

Riceville Community School District

Course Descriptions



2018-19

Riceville Community School District offers career and technical programs in the following service areas:

- Agriculture, Food, and Natural Resources
- Applied Sciences, Technology, Engineering, and Manufacturing
- Business, Finance, Marketing, and Management
- Health Sciences
- Human Services

It is the policy of the Riceville Community School District not to illegally discriminate on the basis of race, color, national origin, sex, disability, religion, creed, age (for employment), marital status (for programs), sexual orientation, gender identity and socioeconomic status (for programs) in its educational programs and its employment practices. There is a grievance procedure for processing complaints of discrimination. If you have questions or a grievance related to this policy please contact the district's Equity Coordinator, Vanessa Huber, Principal, 912 Woodland Ave, Riceville, Iowa 50466, vanessa.huber@riceville.k12.ia.us, 641-985-2288.

STATEMENT OF GUIDING PRINCIPLES--SCHOOL BOARD POLICY

CODE NO. 600

We believe that the main purpose of education is to provide a learning situation that will encourage the student to develop their own intellectual abilities, skills, understandings, and talents to the best of their capabilities. Through varied activities, the school assists the student in becoming a resourceful individual and helps them to prepare for a role in our democratic society.

OBJECTIVES

1. To heighten the student's curiosity to discover and to learn.
2. To encourage the student to apply his/her knowledge.
3. To encourage each student to master the basic skills and fundamentals.
4. To provide experiences in meeting and in solving problems.
5. To stimulate creative and logical thinking by students in all desirable lines of endeavor.
6. To offer aesthetic experiences and opportunities in art, music, and drama.
7. To develop worthy use of leisure time.
8. To assist the student to realize his/her responsibilities and obligations to family, community, and society.
9. To offer a program of studies that will be beneficial to all students.
10. To provide an educational environment that promotes the physical, emotional, and mental health of the student.
11. To develop in the student respect for the dignity of the individual as well tolerance of ideas and beliefs.
12. To promote self discipline.
13. To provide the student with guidance that will help bring about attitudes, sound social and moral behavior.

The following activities are offered to supplement our academic areas:

Band	Cheerleading	Choir	FFA
National Honor Society	Quiz Bowl	Speech & Drama	Student Council
Wildcat Singers	Cross Country	Football	Volleyball
Basketball (Boys & Girls)	Wrestling	Golf	Track & Field
Baseball	Softball		

Core Classes

Language Arts
Mathematics
Science
Social Sciences
Spanish

Career & Technical Education Classes

Agriculture Education
Business and Technology
Computer Science
Health Occupations
Industrial Technology
Family and Consumer Science

Additional Academic Areas

Art
Band/Choir
Physical Education & Health
Gifted & Talented (GT)
Character Development and Leadership
PSEO (online) through NICC

**RICEVILLE COMMUNITY HIGH SCHOOL
RICEVILLE, IA
I M P O R T A N T I N F O R M A T I O N**

Graduation requirements are established to ensure that all students completing high school receive the "basic essentials." At Riceville, good reading, clear writing, mathematics, physical education and a study of our governments, our society, our way of life, and the world around us are considered of great importance no matter what future study or career you may plan. Each student must meet their required academic credits to become eligible for graduation unless extenuating circumstances justify recommendation by the high school principal and superintendent to the Board of Education. Each student must be enrolled in physical education unless a statement by a physician to be excused is on record in the office. A new statement for each school year is required. All full-time students will be required to be enrolled in 6 contact courses. (A contact is a course that meets 1 period a day, 5 days a week.) Seniors are eligible for work release for Period 1 and 2 or Period 7 and 8, with a limit of two periods given. All students are expected to enroll in full schedules until graduation requirements are met. Upon meeting graduation requirements, students must be enrolled in four classes at all times to be eligible for activities. Study Halls will be issued only at the discretion of the school counselor and building principal. Exceptions may be made for students traveling for courses or enrolled in PICC courses.

The courses that you take in high school and the grade that you earn in these courses are kept on your high school record. These are furnished, subject to your permission and/or request, to colleges, employment personnel and the government. Other information that is a part of your permanent school record for future reference is your scholastic rank in class, honors and recognition that you may have earned, participation in outside activities, ratings on aptitude, achievement, reading and interest tests, **AND YOUR ATTENDANCE RECORD.** Frequently, your teachers, counselor and principal are asked by colleges and employers, to furnish statements as to your personality and character, ability to get along with others, seriousness of purpose, industry, leadership, initiative, concern for others, and sense of responsibility, cooperation and emotional stability. Consider these traits of personality and character as you associate with your classmates and teachers throughout your daily academic and social routine.

IMPORTANT

- Before the school year a complete schedule for the entire year for 9-12 students will need to be complete. This schedule will be in place for the student for the entire school year and schedule changes at the end of trimester will be done on a case by case basis with approval from administration required for changing classes.
- Turn your schedule into the School Counselor for review.

Registration Process

Prior to the end of the current school year students will register for their fall classes with the school counselor. Depending on the grade of the student and any specialized instructional plans for individual students, students will create a plan to move them forward as they progress toward graduation and their post-secondary plans.

Required/Expected Educational Plan for Students

Freshmen:

English I
Algebra I or Integrated Math I
Biology
Advanced Computers*
Health I
PE

Sophomores:

English II and Speech
Geometry or Integrated Math II
Physical Science
American History or World History
PE

Juniors:

English III or one year of English electives
Algebra II or Integrated Math III
Chemistry, Physics, or Science Technology/Science Electives
American History or World History
PE

Seniors:

1 year of English electives
American Government
Economics
Character Development and Leadership
Personal Finance
CPR training
PE

Graduation Requirements

English 4 years (English I, English II, speech, and electives)
Math 3 years
Science 3 years (biology, physical science, plus one more year)
Social Studies 3 years (American History, World History, Economics, American Government)
Health I and CPR (once during High School)
Advanced Computers*
PE annually (one semester)
Character development and leadership (1 semester)
Personal Finance (1 Semester)
Transitional planning (job shadow + community service)

TRANSITION PLANNING

Transition Planning is a one credit, required graduation “process.” This process begins in seventh grade and continues through graduation.

