business, economics, entrepreneurship, business communications, business ethics, and the government's role in business, marketing, and business finance. Overall, the course gives students a broad exposure to business operations and a solid background for additional business course.

#### **BUSINESS LAW (1 semester – 1 credit)**

**GRADES 9-10-11-12** 

PREREQUISITE: None

This course provides students with an understanding of the legal framework of our society. The topics covered include the history, development, and classification of laws, personal and business law related to everyday life, contract law, the court system and courtroom procedures, legal terminology, constitutional rights, ethics, technology law, intellectual property, social responsibility, international law and consumer protection.

#### FINANCIAL LITERACY (1 semester – 1 credit)

**GRADES 9-10-11-12** 

Personal financial literacy course is designed to alert, inform, and educate students in concepts of personal finance and money management. Students will begin to develop the skills and strategies that promote personal and financial responsibility related to financial planning, savings, investment, and charitable giving in the global economy. This course will start students on a path toward being in control of their financial futures. Five broad topics will be the foundation of the course: college and career planning, money management, savings and investing, income and spending. The course will teach students to search and assess college and career opportunities, identify and prioritize their personal money management goals, develop personal spending and savings plans, comprehend the impact of time on the value of money, understand the cost of using credit, and protect assets.

## **FOUNDATION OF ENTREPRENEURSHIP (1 semester – 1 credit) Indian Hills Credit Available BUS 128**

**GRADES 10-11-12** 

PREREQUISITE: Introduction to Business

This course is suitable for anyone who dreams of one day becoming his/her own boss. Students will learn how to identify and evaluate opportunities, analyze feasibility, and plan to create and grown successful businesses. The course provides an overview of entrepreneurship and its importance in society and inspires students to recognize entrepreneurial characteristics within themselves. This course combines practical skills with revenant theory to prepare students to think like entrepreneurs. The primary focus is on new venture creation, with a secondary benefit of preparing students to become entrepreneurial employees within existing firms.

#### **MARKETING (1 semester – 1 credit)**

**GRADES 10-11-12** 

PREREQUISITE: Introduction to Business

Marketing students will examine actives in marketing and business important for success in marketing employment and postsecondary education. Students will learn how products are developed, branded, and sold to businesses and consumers. Students will analyze industry trends and gain hands-on experience in the marketing of goods, services, and ideas. Topics will include professionalism in the workplace, product planning and positioning promotion, pricing selling, economic issues, and the impact of technology on the marketplace. \*2<sup>nd</sup> semester only

#### **ACCOUNTING I (1 semester – 1 credit)**

**GRADES 10-11-12** 

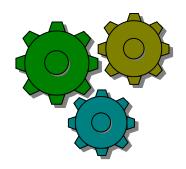
This is a one semester introductory course in double entry accounting procedures. Students will learn to keep financial records for a service business organized as a sole proprietorship. Principles covered include the bookkeeping cycle, debit/credit theory, financial statements, use of various journal and ledgers, worksheets, accounts receivable and payable, and payroll systems. Computers will be used for simulation and projects.

#### **ACCOUNTING II (1 semester – 1 credit)**

PREREQUISITE: Accounting I

This course will cover the complete accounting cycle for a merchandising business organized as a corporation. The Fundamental principles of accounting will be reinforced, but the course will focus primarily on more advanced accounting concepts and procedures. These procedures include recoding transactions into different types of journals, posting to ledgers, recording purchases returns and allowances, recoding international sales, accounting for uncollectible accounts, plant assets and depreciation, inventory, notes and interest accrued revenue and expenses, and distributing dividends.

**GRADES 10-11-12** 





# INDUSTRIAL TECHNOLOGY

Industrial technology is a part of our modern and expanding technology. This technology includes the entire material progress of our civilization from the first stone used as a hammer by primitive man to the complex satellites, which orbit the earth today. Industrial technology courses will help prepare the student for elective living and intelligent citizenship in our industrial society. The following courses will provide educational shop experience, which deals with materials, processes, products, occupations, and problems of the industrial world.