1. Each student, beginning in 8th grade, will participate in long and short term career and educational planning. We will be using Kuder as our career information system starting in 2017-18. Students will sketch four-year education plans and course selections working toward career and college goals. We allow for flexibility as student interests and goals change. These education plans will provide the framework for each student’s education through graduation.
2. Meetings with the high school counselor will be scheduled as needed during grades 9-12.
3. Each student will complete a job shadow experience.
4. Students will take the following standardized tests during high school:
 - 9th: Iowa Assessments, MAP
 - 10th: Iowa Assessments, MAP, PreACT, ACCUPLACER (as needed)
 - 11th: ASVAB, Iowa Assessments, MAP, ACCUPLACER/PSAT/ACT/SAT (as needed)
 - 12th: NCRC (mandatory), ACCUPLACER/ACT/SAT (as needed)
5. Juniors and seniors will begin to research college possibilities, scholarship availability, and financial aid preparation. Campus visits and participation in similar endeavors will help to prepare for postsecondary education.

CPR (Cardiopulmonary Resuscitation)

CPR training is required by state law, and will be offered and taught yearly. Those unable to be present for this training must enroll and receive certification at alternate locations.

E2020 Options

E2020 courses are offered primarily as an option for students to recover credits to be able to meet graduation requirements. In some instances to accommodate scheduling for students, the district will allow students to register for e2020 classes as long as the following conditions have been met. **Administrator approval is required to enroll in any e2020 classes.**

1. The class being taught conflicts with another class the student wishes to take and would have a negative impact on the student’s ability to graduate with peers.
2. The teacher of the class that is offered by the district reviews and agrees to the curriculum offered by the e2020 class will cover the same material that is covered in the classroom.
 - a. The teacher of the class that e2020 will duplicate will monitor the progress of the class to make sure the student is staying on track to complete the class on time.
 - b. The teacher of the class that e2020 will duplicate will not deliver direct instruction or offer support for the student(s) taking the course.
3. Students who are taking e2020 classes will not receive classroom support from school staff. Student(s) utilizing this option are taking the responsibility to complete these classes on their own. Accommodations for scheduling will be made during the school day if it does not negatively impact the scheduling and timing of classes offered in the building.
4. Students taking e2020 classes are still expected to meet the academic requirements of extracurricular activities.

COURSE DESCRIPTIONS

AGRICULTURE EDUCATION

The Agriculture Education Program provides an opportunity for both male and female students to develop a basic understanding of Iowa Agriculture. The program has three essential components: Classroom & Laboratory Instruction, FFA, and Supervised Agricultural Experience. All students who are enrolled in Agricultural Sciences curriculum at Riceville Community School will be listed as a member of the FFA, a youth leadership organization, and are expected to complete a Supervised Agricultural Experience in an area of interest related to agricultural sciences, foods, and natural resources.

CASE™ course offerings. The **CURRICULUM FOR AGRICULTURAL SCIENCE EDUCATION (CASE™)** program is a national program developed to prepare students for careers in science, technology and engineering through exciting “hands-on” experiences through activities, projects and problems in agricultural sciences, food and natural resources (AFNR) subject matter. CASE has the goal to increase the rigor and relevance of agriculture subject matter and enhance core academic areas including science, mathematics, and English. Information about this can be found at: <http://case4learning.com/curriculum.html>. The CASE™ curriculum is receiving the endorsement and support of the 2012-13 and 2013-14 Iowa Governor’s STEM scale-up program initiative.

18003 Agriculture and Natural Resources—Comprehensive

[Introduction to Agriculture, Food, and Natural Resources (CASE™)](Year Course) Freshmen level

Agriculture and Natural Resources—Comprehensive courses cover a wide range of topics concerning agriculture and natural resources, including plant and animal science, production, and processing; environmental science and conservation; ecology; agricultural mechanics; agricultural construction; business operations and management; and the careers available in the agricultural/natural resources industry. They may also include topics such as chemical and soil science, forestry, agricultural marketing, and veterinary science.

Introduction to Agriculture, Food, and Natural Resources (AFNR) is a full year introductory course in the CASE sequence of courses. It is designed to introduce students to the four pathways that are offered through CASE. In addition to a brief overview of animal science, plant science, natural resources, and agricultural technology and systems, students will explore FFA, leadership, and science in agriculture.

18504 Natural Resources Management [Natural Resources & Ecology (CASE™)] (Year Course)

Natural Resources Management courses combine the fields of ecology and conservation with planning for the efficient use and preservation of land, water, wildlife, and forests. Within the general area of natural resources management, these courses usually cover specific topics and uses, such as hunting or fishing preserves, forest production and management, wildlife preservation, and human outdoor recreation.

The CASE™ *Natural Resources and Ecology* course is intended to serve as a foundation course within the CASE sequence. The course is structured to enable all students to have a variety of experiences that will provide an overview of the field of natural resources and ecology. Students will work to explore hands-on projects and activities while focusing on the characteristics of natural resources and ecology by working on major projects and problems similar to those that biologists, ecologists, natural resources conservationists as well as other specialists face in their respective careers. Study of the natural world including biomes, land, air, water, energy, use and care as well as a focus on issues surrounding man's interaction with the Earth will be covered. The knowledge and skills used will be a building block in future courses within the CASE program.

18051 Plant Production/Science [Agriculture Science-Plants (CASE™)] (Year Course)

Plant Production/Science courses provide knowledge about the propagation of plants for food and fiber. These courses may cover such topics as soil science, irrigation, pest and weed control, food and fiber processing, and farm operations. They may also cover the knowledge and skills needed to produce all types of crops or may emphasize a particular area of the agricultural industry. The purpose of this Plant Science course is to expose students to the world of agriculture, plant science and career options. The course is structured to enable all students to have a variety of experiences that will provide an overview of the field of agricultural science with a foundation in plant science. Coursework will also require students to acquire knowledge and skills required to utilize plants effectively. Students will research the value of plant production and its impact on the individual, the local, and the global economy. Students will work in teams, exploring hands-on projects and activities, to learn the characteristics of plant science and work on major projects and problems similar to those that plant science specialists, such as horticulturalists, agronomists, greenhouse and nursery managers and plant research specialists face in their respective careers.

18249 Agribusiness—Other (Intro to Agriculture Markets AGB235) (One Semester) – Junior and Senior level.

This course will provide students with an overview of the agricultural markets and marketing systems and how these are evolving in a rapidly changing global market. Students will learn how to analyze markets and pricing alternatives and how to use the futures markets to lock-in or improve profits. Includes the study of farm level price behavior, pricing systems, and marketing management. Other areas that will be studied include technical analysis, the use of other market information, and the grading of agricultural products.

18204 Ag Sales and Service (One Semester) - Junior and Senior level.

This course will help students understand the basics of selling agriculture products. Students will work individually as well as with a team to develop plans to attract new customers, build customer relations, and continue those customer relations. Learning to advertise and promote their products will be a section of this course as well. As part of the service aspect, students will be expected to organize and run the vending machines for the FFA. Skills learned will include doing inventory, ordering items, stocking the machines, pricing items, fixing machines when there are issues, and making sure all items fall under the Smart Snacks categories.

18201 Agribusiness Management (Farm Business Management AGB330) (One Semester) – Junior and Senior level.

Agribusiness Management courses provide students with the information and skills necessary for success in agribusiness and in operating entrepreneurial ventures in the agricultural industry. These courses may cover topics such as economic principles, budgeting, risk management, finance, business law, marketing and promotion strategies, insurance, and resource management. Other possible topics include developing a business plan, employee/employer relations, problem-solving and decision-making, commodities, and building leadership skills. These courses may also incorporate a survey of the careers within the agricultural industry.

Emphasis of this semester course is agricultural business records and management. Subject matter areas include: the farm management process, farm management information, depreciation and valuation, the balance sheet, the income statement, farm economic principles, farm budgeting, farm business structures, risk management, farm tax management, farm investment and credit, farm business analysis, human resource management, and land & machinery management.

18402 Agriculture Mechanics and Equipment (Ag Power & Technology) (One Year)

Agriculture Mechanics and Equipment courses provide students with the engineering and power technology principles, skills, and knowledge that are specifically applicable to the agricultural industry. Typical topics include the operation, maintenance, and repair of power, electrical, hydraulic, and mechanical systems. Student's participating in the APT course will have experiences in various mechanical engineering concepts with hands-on activities, projects, and problems. Basic skills to operate, repair, engineer, and design agricultural tools and equipment will be covered in this course. Students will apply the engineering principles to the construction of machines and structures. This course is designed for students who are planning careers in Agriculture relating to Ag Power and Machinery operation and management.

18101 Working with Animals AGS101 (One Semester)

This course is designed for students who have a high interest in Animal Science and is a prerequisite for the course, "Survey of the Animal Industry". The purpose of this course is to give students practical experience working with animals. The major units of instruction include beef cattle, dairy cattle, swine, sheep, horses, goats, poultry, companion animals, and aquaculture.

18101 Survey of an Animal Industry AGS114 (One Semester)

This course is designed for students who have a high interest in Animal Science. Subject matter areas include: importance and history of the livestock industry, animal breeding and reproduction, nutrition and feeding, life cycle production, animal health, marketing of animal products, and issues in the animal industry. "Working with Animals" is a pre-requisite for this course.

18052 General Horticulture (One Semester)

General Horticulture courses expose students to the art and science of growing plants, shrubs, trees, flowers, fruits, and vegetables. In doing so, they cover a wide variety of topics, including greenhouse and nursery operations, soils and media mixtures, fruit and vegetable production, turf/golf course management, interior and exterior plantscaping, irrigation systems, weed and pest control, and floral design.

18055 Soil Science (Soils & Water) - (One Trimester) - Sophomore, Junior and Senior level.

Soil Science courses involve the study of soil properties, including soil chemistry, biology, fertility, mineralogy, and hydrology. Topics covered may also include soil conservation, irrigation, and management.

Emphasis in this semester course is soil science, soil fertility, water quality and sustainable agriculture. Subject matter areas will include: soil profiles & horizons, soil development, drainage, soil color & texture, land classification & use, soil conservation practices, and water quality & management.

18203 Agricultural Leadership (One Semester)

Helps students develop leadership skills with a focus on opportunities in the food, fiber, and natural resources industries. Topics may include but are not limited to human relationships and effective communication, decision-making and problem-solving, leadership qualities and styles, and ensuring successful completion of group activities.

Crop Science (One Semester)

ART

05154 Creative Art—Comprehensive (Intro to Art) (One Semester)

<https://youtu.be/cWkkWw9ieZw>

Creative Art—Comprehensive courses provide students with the knowledge and opportunity to explore an art form and to create individual works of art. These courses may also provide a discussion and exploration of career opportunities in the art world. Initial courses cover the language, materials, and processes of a particular art form and the design elements and principles supporting a work of art. As students advance and become more adept, the instruction regarding the creative process becomes more refined, and students are encouraged to develop their own artistic styles. Although Creative Art courses focus on creation, they may also include the study of major artists, art movements, and styles.

05157 Creative Art—Painting (One Semester)

<https://youtu.be/-Hnh7Z9Gq9U>

Creative Art—Painting courses cover the same topics as Creative Art—Drawing/Painting, but focus on painting. In keeping with this attention on two-dimensional work, students typically work with several media (such as watercolor, tempera, oils, acrylics, and so on), but some courses may focus on only one medium or explore other media.

05156 Creative Art—Drawing (Drawing & Design) (One Semester)

https://youtu.be/vB6PIOn6o_o

Creative Art—Drawing courses cover the same topics as Creative Art—Drawing/Painting, but focus on drawing. In keeping with this attention on two-dimensional work, students typically work with several media (such as pen-and-ink, pencil, chalk, and so on), but some courses may focus on only one medium or explore other media.

05169 Digital Photography (One Semester)

Digital photography courses enable students to discover and explore how the computer can be used to create or to assist in producing various forms of artwork. These courses provide the opportunity to become more adept in both the art form and in the use of the computer. Students need to have a digital camera with manual options for the course.

05159 Ceramics (One Semester)

This course will be an introduction to clay and how to safely work with it. Emphasis will be placed on the design elements of texture, line, color, and shape. Students will learn the basics of hand building techniques such as pinch, coil and slabs. We will create functional pieces as well as sculptural. Students will also learn a variety of techniques dealing with glaze and the function of the kiln.

BUSINESS AND TECHNOLOGY

12053 Entrepreneurship* (One semester) *Juniors/Seniors Only

<https://youtu.be/VnD2mdQmWAE>

Entrepreneurship courses acquaint students with the knowledge and skills necessary to own and operate their own business. Topics from several fields typically form the course content: economics, marketing principles, human relations and psychology, business and labor law, legal rights and responsibilities of ownership, business and financial planning, finance and accounting, and communication. Several topics surveyed in business management courses may also be included. College credit through the University of Iowa is offered. Passing an exit exam is required to earn the college credit.

10004 Computer Applications (Advanced Computer Applications* BCA212) (One Semester)

In Computer Applications courses, students acquire knowledge of and experience in the proper and efficient use of previously written software packages. These courses explore a wide range of applications, including (but not limited to) word-processing, spreadsheet, graphics, and database programs, and they may also cover the use of electronic mail and desktop publishing.

12104 Accounting 1 & Accounting 2* ACC111 (One Semester Each) *Junior or senior standing only

<https://www.youtube.com/watch?v=AL7oxxoRLg8>

Accounting courses introduce and expand upon the fundamental accounting principles and procedures used in businesses. Course content typically includes the full accounting cycle, payroll, taxes, debts, depreciation, ledger and journal techniques, and periodic adjustments. Students may learn how to apply standard auditing principles and to prepare budgets and financial reports.