#### **DRAFTING** (full year - 2 credits)

**GRADES 9-10-11-12** 

Introduction to Drafting is a course designed to help the student that might be thinking about a career in drafting, engineering, or some related field. The student will be exposed to the basics of drafting to include:

CAD - Computer Aided Design Sketching Lettering Use of drafting equipment Measuring systems - engineer, architectural, and metric Geometry of technical drawing Dimensioning fundamentals Sectional views Other CAD Systems

#### **GENERAL WOODWORKING (1 semester – 1 credit)**

**GRADES 9-10-11-12** 

(Student will have supply expenses for this class)

General Woodworking is an introductory course offered to all students. The course is designed to provide students with a variety of experiences in cabinet making through the production of a required project and a project of the student's choice. Examples of the skills and knowledge the student will gain are:

Wood and wood materials
Measurement and layout
Uses of machine and hand tools
Fasteners
Related careers in industry

Design and planning Safety of machine and hand tools Joinery Finishes

Proper planning, problem solving, and organization are stressed throughout this course.

## **WOODWORKING II (1 semester – 1 credit) PREREQUISITE: General Woodworking**

**GRADES 9-10-11-12** 

(Students will have supply expenses for this class)

Woodworking II is a semester course. The course is designed to continue and build on the skills and knowledge learned from General Woodworking. Students will continue to use design, planning, safety, problem-solving, critical thinking, and wood materials to construct a project of the student's choice.

#### INTRODUCTION TO ENGINEERING AND DESIGN (full year-2 credits) GRADES 9-10-11-12

Introduction to Engineering and Design is a full year course designed to guide students in the career pathways of engineering and technological career pathways. We will cover the principles and concepts of engineering design. Students will be exposed to the engineering process of design and use technology to develop, draw and problem-solve ideas in engineering fields.

#### **INTRODUCTION TO WELDING (1st semester – 1 credit)**

GRADES 9-10-11-12

(Students will have supply expenses for this class)

Intro to welding is an introductory class offered to all students. This primary lab course is designed to provide students with a variety of hands on experiences in various types of welding processes (Arc/MIG) and Oxy-Acetylene torch processes. This course is centered on learning the following concepts: Basic Tool/Equipment Use and Safety along with student enhancement in the areas of mathematics and problem solving.

#### **INTRODUCTION TO MACHINING** (2<sup>ND</sup> semester – 1 credit)

**GRADES 9-10-11-12** 

(Students will have supply expenses for this class)

Intro to machining is an introductory class offered to all students. This primary lab course is designed to provide students with a variety of hands on experiences with various types of metal working machines with includes the following; Lathe, Vertical Mill, Drill Press, Surface Grinder, Tool Grinder. Concepts covered in lab include; General Manufacturing, Metal Processing, Blue Print Reading, Precision Measuring, and Basic Tool/Equipment Use and Safety, along with student enhancement in areas of mathematics and problem solving.

#### **MACHINE METALS (full year - 2 credits)**

**GRADES 10-11-12** 

(Student will have supply expenses for this class.)

Machine Metals is a full year course, open to sophomore, junior, and senior students that have successfully completed the General Metals class.

Machine Metals is a laboratory course. The major emphasis of study and activity is developed around the basic metalworking machines, such as the lathe, vertical and horizontal mill, drill press, tool grinder, and computer operated machines (CNC).

Welding is continued from General Metals with the inclusion of TIG welding, MIG welding and plasma cutting.

The information and activities associated with the machinist trades is the focus of this course. Students experience the mathematics, science, and skills required to set-up, maintain and operate metalworking machines.

Required set-ups and machining exercises account for a major portion of the students' time.

#### **ADVANCED MACHINE METALS (full year - 2 credits)**

**GRADES 11-12** 

(Student will have supply expenses for this class.)

Advanced Machine Metals is full year course, open to juniors and seniors who have successfully completed General and Machine Metals courses.

This project-oriented lab class involves machining parts on the lathe, vertical, and horizontal-milling machine.

#### **MACHINE SHOP PRACTICES (1st sem. – 1 credit)**

**GRADE 12** 

IHCC Course MFG 209 – Machine Shop Practices (3 credits) (Student will have supply expenses for this class)

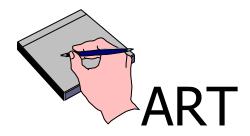
This course covers safety in machine shops, environmental safety, measurement, layout, inspection, setup, basic bench work practices and non-traditional machining processes.