Calculators, electronic spreadsheets, or other automated tools are usually used. Advanced topics may include elementary principles of partnership and corporate accounting and the managerial uses of control systems and the accounting process.

12051 Introductory Business BUS103 * (One Semester) Junior/Senior standing only

Introductory Business courses survey an array of topics and concepts related to the field of business. These courses introduce business concepts such as banking and finance, the role of government in business, consumerism, credit, investment, and management. They usually provide a brief overview of the American economic system and corporate organization. Introductory Business courses may also expose students to the varied opportunities in secretarial, accounting, management, and related fields. Introduction to Business will introduce students to the world of business and help prepare them for more meaningful and beneficial interaction with business. Units will include learning about the economic environment; business ownership; business ethics; consumer decisions, rights, and responsibilities; management; marketing; financial management; business law; and career exploration. Introduction to Business is intended to provide an essential background for further study in business and economic courses in high school or later in post-secondary study. Students will also take an active role in managing and running the Booster Club concession stands.

11151 Digital Media Technology (Multimedia Productions) (Year Course)

These courses are designed to give students the skills necessary to support and enhance their learning about digital media technology. The main project focused on is the completion of the school yearbook. Topics covered in the course may include internet research, copyright laws, web-publishing, use of digital imagery, electronic forums, newsgroups, mailing lists, presentation tools, and project planning.

12103 Finance (Personal Finance FIN122) (One Semester) *Junior/Senior standing only

Finance courses are similar to Banking and Finance courses, but they focus specifically on finance, addressing how businesses raise, distribute, and use financial resources while managing risk. Course content typically involves modeling financial decisions (such as borrowing, selling equity or stock, lending or investing) typically undertaken by businesses.

Personal finance is a one-trimester course designed to prepare students to get along in the world and to be competent consumers. Topics covered include wages and salary, checking and savings accounts, transportation expenses, housing costs, budgeting, insurance, investments and economic literacy. Personal finance meets the requirement as a third year of high school math for graduation requirements from Riceville. Personal finance **DOES NOT**, however, meet the entrance requirements of three years of high school math for 4-year colleges.

HEALTH OCCUPATIONS

INTRO to HEALTH OCCUPATIONS* HSC110 (Fall Semester)

14001 Exploration of Health Care Occupations

Exploration of Health Care Occupations courses expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, dental care, administrative services, and lab technology). These courses provide experiences in several of these occupational clusters, along with information and knowledge related to the health care industry as a whole. Orientation to the institutions that make up our health care system. Explores the health care system and the ethical, legal, and safety issues influencing and regulating health practices and maintenance. Explores health career pathways in therapeutic, diagnostic, health informatics, and support services.

MEDICAL TERMINOLOGY* HIT140 (Fall Semester)

14154 Medical Terminology

In Medical Terminology courses, students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.

The study of medical terminology as the language of medicine with emphasis on word analysis, construction of definitions, pronunciation and spelling of medical terms.

CERTIFIED NURSE AIDE* HSC172 (Fall and Spring Semesters) ** Accuplacer reading score of 43+ or ACT of 15+.

14151 Medical/Clerical Assisting

Medical/Clerical Assisting courses enable students to develop knowledge and skills that combine the medical and clerical fields. Students typically develop skills such as patient exam preparation, assessment of vital signs, routine lab procedures, medical transcription, financial accounting, patient and insurance company billing, and record-keeping.

This 75-hour course meets the training of the Omnibus Budget Reconciliation Act of 1987 (OBRA) for aides working in nursing facilities (NF) and skilled nursing facilities (SNF). Emphasizes the achieving of basic level of knowledge and demonstrating skills to provide safe, effective, resident/client care. **Students must be 16 years of age to attend clinical.**

INTRO to NUTRITION* PNN270 (Spring Semester) **Prerequisite: Accuplacer score of 44 or higher in Elementary Alg. or ACT 17
08051 Health Education

Topics covered within Health Education courses may vary widely, but typically include personal health (nutrition, mental health and stress management, drug/alcohol abuse prevention, disease prevention, and first aid) and consumer health issues. The courses may also include brief studies of environmental health, personal development, and/or community resources.

Emphasizes a practical knowledge of good nutrition and some knowledge of diet therapy. Includes a background of adequate and accurate information on basic nutritional needs of the body.

DOSAGE CALCULATIONS* PNN200 (Spring Semester) **Prerequisite: Accuplacer score of 44 or higher in Elementary Alg. or ACT 17
14253 Pharmacology

Pharmacology courses involve a study of how living animals can be changed by chemical substances, especially by the actions of drugs and other substances used to treat disease. Basic concepts of physiology, pathology, biochemistry, and bacteriology are typically brought into play as students examine the effects of drugs and their mechanisms of action.

A review of fractions and decimals, conversions of metric, apothecary, and household units, and computations of drug dosages.

PRINCIPLES OF DISEASES* HIT165 (Spring Semester) **Prerequisite: Minimum of "C-" in HIT140 (Med. Terminology) or HSC117.
14251 Health Science

Health Science courses integrate chemistry, microbiology, chemical reactions, disease processes, growth and development, and genetics with anatomy and physiology of the body systems. Typically, these courses reinforce science, mathematics, communications, health, and social studies principles and relate them to health care.

A focus of essential concepts of disease processes in relationship to the etiology, pathogenesis, pathology, and treatment of human diseases.

INDUSTRIAL TECHNOLOGY

13054 Wood Processing/Production (Introduction to the Built Environment) (One Semester) (Ltd. Enrollment - 10)

Wood Processing/Production courses include studying the properties of woods and composites made from woods and using these materials to construct usable products. These courses enable students to experience the process of translating an idea into a finished product, with instruction in planning, designing, selecting materials, and using tools and machines. This course is for studying the application of framing floors, walls, ceilings and roof sections of a building. You will learn how to estimate and purchase materials. You will also learn how to use many of the tools used in the carpentry field. During this time you will construct small sample sections of floors, walls and rafters. The last nine weeks will consist of applying the knowledge gained to design a building; estimate materials needed, and then construct a building for someone in the community.

17002 Construction—Comprehensive (Construction Core Curriculum) (One Semester) (Ltd. Enrollment - 10)

<https://youtu.be/cXlqzRofKVY>

Construction—Comprehensive courses provide students with basic knowledge and skills required for construction of commercial, residential, and institutional structures. These courses provide experiences and information (typically including career opportunities and training requirements) regarding construction-related occupations such as carpentry, cabinetmaking, bricklaying, electrical trades, plumbing, concrete masonry, and so on. Students engage in activities such as reading blueprints, preparing building sites, starting foundations, erecting structures, installing utilities, finishing surfaces, and providing maintenance. This course is designed to give a general background in the construction area. This course will cover topics of basic safety, construction math, hand tools, power tools, blueprints, material handling, employability skills, and communication skills. This class will get give hands-on experience using tools involved in the many construction areas, as well as a general overview of what it takes to be involved in the construction trades.

17007 Cabinetmaking (Cabinetetry) (One Semester) (Ltd. Enrollment - 10)

<https://youtu.be/re7SUV4k-E0>

Cabinetmaking courses provide students with experience in constructing cases, cabinets, counters, and other interior woodwork. Students learn to distinguish between various types of furniture construction and their appropriate applications, and how to use various woodworking machines and power tools for cutting and shaping wood. Cabinetmaking courses cover the different methods of joining pieces of wood, how to use mechanical fasteners, and how to attach hardware. Initial topics may resemble those taught in Woodworking courses; more advanced topics may include how to install plastic laminates on surfaces and how to apply spray

finishes. The first six weeks is studying and learning from the textbook. This book covers the different types of wood, their usefulness, durability and economy; also usage of the different tools, learning their parts and how to use them safely. Projects are planned and sketched so a cost estimate can be made before construction begins. After the classroom section of the course is completed, the remaining six weeks of the semester are spent in the shop constructing the projects of your choice. It is recommended that the first project be of a simple design so that you have a chance to become familiar with the power tools and operations. You will be permitted to work at your own pace and complete as many projects as time permits.

Shop Related Welding* WEL329 & Welding Fundamentals* WEL330 (One Semester) (Ltd. Enrollment - 10)

<https://youtu.be/6GAmzzVqb2g>

This course will cover the safety and proper operation of equipment used in various welding procedures. The use of arc, mig gas, and tig welders will be covered and applied. Horizontal lap, butt, and T welds will be performed with each of these welders. The use of the cutting torch and plasma cutter will also be introduced and applied. Students will be allowed time for a project if they choose. ***Dual credit course with NICC (1/1cr.)**

13207 (Shop Related Welding)

Welding courses enable students to gain knowledge of the properties, uses, and applications of various metals, skills in various processes used to join and cut metals (such as oxyacetylene, shielded metal, metal inert gas, and tungsten arc processes), and experience in identifying, selecting, and rating appropriate techniques. Welding courses often include instruction in interpreting blueprints or other types of specifications.

13208 Particular Topics in Welding (Welding Fundamentals)

In these courses students gain knowledge and skills in particular aspects of welding. Examples include individual courses in each of the following types of welding: gas metal, gas tungsten, and shielded metal and flux core arc welding.

Metal Design & Fabrication (One Semester) (Ltd. 10) Prerequisite-Welding Fundamental

<https://youtu.be/vywKKnAB41l>

This course will allow students to increase and develop their metal working skills. Students will design and build a project out of metal with the use of various metalworking tools and machines. They will gain skills in problem solving and fabrication that will aid gainful employment in a trades profession.

17010 Home Maintenance (Plumbing & Electricity) (One Semester)

https://youtu.be/3grUobm2_b4

Home Maintenance courses provide students with knowledge and skills related to devices and systems found in the home. Course content may include electrical wiring, plumbing, window and door repair and installation, wall and floor repair and finishing, furniture repair and finishing, and small appliance repair. This one trimester course takes a look at basic electricity, plumbing, and residential wiring. The course of study includes: the basics of electricity and plumbing, how electricity and plumbing works, alternating current motors, water and drain systems, how we get electricity and water to home, and all areas of wiring and plumbing which your home and other buildings use. The majority of the class is spent on residential or home wiring and plumbing, for example: switches, lights, receptacles, sinks, waterlines, gas lines, and drains. If time permits, and the opportunity arises, we will do wiring and plumbing in a local house or other building. The class is designed to give as much "hands-on" experience as possible.

HOME MAINTENANCE AND REPAIR (One Semester) (Ltd. 10)

<https://youtu.be/AgzjoEWcwoY>

What are the biggest purchases of our lives, our vehicles and our homes? This class will take the basics of ownership and maintenance of both and teach you how to take care of them. This class will look at construction, reading floor plans, plumbing, electrical and maintenance of a house. The class will also look at the maintenance and purchase of small gasoline engines and automobiles. This class is for all students.

21102 Drafting—General (Drafting/CAD) (One Semester)

<https://youtu.be/LVwWydPlv2k>

Drafting—General courses, usually offered as a sequence of courses, introduce students to the technical craft of drawing illustrations to represent and/or analyze design specifications and then refine the skills necessary for this craft. Drafting—General courses use exercises from a variety of applications to provide students with the knowledge and experience to develop the ability to perform freehand sketching, lettering, geometric construction, and multiview projections and to produce various types of drawings (working, detail, assembly, schematic, perspective, and so on). Computer-aided drafting (CAD) systems (if available) are typically introduced and used to fulfill course objectives.

This one trimester course will teach the student to visualize and express their own ideas graphically as well as interpret the ideas of others. Mechanical and architectural drafting is open to anyone and is recommended for anyone thinking about going into

engineering, architecture, interior design, or trade school, as well as those who just want to be able to express their ideas to others more concretely. The majority of the class consists of learning the Auto CAD drafting computer program.

22151 Career Exploration (One semester)

<https://youtu.be/Cm9K6O4ERfg>

Any realistic career planning must begin with developing a better understanding of oneself. The purpose of this course is to provide students with instruction in the career planning process directly related to the selection of a college major or the world of work. Topics include a comprehensive skills assessment, identification of work and personal values, career interests, work and learning styles, and personality types related to college majors and academic success. As the course progresses, students will begin to develop areas of interests related to college majors or future career paths. Each student will complete a project to investigate college majors or occupations that are of interest to them. The student will begin to use the information to evaluate to what extent their career interests realistically match their skills and qualities. Each student as part of their project will develop career/occupational goals and academic plans.

LANGUAGE ARTS

01001 English/Language Arts 1 (English 1) (Year Course)

Required

<https://youtu.be/-D4TitLWDJY>

Formerly known as English 9, this course concentrates on a complete review of English grammar, World Literature, study skills and the writing process. The study of literature is aimed at improving the students' thinking, problem solving, discussion, viewing, and writing skills while increasing their understanding and appreciation of literature. One unit on classical mythology will be completed. Vocabulary, spelling, and journaling also will be completed throughout the year.