#### **MACHINE OPERATIONS (2<sup>nd</sup> sem. – 1 credit)**

**GRADE 12** 

IHCC Course MFG 222 – Machine Operations I (4 credits) (Student will have supply expenses for this class)

This project-oriented lab is the first class in the machining series. The operations involve machining parts utilizing lathe, vertical milling machine, drill press, surface grinder, shaper, pedestal grinder and band saw



The visual arts program is for students who are interested in Art either for pleasure or as a career. The primary purposes are:

- (1) Introduce students to the basic areas of art: criticism, aesthetics, history and production.
- (2) Enhance their interest in these areas and allowing more free time to work in the artist's interest area.
- (3) Allow the advanced students to find and explore the art media that interests them. This exploration takes place in the junior and senior years.
- (4) Instill respect, pride, responsibility, accountability, and creativity in art students.

(Students will have supply expenses in these classes.)

#### **INTRODUCTION TO ART (1 semester - 1 credit)**

**GRADES 9-10-11-12** 

Introduction to Art is open to all high school students interested in the visual arts and is a **prerequisite for all other art classes**. This course gives a student the opportunity to discover art and enhance their abilities. It is designed to provide basic background in:

- 1.) Encouraging creative expression of visual arts.
- 2.) Developing skills in making personal art.
- 3.) Building artistic confidence.
- 4.) Experiencing different art media.

Areas worked in will include drawing, painting, color mixing, design, ceramics and oil pastels, to name a few. Areas investigated will be color, shape, form and space.

## DRAWING/WATERCOLOR PAINTING (1 semester - 1 credit) GRADES 10-11-12 PREREQUISITE: Intro to Art

This course is designed for further creativity and experimenting with drawing materials and watercolors. Drawing with pencil and charcoal, are among the drawing tools to be used. Emphasis will be on the use of form, shape, texture, value, and contrast to create drawings of interest.

In watercolor, students will learn about watercolor washes, wet/dry application, and sponge application. Several opportunities will be provided to experiment with watercolor.

Class will be divided equally between drawing and painting.

## ACRYLIC AND OIL PAINTING (1 semester - 1 credit) PREREQUISITE: Intro to Art

**GRADES 10-11-12** 

Creativity and experimentation with acrylic paint or a painting medium that is water base (latex and tempera) are the basic components of Acrylic and Oil Painting class. Students will mix colors, blend colors, paint details, layer paint, and learn to dry brush when appropriate. Painting with freedom and without fear is a goal.

Students are required to pay for their own supplies in this course. This includes canvas, paints, brushes and paint trays. The cost will be approximately **\$30.00** minimum (or more). Students may purchase frames/canvas at craft stores or build wood frames in the art room. This cost will be the student's responsibility and be paid to the CHS office fund called Art Resale. If building in art class, the student will assemble frames, stretch canvas and prepare the surface for painting. Latex paint will be used to prepare the surface.

Students will be expected to express themselves on assigned projects and independent projects. Students will be allowed the possibility to explore oil paint. Art History will also be explored.

## **CERAMICS (1 semester - 1 credit) PREREQUISITE: Intro to Art**

**GRADES 11-12** 

Ceramics is designed to introduce students to the three-dimensional aspects of art through the use of clay. Ceramic students will work with clay and explore the constructive possibilities through basic building principles of: pinch, slab, coil, and throwing. The use of ceramic glazes and the basic knowledge of an electric kiln are important to the class. Exploring ways to create with clay and decorating clay pieces are key to the course. Students should **NOT** be afraid to get their hands dirty! Art History will also be explored.

## INDEPENDENT ART I (1 semester - 1 credit) PREREQUISITE: Intro to Art, Drawing & Watercolor, Acrylic & Oil Painting, Ceramics

Students with a strong interest in the arts and a desire for more independent time to create personal work will thrive in Independent Art I. The main interest of the course is to allow students more time to work in their area of expertise. Criticism and aesthetics will be explored in this class. Students are expected to have a grade point of 3.00 or "B" in their art courses. A written contract is expected for this class of what the student wishes to accomplish.

## INDEPENDENT ART II (1 semester - 1 credit) PREREQUISITE: Intro to Art, Drawing & Watercolor, Acrylic & Oil Painting, Ceramics,

This course is a continuation of Independent Art for students with an interest in visual arts. Students are expected to have a grade point of 3.00 or "B" in their art courses. A written contract is expected for this class of what the student wishes to accomplish in their expertise area.