01155 Communications (Speech)

(Semester Course) Required

Speech 1 <https://youtu.be/X7NmUM6tFPA>

Speech 2 <https://youtu.be/eFUMbL9Fusg>

Communications courses focus on the application of written and oral communication skills through a variety of formal and informal experiences. The courses are performance-based and emphasize effective interpersonal and team-building skills. Communications courses may also involve the study of how interpersonal communications are affected by stereotypes, nonverbal cues, vocabulary, and stylistic choices. This class will coordinate with the speech and drama program.

01002 English/Language Arts 2 (English 2)

(Year Course) Required

<https://youtu.be/ZAGefUV4V4M>

English/Language Arts II (10th grade) courses usually offer a balanced focus on composition and literature. Typically, students learn about the alternate aims and audiences of written compositions by writing persuasive, critical, and creative multi-paragraph essays and compositions. Through the study of various genres of literature, students can improve their reading rate and comprehension and develop the skills to determine the author's intent and theme and to recognize the techniques used by the author to deliver his or her message.

01003 English/Language Arts 3 (English 3) (Year Course)

<https://youtu.be/JPkBtd-KRu4>

The emphasis of this course is the study of the writing process and the appreciation of British Literature. This course will focus on British Literature from early English until modern English. Team participation skills will be developed. Author's lives and the time period from which they wrote will be accented. Literary techniques will be studied. Discussion, interpretation, and problem solving skills will be stressed. At least one full-length classic British novel will be studied. Vocabulary will be studied weekly throughout the year. All final written assignments require the use of a word processor. This course is designed to refine students' communication skills and to help them further prepare to enter the world of work.

ENG:021 | 3 Foundations of Writing

(One Semester)

<https://youtu.be/z5cGK31X8dk>

A writing course that develops fluency and confidence in communication and clarity in thinking through writer's notebooks,

expository writing, analytical reading, and listening. Structured assignments are used to explore personal goals and values, exercising skills needed for reasoning and writing across the curriculum. (Taken from the NICC handbook) This class would work well as a transition class in preparation for College Composition I.

01058 World Literature (One Semester)

World Literature courses use representative literature selections from ancient and/or modern times from countries around the world. Students improve their critical-thinking skills as they comprehend the diversity of literary traditions and the influences of those traditions. Oral discussion is an integral part of literature courses, and written compositions are often required.

01062 The Classics (One Semester)

<https://youtu.be/kVBziSOWagA>

This class will be the study of classical literature. Author studies will be done with authors such as Dickens, Hawthorne, Bronte, Wilder, and others. The writings will be compared to modern literature to seek patterns with subject matter, style, vocabulary and themes. Writing skills will be reinforced through responses to literature, narratives and descriptive papers. Critiques of the literature will be written.

01103 Evolution of Communication (One Semester)

https://youtu.be/o6QgshtFF_Y

This is a one trimester class usually offered after the two trimesters of Foundations of Writing. It creates a timeline of study from hieroglyphs to social media. The class involves an exposure to various topics such as sigillography, cryptology, and other forms of communication from the past to the present. Students actively take part in studying, discussing and writing in reference to these forms of communication and their effects on society.

01103 Composition

Composition courses focus on students' writing skills and develop their ability to compose different types of papers for a range of purposes and audiences. These courses enable students to explore and practice descriptive, narrative, persuasive, or expository styles as they write paragraphs, essays, letters, applications, formal documented papers, or technical reports. Although composition courses may present some opportunities for creative writing, their focus usually remains on nonfiction, scholarly, or formal writing.

College Composition 1* ENG105 (One semester) (Dual credit class) Junior/Senior Level

<https://youtu.be/tT88mPBh2Ws>

This class offers preparation for the types of communication and thought essential to academic and working-world success. The course focuses on writing as a process and is intended to help students identify and refine their own personal writing. Students will prepare for their college experience.

Prerequisite: Accuplacer test.

College Composition 2* ENG106 (Dual credit class) Junior/Senior Level

<https://youtu.be/tT88mPBh2Ws>

This is a writing course that focuses on writing as a process with emphasis on persuasion, evaluation, analysis, investigation, and research and documentation of sources. Students will prepare for their college experience. Prerequisite: College Composition I.

Star Wars (One Semester)

<https://youtu.be/gaR16uFDG9Y>

Technical Writing (One Semester)

<https://youtu.be/P9MF2AJXM4M>

Great Novels (One Semester)

<https://youtu.be/HDEDjLajQa8>

Mythic Elements

<https://youtu.be/AbHaAueE538>

Creative Expressions

<https://youtu.be/lm-f305r7h4>

British Lit - A Study of Doyle and Carroll

<https://youtu.be/yDjkQx377qc>

02052 Algebra 1 Prerequisite: NONE.

<https://www.youtube.com/watch?v=EiQ7keRz3JI>

This first course in algebra covers the basic structure of the real number system. Topics covered include introduction to algebra, working with real numbers, solving and graphing one-step and two-step equations and inequalities, polynomials and translating word problems into equations, factoring polynomials, fractions, applying fractions, linear equations and systems, introduction to functions, inequalities, rational and irrational numbers, and solving and graphing quadratic functions. The emphasis is on the structure of algebra and learning the language of algebra. (Linear equations are getting moved to 8th grade math)

02072 Geometry Prerequisite: Algebra I.

<https://www.youtube.com/watch?v=6nYLRn1mi6U>

The purpose of geometry is to teach the basic properties of plane figures, such as the triangle, parallelogram, square, rectangle, and circle. There are also units on deductive and inductive reasoning, parallel and perpendicular lines, congruent triangles, similar polygons, construction of geometric shapes using a compass and a straightedge, and finding areas and volumes. Geometry also helps develop the logic required for doing formal proofs. The knowledge will aid students in any endeavor, whether it includes math or not.

02056 Algebra 2 Prerequisites: Algebra I and Geometry.

<https://www.youtube.com/watch?v=5DTbUCV-okg>

Topics covered in Algebra II will include reviewing and increasing the skills involved with positive and negative numbers and zero, the solution of linear equations in two and three variables, solving verbal problems, properties of polynomials and rational expressions, linear and quadratic functions, exponential and logarithmic functions, and developing irrational numbers and complex numbers.

02110 Pre-Calculus (formerly Advanced Math) Prerequisites: Algebra I, Geometry, and Algebra II.

<https://youtu.be/hvI51kSTJaY> (same video as Trigonometry)

This one-year course includes trigonometry and pre-calculus topics as well as a variety of other topics. Pre-calculus topics include polynomial functions, rational functions, trig functions, analytic trig, vectors in a plane, complex numbers, systems of equations and inequalities, matrices, determinants, sequences, series, and mathematical induction. Other topics covered are progressions, binomial expansions, permutations, combinations, graph theory, probability, statistics, rates of change, and sets of numbers. Pre-calculus meets the entrance requirements of three years of high school math for 4-year colleges. Students who plan to attend a 4-year college should take this course.