## **GRAPHIC DESIGN (1 semester – 1 credit) PREREQUISITE:** Intro to Art

**GRADES 11-12** 

Graphic Design is a computer class that will be similar to a college course and students must be self-motivated. During the semester, students will explore the techniques, tools, and processes used in the creation of graphic design. Experimentation with a variety of illustration techniques and design media is the norm. Adobe PhotoShop and Adobe Illustrator will be used to create projects. We will learn the elements and principles of design along with creating projects such as logo designs, business cards, and product designs. This class requires note taking, sketching and knowledge of computers.

If the student has not passed a computer class at Centerville High School, the student must get prior approval from the instructor and demonstrate numerous computer competencies. Students will use Google Classroom to turn in projects for printing. A portfolio will be expected at the end of the semester of all printed work.



## AGRICULTURE EDUCATION

#### **AGRI SCIENCE I (full year - 2 credits)**

**GRADES 9-10-11-12** 

This class covers basic record keeping principles in beginning Supervised Agricultural Experience programs, a FFA unit, and livestock production principles for beef, sheep, swine, equine, and poultry including feeding, nutrition, selection, reproduction, and management. Also covers foodborne illnesses and history of agricultural technology. A unit covering business organizations and budgeting will be covered. This course is a prerequisite to the following courses.

#### **AGRI SCIENCE II (full year - 2 credits)**

**GRADES 10-11-12** 

PREREQUISITE: AGRI SCIENCE I

The basic principles of soils, conservation of resources, cover crops, crop pests, tillage practices, climate, major crops of Iowa and production of these crops will be covered in this course. A parliamentary procedure unit will also be included in this class. Students will also study resume writing, interviewing skills, and leadership in this class. A business unit covering cash flow analysis and least cost rations will be covered as well.

#### **NATURAL RESOURCES (1 semester - 1 credit)**

**GRADES 11-12** 

PREREQUISITE: AG I & AG II

During this class, the students will explore careers in Natural Resources and study Fish, Wildlife and Forest Resources, Erosion Control Methods, Wetlands, Outdoor Recreation and Plant Materials. We will also study Aldo Leopold and many of his works.

#### **AGRICULTURE PRODUCTS (1 semester-1 credit)**

**GRADES 11-12** 

PREREQUISITE: AG I & AG II

Processing of agricultural products will be examined including food chemistry, food and fiber production, food processing operations, and meats judging through presentations and activities.

**GRADES 10-11-12** 

PREREQUISITE: Biology

This course will include the study of career opportunities in Horticulture, plant nutrient needs, landscape maintenance, bulb plants, and poinsettias will be raised and sold. This class will include extensive hands-on activities.

#### **AGRICULTURE CAREER ACADEMY**

This is a partnership between Indian Hills Community College and Centerville High School. CHS juniors or seniors who have successfully completed Agriculture Science I and II may take advantage of the opportunity to earn college credits through this academy.

#### The first year courses will be taught at Centerville High School.

#### **SURVEY OF ANIMAL INDUSTRY (1st sem – 1 credit)**

IHCC Course AGS113 (3 IHCC credits)

This course discusses the integration of livestock in a sustainable farming system including small-scale production for niche markets. Topics include appropriate breed selection, nutrition, reproduction, diseases, processing, and land management for hogs, poultry, cattle, sheep, and goats. \*\*Not required to be enrolled in Ag Academy to take

#### PRINCIPLES OF HORTICULTURE (2<sup>nd</sup> sem – 1 credit)

IHCC Course AGH221 (3 IHCC credits)

PREREQUISITE: C or above in Horticulture I (not required to be enrolled in Ag Career Academy to take)

This course will provide the student with essential knowledge and skills necessary for a solid orientation in horticulture. Areas of study include climate and plant growth, botanical nomenclature, anatomy, propagation, vegetable gardening, fruit trees, flower and herb gardening.

#### 2<sup>nd</sup> year courses taught at IHCC campus – Centerville

#### **FUNDAMENTALS OF SOIL SCIENCE (1 CHS credit – 3 IHCC credits)**

FALL TERM AGA154

This course covers basic concepts, terminology and applications of soil science. Soil ecosystems will be studied at both microscopic and macroscopic levels. Current soil management practices will be examined. Laboratory topics include soil types, soil mapping, land use and data collection techniques. This course requires 3 hours of lecture and 2 hours of lab per week.