02103 Trigonometry Prerequisites: Algebra I, Geometry, and Algebra II.

<https://youtu.be/hvI51kSTJaY> (same video as Pre-Calculus)

Trigonometry courses prepare students for eventual work in calculus and typically include the following topics: trigonometric and circular functions; their inverses and graphs; relations among the parts of a triangle; trigonometric identities and equations; solutions of right and oblique triangles; and complex numbers.

02061 Integrated Math I, II, III

Integrated 1 <https://www.youtube.com/watch?v=DUhxJugG2FI>

Integrated 2 <https://www.youtube.com/watch?v=UseV9PXsaQY>

Integrated 3 <https://www.youtube.com/watch?v=hFYPMNWjAkY>

Integrated Math courses emphasize the teaching of mathematics as problem solving, communication, and reasoning, and emphasize the connections among mathematical topics and between mathematics and other disciplines. The multi-period sequence of Integrated Math replaces the traditional Algebra I, Geometry, Algebra II sequence of courses, and usually covers the following topics during a three- or four-year sequence: algebra, functions, geometry from both a synthetic and an algebraic perspective, trigonometry, statistics and probability, discrete mathematics, the conceptual underpinnings of calculus, and mathematical structure.

Math for Liberal Arts* MAT110 (One Semester)

Concurrent course (high school and college credit). A survey of mathematical ideas emphasizing mathematical techniques for problem solving. Includes set theory, logic, algebra graphs, counting techniques, probability, statistics and consumer math.

Prerequisite: qualifying math test score

Intermediate Algebra* One Semester

Concurrent course (high school and college credit). Reviews real numbers and polynomials and other variable expressions, solving

equations and inequalities, graphs of linear equations, factoring of polynomials, solving quadratic equations, operations on rational expressions and solving rational equations. **Prerequisite: qualifying math test score**

College Algebra* MAT120

(One Semester)

College Algebra Assists in formalizing previously developed algebraic concepts and demonstrates further concepts and techniques necessary for subsequent study in mathematics. Topics include algebraic operations, exponents, radicals, logarithms, solution of linear and quadratic equations, systems of equations, determinants, complex numbers, inverse functions, graphing and other topics of advanced algebra. (48/0) Prerequisite: A minimum grade of C- in MAT:102 or MAT:747 or qualifying placement score

Statistics* MAT156

(One Semester)

Introduces the basic methods of statistical reasoning to help develop the ability to summarize data, interpret data and draw conclusions based on the data. (48/0) Prerequisite: A minimum grade of C- in MAT:102 or MAT:747 or qualifying placement score

MUSIC

05110 Chorus (Year Course)

Chorus courses provide the opportunity to sing a variety of choral literature styles for men's and/or women's voices and are designed to develop vocal techniques and the ability to sing parts. This class is a three-trimester elective course that focuses primarily on music performance. A variety of music is studied, and students will be introduced to and explore different styles, genres, and cultures. Music fundamentals, taught through music theory, and music history are also important aspects of this class, in addition to ensemble participation. Students will complete worksheets, evaluate personal performances, and participate in out-of class performances in addition to required concerts. Students have the opportunity to perform in concert choir, Wildcat Singers, solo and ensemble contests, and perform the National Anthem at athletic events. Honor choir experiences are also offered.

05101 General Band (Year Course) **Prerequisites: See explanation below.

General Band courses develop students' technique for playing brass, woodwind, and percussion instruments and cover a variety of non-specified band literature styles (concert, marching, orchestral, and modern styles). Band is a performance-oriented course that provides students with the opportunity to perform in marching band, pep band, and solo and ensemble contest. Students may also have the opportunity to participate in Flag Corps, Honor Bands, and festivals. Each year of band builds upon skills and concepts learned in the previous year(s), and because of this, no high school students may be admitted to band without permission from the director.

Prior to enrolling in high school band class as a freshman, a student must be able to play the following scales from memory and demonstrate knowledge of key signatures as they relate to his or her instrument: Concert Bb, Concert Eb, Concert Ab, and Concert F.

Prior to enrolling in high school band class as a sophomore, junior, or senior, a student must meet freshman requirements AND add the following scale(s) to their repertoire: Concert C.

PHYSICAL EDUCATION & HEALTH

08001 Physical Education

The physical education department provides numerous activities to help develop the physical fitness of each individual and acquaint the student with a wide variety of activities. Upon completion of 4 years of physical education, the student will understand that through proper diet and activity they can lead a healthy life. The department's goal is that each student will be given the opportunity to understand different types of fitness activities which include personal fitness, individual / dual sports, team sports, and recreational games. Daily personal fitness activities include strength training, speed / power training, movement / flexibility based activities, core based activities, and injury prevention. Sport activities are presented annually or biannually with each unit lasting about three weeks. Through contact with these activities, a student will learn basic fundamentals, history of the sport, rules, and techniques that will allow them success. They also learn how these activities can keep them physically fit and extend this into future life. Some team and individual activities include; softball, basketball, soccer, flag football, volleyball, floor hockey, weight lifting, badminton, pickleball, team handball, speedball, and lacrosse. Some recreational activities may include archery, fishing, ping pong, bocce ball, horseshoes, disc golf, ladder golf, and bean bag toss. Periodically, students will also participate in games of wiffleball, kickball, dodgeball, or capture the flag. Dressing for class is required and failure to do so will result in half credit for that day. A student is required to take Physical Education 1 Trimester per academic year.

08047 IPEP (Individualized Physical Education Plan)

Principal approval due to scheduling conflicts.

The Individualized Physical Education Plan (IPEP) will be an option for physical education students who are interested in filling the regular eight period day with seven or eight classes and are willing to participate in physical training outside of the regularly scheduled day. These students would keep a log of all activities and communicate regularly with the physical education teacher with regard to the impact of the activity on the student's development and to document the process. The student will also be required to write a report and have two periodical articles per quarter. The physical education teacher may also need to provide a given student with activities to facilitate the student effort.

08051 Health Education

Topics covered within Health Education courses may vary widely, but typically include personal health (nutrition, mental health and stress management, drug/alcohol abuse prevention, disease prevention, and first aid) and consumer health issues. The courses may also include brief studies of environmental health, personal development, and/or community resources.