#### **EQUINE SCIENCE (1 CHS credit – 3 IHCC credits)**

FALL TERM AGS216

This course is an introduction to concepts, practices and decisions necessary when managing horses through stages of their lives. Lab work required.

## AGRARIAN SYSTEMS AND ECOLOGY (1 CHS credit – 3 IHCC credits) TERM

WINTER AGN127

The ecological and economical management of sustainable resources as they relate to agricultural practices will be the focus of this course. Students will be able to put into perspective the historical evolution of agrarian practices and how they relate to future practices in agriculture, forestry, wildlife, and water and soil management.

#### **WOODLAND MANAGEMENT (1 CHS credit – 3 IHCC credits)**

WINTER TERM AGN125

This course focuses on planning, using managerial, economic, and wildlife techniques to meet the objectives of land use. Economic topics will include investment of financial resources, marketing and time issues. Lab work required.

## PRINCIPLES OF AGRONOMY (1 CHS credit – 3 IHCC credits) TERM

SPRING AGA114

This course covers basic concepts, terminology and applications of agronomy. Topics include crop production theories, techniques and technology, evolution of crop production, biological, chemical, geological, environmental and economic aspects of farming. Laboratory exercises correspond to lecture topics.

## **BEEF CATTLE SCIENCE (1 CHS credit – 3 IHCC credits) TERM**

SPRING AGS226

This course is an introduction to principles, practices and decisions necessary when managing beef cattle in all stages of the production cycle. Lab work required.

Students must take the first year courses to be eligible to take the second year courses. The courses are paid for by our school. Students will not be allowed to continue with the courses in the next term if they failed any in the preceding term.

## WORK EXPERIENCE



#### WORK EXPERIENCE PROGRAM

Centerville High School operates a work experience program for special education students interested in getting some practical experience in the world of work before they graduate from high school. The class is open to all special education students. A student may earn up to five credits for the full year of participation divided into the following areas:

#### **WORLD OF WORK (1 semester - 1 credit)**

**GRADES 9-10-11-12** 

World of Work is the classroom portion of the work experience program. Freshman work on basic work habits, application forms, budgeting, teamwork, and leadership skills. Sophomores focus on money management, application forms and researching occupations. Juniors focus on resumes, interviewing techniques, values, skills, and the law in the workplace. These students will job shadow an occupation of their choice for one semester. Seniors are involved in activities that focus on everyday scenarios such as decisions they will need to make to set up and manage their households after they finish high school. They also practice filling out tax forms and do a unit on credit and insurance.

#### WORK (full year - 2 credits)

**GRADES 9-10-11-12** 

A special education student must be enrolled in the World of Work program to receive credit for work. A student has the option of receiving 2 or 4 credits per year. In order to receive 2 credits, the student must work a minimum of 90 hours per semester. In order to receive 4 credits, the student must work a minimum of 150 hours per semester. Many students work for private employers and are paid at least minimum wage. We also have students that will work during the school hours for up to two hours per day or may work either before or after school.



## PHYSICAL EDUCATION (full year-alternating days - 1/2 credit per semester)

**GRADES 9-10-11-12** 

Physical Education is required of all students throughout their four years in high school. Juniors/Seniors will attend class Monday, Wednesday and Friday the first semester and Tuesday/Thursday the second semester. Freshmen/Sophomores will attend on Tuesday/Thursday the first semester and Monday, Wednesday and Friday the second semester. Objectives of the physical education program include the development of acceptable health habits, good posture, worthwhile use of leisure time, knowledge of rules of the activities and fair play.

Every student must meet in gym class at least twice each week. Each individual must provide his or her own uniform and shoes. To receive a passing grade, the student must attend regularly, make-up absences, dress out for class, participate in the activities and follow the standards outlined in the classroom discipline continuum.

# LOW IMPACT PHYSICAL EDUCATION (full year-alternating days — ½ credit per semester)

**GRADES 9-10-11-12** 

(Class cannot be taken in addition to regular PE class)

Activities include walking, jogging, medicine ball workouts, weight lifting and Tae Bo. Students will also learn to monitor heart rates and study proper nutrition.

Eligible students for this class would include students who have failed or scored low on Physical Fitness Tests, students who need to repeat PE class due to failure or lack of participation or students who have health issues (asthma, obesity, pregnancy, etc.)

The class will be limited in size and seniors have first priority.

#### **ULTIMATE HEALTH – EXTREME PE (1 CREDIT PER SEMESTER) GRADES 9-10-11-12**

Class will meet 3 days a week one semester and two days the other semester.

This class is available 0-4<sup>th</sup> hour. Zero hour meets @7:00AM. **Students who have not yet completed their P.E. graduation requirement will have priority.** 

The focus of this class will be intense weight training, speed and agility, and health issues concerning competitive fitness. The training program will be general in that it will be set up to improve the overall ability of each student. In other words, it will not be sport-specific. Emphasis will be placed on technique, strength, speed, explosiveness, and most importantly improvement. Because of this emphasis, students will be tested periodically on their improvement in all aspects of athleticism, including strength, speed, agility, and endurance. This class is designed to meet the needs of the student who wants to be challenged physically as well as mentally and is willing to work hard to improve his/her overall fitness, health, and lifestyle. Ultimate Health will offer life-long fitness activities, along with health and nutritional guidelines to help each student reach his/her full potential in all aspects of life!

\* Students that fail Ultimate Health either first or second semester <u>will not</u> be eligible to take the course until they have sat out one full semester.



# DRIVER EDUCATION

#### **DRIVER EDUCATION (1 credit - SUMMER ONLY)**

Driver Education is offered as a **SUMMER** course. Classes usually start during the first week following the end of the regular school year. The course consists of two phases, classroom instruction and behind the wheel instruction.

The 2018 summer session will be held in June, with the daily classroom time being 8-11 a.m., Monday-Friday. Drive time instruction is set by the instructor and usually ranges from 6:30 a.m. to 8 p.m., Monday through Saturday.

All Driver Education students must have a valid Iowa Driving Permit before the class begins.



Excellence in music has been a tradition at Centerville High School. Full credit is given for Band, Concert Choir and Drama. Classes are graded and do enter into grade point average.

#### BAND (full year - 2 credits)

**GRADES 9-10-11-12** 

The CHS band meets daily. The band curriculum includes Marching Band, Basketball Pep Band, Concert Band, and lessons. Optional performance groups include jazz band 2, solo and ensemble, All State and Honor Band auditions. Students must be enrolled in band for consecutive semesters while at CHS. Once a student drops band, they may not re-enroll unless special permission is given from the director. There is a band handbook available, which includes additional information.

#### JAZZ BAND I (full year – 2 credits)

This is a full year class and will meet every day. Students will learn varying styles of Jazz and perform concerts, public performances and contests throughout the school year. Performing improvised solos is an optional but encouraged part of jazz band. This is an auditioned ensemble comprised of typical jazz band instrumentation. Enrollment in this course is only with the recommendation of the director. Attendance at all performances is an expectation for members of this group.

#### **CONCERT CHOIR (1 credit per semester)**

**GRADES 9-10-11-12** 

The Concert Choir is chosen by audition only. An advanced mixed honor choir focuses on the preparation of concert literature. Optional performance groups include Triple Trio, Solo, Ensemble and Jazz Choir, Madrigal and Male Octet. Students must be eligible and adhere to the Good Conduct Policy as well as the State Eligibility Criteria. Students must show proficiency in sight-reading, tonal memory and teamwork skills. Auditions are held in the spring of the preceding school year. Students who are new to the district may audition in November at the discretion of the instructor.

#### **DRAMA I (1 credit – 1st semester)**

**GRADES 9-10-1-12** 

Drama I will be offered in the fall (1<sup>st</sup> semester). It is open to any high school student 9-12 interested in learning more about theatre arts. We will study technical elements; scenery, special effects, props, lighting, sound, costumes, choreography, make-up and hair. We will also look at acting and analyzing character and scripts.

#### DRAMA II (1 credit – 2<sup>nd</sup> semester)

**GRADES 9-10-11-12** 

PREREQUISITE: Drama I

Drama II will be offered in the spring (2<sup>nd</sup> semester). A prerequisite is Drama I. In this class, we will be furthering our knowledge of theatre arts through the spoken word-storytelling, improvisation, poetry, prose and acting. We will also experiment with mime and building sets.

## HEALTH SCIENCES PROGRAM

\*Some courses/sequencing are subject to change but this will not affect scheduling (COURSES OFFERED PENDING BUDGET CONCERNS AND INTEREST IN CLASS)

The High School Health Occupations program offers courses required in the Practical Nursing Program at Indian Hills Community College. Students that enroll and complete (meeting the IHCC specified standards) the two years while in high school will be almost half-way through the Practical Nursing Program. The first year group of courses will be offered in the morning on the IHCC-Centerville campus, while the second year group of courses will be there in the afternoon.

Enrollment in the Centerville High School Health Occupation program does not guarantee admission to the Practical Nursing Program.

Centerville High School attendance policy applies to this program. Transportation will be provided as needed by Centerville Community Schools.

In order for a student to continue each term in this program, he/she must have successfully completed each course in the previous term.

#### **Health Sciences – 1<sup>st</sup> Year**

#### **MEDICAL TERMINOLOGY (1 term – 1 credit)**

IHCC Course HSC113 (2 credits)

GRADES 11-12 1st Year-Fall Term

This course offers a study of the basic medical language essential to health occupation careers. Emphasis will be placed on word analysis and construction, definitions, pronunciation, spelling and standard abbreviations.

#### **COMPUTER ESSENTIALS (1 term – 1 credit)**

IHCC Course CSC105 (1 credit)

**GRADES 11-12** 1st Year-Fall Term

The basics of the Windows operating systems, electronic communications, and Internet research will be covered. Students will use basic features of word processing and presentation software. This course is intended for students with limited computer skills.

#### NURSING ESSENTIALS, I (1 term – 2 credits)

IHCC Course PNN147 (3 credits)

**GRADES 11-12** 1st Year-Fall Term

This course introduces the essential scientific knowledge, technical skills and communication techniques, as specified by OBRA, to function as an accountable member of the health care team. Theory, laboratory practice and clinical experience will be incorporated to prepare the student to address the biopsychosocial and spiritual needs of patients.

#### NURSING ESSENTIALS II (1 term – 2 credits)

PREREQUISITE: Nursing Essentials I

IHCC Course PNN148 (2 credits)

GRADES 11-12 1st Year-Winter Term

This course introduces basic assessment principles and techniques and explains documentation procedures. The concept of surgical asepsis and the procedures requiring sterile technique are discussed. Protocol for medication administration is examined. The student will have the opportunity to gain skill in advanced nursing procedures requiring sterile technique.

#### INTRODUCTION TO PSYCHOLOGY (1 term -1.5 credits)

IHCC Course PSY111 (3 credits)

GRADES 11-12 1st Year-Winter Term

This course provides a broad introduction to the principles of contemporary psychology. The course is based on providing the student with an understanding of the theoretical foundations of psychology, as well as a survey of empirical research dealing with behavior and mental processes.

#### **HUMAN ANATOMY (1 term – 1 credit)**

IHCC Course BIO175 (3 credits)

GRADES 11-12 1st Year-Spring Term

This course covers basic concepts in human anatomical structure in relation to simple body functions. All body systems are covered with emphasis on structure. This course is for students interested in pursuing health or science programs. To succeed in this course, a student should have a strong background in biology.

#### **HUMAN ANATOMY LAB (1 term – 1 credit)**

IHCC Course BIO176 (1 credit)

**GRADES 11-12 1st Year-Spring Term** 

Anatomy lab covers with lecture topics through the use of models, computer simulations, and diagrams to confirm anatomical structure of tissues, bones, and muscles.

#### PATHOPHYSIOLOGY (1 term - 1 credit)

IHCC Course HSC212 (3 credits)

GRADES 11-12 1<sup>st</sup> Year-Spring Term

The nature, cause, and treatment of disease are the focus of pathophysiology. The characteristics and etiology of diseases are presented using appropriate medical terminology to help students understand the relationship between clinical signs and disease processes.

#### **Health Sciences – 2<sup>nd</sup> Year**

**MENTAL HEALTH NURSING 1 (1 term – 1 credit)** 

IHCC Course PNN401 (1 credit)

**GRADES 11-12** 2<sup>nd</sup> Year-Fall Term This course introduces basic nursing theory related to the psychological aspects of illness. The concepts of mental health and emotional illness are examined. The role of the nurse in caring for clients with alterations in mental health is discussed.

#### **NUTRITION (1 term – 1 credit)**

IHCC Course PNN265 (3 credits)

GRADES 11-12 2<sup>nd</sup> Year-Fall Term

This course surveys normal nutritional needs of individuals throughout the lifespan. Emphasis is placed on identifying the various nutrients and their functions for the maintenance or restoration of health. The protection and preservation of food and community nutritional needs are discussed. Dietary modifications related to specific diseases are introduced.

#### **HUMAN PHYSIOLOGY (1 term – 1 credit)**

IHCC Course BIO178 (3 credits)

**GRADES 11-12** 2<sup>nd</sup> Year-Winter Term

This course offers a detailed look into the physiology of the nervous, respiratory, digestive, circulatory, urinary, reproductive and endocrine systems. This course is designed for the health occupations major.

#### **HUMAN PHYSIOLOGY LAB (1 term – 1 credit)**

IHCC Course BIO179 (1 credit)

**GRADES 11-12** 2<sup>nd</sup> Year-Winter Term

Physiology Lab covers the lecture topics emphasizing the visual and simulated physiology of body systems and their accompanying organ anatomy.

#### **NURSING OF ADULTS 1A (1 term – 1 credit)**

IHCC Course PNN502 (1.5 credits)

GRADES 11-12 2<sup>nd</sup> Year-Winter Term

This course introduces basic principles of adult nursing and common diseases affecting the endocrine and cardiovascular systems. Related signs and symptoms, laboratory findings and treatment of specified diseases will be presented. Basic nursing care of the surgical and adult patient will be discussed.

#### NURSING CLINICAL EXPERIENCE 1A (1 term – 1 credit)

IHCC Course PNN710 (1.5 credits)

GRADES 11-12 2<sup>nd</sup> Year-Winter Term

This clinical course affords students the opportunity to provide basic nursing care to residents in the long-term care setting using scientific nursing principles. Emphasis is placed on assessment and documentation skills. Certification in American Heart Association Basic Life Support will be completed. Students will complete required HIPPA, Infection Control and Mandatory Reporting for child/adult training for Health Care Providers.

#### **NURSING OF ADULTS 1B (1 term – 1 credit)**

IHCC Course PNN503 (1.5 credits)

**GRADES 11-12** 2<sup>nd</sup> Year-Spring Term

Common diseases affecting the hematopoietic, respiratory and renal systems are introduced. Related signs and symptoms, laboratory findings and treatment of specified diseases will be presented. Basic nursing care of the adult patient will be discussed.

#### NURSING CLINICAL 1B (1 term – 1 credit)

IHCC Course PNN713 (1 credit)

**GRADES 11-12** 2<sup>nd</sup> Year-Spring Term

Students will provide basic nursing care to patients in the long-term care setting using scientific nursing principles. Emphasis is placed on assessment and documentation skills.

#### **DEVELOPMENTAL PSYCHOLOGY (1 term – 1 credit)**

IHCC Course PSY121 (3 credits)

**GRADES 11-12** 2<sup>nd</sup> Year-Spring Term

The course is designed to provide a survey of the patterns of behavior and current attitudes on human development from birth to death. Emphasis is given to the theories of cognitive, social, physical and emotional development.

# Indian Hills Community College - College Study Program Courses

Indian Hills Community College – College Study Program courses are college courses taught by Indian Hills' faculty on the Indian Hills campus for both high school and college credit. The classes meet at Indian Hills Community College on Monday through Thursday. The Centerville Community Schools under the IHCC College Study Program pay the cost of the tuition and textbooks.

Grades and credits given by Indian Hills will be entered on the student's high school transcript and will be included when grade point averages are calculated.

IHCC College Study Program classes are open to juniors and seniors who have at least a 2.50 GPA.

#### CALCULUS I\* (Fall Term - Monday - Thursday - 7:30 - 8:50)

One High School Credit and Four Sem. Hours of College Credit – MAT 210

\*More details on Calculus under the Math Section of this guide and a detailed description of the Calculus classes are available in the Indian Hills catalog.

#### CALCULUS II (Winter Term - Monday - Thursday - 7:30 - 8:50)

One High School Credit and Four Sem. Hours of College Credit – MAT 216

#### CALCULUS III (Spring Term - Monday - Thursday - 7:30 - 8:50)

One high school credit and Four Sem. Hours of college credit – MAT 219