Health 1: Introduction to Health (Trimester) *Graduation Requirement <https://www.youtube.com/watch?v=zZRYg7x3Jko>

Riceville Community School's health course is designed to establish, promote and support health-enhancing behaviors for students. *National Health Education Standards and Performance Indicators* are used as a guideline for the curriculum covered throughout the class. The following standards provide a framework for student goals in relation to health education: *1. *Students will comprehend concepts related to health promotion and disease prevention to enhance health.* *2. *Students will analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.* *3. *Students will demonstrate the ability to access valid information, products, and services to enhance health.* *4. *Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.* *5. *Students will demonstrate the ability to use decision-making skills to enhance health.* *6. *Students will demonstrate the ability to use goal-setting skills to enhance health.*

*7. *Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.* *8. *Students will demonstrate the ability to advocate for personal, family, and community health.* Furthermore, this class is designed to expose students to health topics including, but not limited to, nutrition; personal health; fitness and exercise; the body systems; drug and alcohol education; sexual education; mental health; and muscles and bones.

Health 2: First Aid and Safety (One Semester) Prerequisite: Health 1 <https://www.youtube.com/watch?v=zZRYg7x3Jko>

This class is designed to further explore concepts covered in Health 1. Throughout the course, various health topics will be discussed which include, but are not limited to, physical fitness; nutrition; mental health; substance abuse; family health; sexual health; and financial literacy. Throughout the course of the curriculum, there will be an emphasis on first aid and safety. These topics will be covered to increase the knowledge base for individual safety and the safety of others. The increase in knowledge is intended to provide students with the skills to make health-enhancing behavior choices from adolescence to adulthood.

Introduction to Public Health (One Semester) <https://www.youtube.com/watch?v=PxyzysddKW4&t=2s>

Introduction to Public Health is an elective offering in the field of health. The role of public health is to protect the health of populations. Within this role, public health focuses on promoting healthy lifestyles, researching and preventing the spread of diseases, preventing injuries, and advocating for public health policies. An overview of major public health topics and issues will be covered throughout the course. Topics will include, but are not limited to: public health terminology; community resources offered by public health; the relationship between the medical field and public health; public health purposes; current public health initiatives; factors that affect the public's health; and how public health works to improve life for all people.

Refer to the Iowa Core Curriculum and the National Health Education Standards for more detailed information.

Student Aide

The student-aide offering is for any Junior / Senior who is interested in pursuing education as a profession. Upon being a student-aid, the student will better understand how a teacher prepares for class, facilitates lessons, and organizes a cohesive classroom conducive to learning. The student-aide will be expected to help the teacher in the above mentioned items however they seem fit depending on the ability / readiness of the student-aid to do so. The student-aide will more than likely rotate to different classrooms daily to allow the student to see a variety of classrooms / teaching styles. This will depend on the period in which the student-aide is requesting to take the offering AND what interests the student has for education. This offering is a privilege and only students pre-approved by principal and staff are allowed to be a student-aide.

Beginning Officials Class

Beginning Officials Class is designed to help students understand how to become an athletic official along with learning the

nuances of officiating. Things discussed include game management, ethics, pre / post routines, mental components, body language, self talk, communication (verbal and nonverbal), maintaining focus in contest (whether a “blow out” or tight, highly competitive game), work effectively with partner, how to slow the game down mentally, Growth Mindset, understand rhythm / flow of game, how to get certified and advance in officiating, how to read a rule book and take the rules test, etc.

PEAK Performance

Peak Performance is designed to help students better understand how to improve their performance in body composition, athletics and life. This class will touch upon a variety of subjects including time management/prioritization, mental conditioning, building a positive attitude, developing positive self talk, relaxation and recovery techniques, building a process over outcome approach, developing an uncommon daily routine, and learning how to maximize potential. This class will help inspire and motivate students to pursue excellence in their everyday lives in all their future endeavors.

SCIENCE

03051 Biology Freshmen Level Year Required

<https://youtu.be/sgxESvwRxXM>

Biology is designed to provide information regarding the fundamental concepts of life and life processes. This course will include topics as cell structure and function, general plant and animal physiology, genetics, and taxonomy.

03159 Physical Science Sophomore Level Year Required

<https://youtu.be/QFzZeOeBxvw>

Physical Science involves the study of the structures and states of matter. This course offers students an opportunity to become more acquainted with the physical world around them. Through the use of audio-visual, traditional and computer-based experiments, class discussion, and group interaction, each student is led to an appreciation of the diversity of matter, various forms of energy, wave phenomenon, electromagnetism, and everyday physical and chemical interactions.

03101 Chemistry Junior or Senior Level Year

<https://youtu.be/IdEOHVivg0>

Chemistry involve studying the composition, properties, and reactions of substances. This course will explore such concepts as the behaviors of solids, liquids, and gases; acid/base and oxidation/reduction reactions; and atomic structure. Chemical formulas and equations and nuclear reactions are also studied. High school chemistry is very important for anyone who plans to go to college and especially important for careers in agriculture, science, health-related careers, environment, etc. Students taking this class must have a C or better in Physical Science and have taken Algebra I.

03151 Physics Junior or Senior Level Junior or Senior Level Year

<https://youtu.be/ddfL0lyuuys>

Physics involves the study of the forces and laws of nature affecting matter, such as equilibrium, motion, momentum, and the relationships between matter and energy. The study of physics includes examination of sound, light, and magnetic and electric phenomena. This course is especially important for anyone planning a career in science, engineering, many health-related and construction-related careers. Students taking this class must have a C or better in Physical Science and have taken Algebra I.

Anatomy & Physiology: (One Semester) (Prerequisite: Biology)

<https://www.youtube.com/watch?v=dXr0SQPe39o&t=1s>

The *Anatomy and Physiology* course will enable students to develop an understanding of the relationships between the structures and functions of the human body. Covered topics will include: mechanisms for maintaining homeostasis, chemistry of life, cells, tissues, integumentary system, musculoskeletal system, nervous system, sensory organs, endocrine system, circulatory system, respiratory system, digestive system, urinary system, reproductive system, and fetal development. This course will involve laboratory activities, projects, dissections, textbook materials, models, diagrams, and journal writings.

Refer to Next Generation Science High School Standards for more detailed information.

Diseases of the Human Body: (One Semester) (Prerequisite: Biology)

<https://www.youtube.com/watch?v=6xGbPsnMXs8>

This course will relate to the study of human diseases and organ system involvement, including physical signs and symptoms, prognoses, and common complications and their management. Covered topics will include: infectious diseases, neoplasms, congenital disorders, mental illnesses, and diseases/disorders of the major human body systems (urinary, reproductive, digestive, respiratory, cardiovascular, nervous/sensory, endocrine, musculoskeletal, and integumentary). Coursework will involve microbiology discussions, laboratory activities, projects, textbook materials, online research, and journal writings.

Refer to Next Generation Science High School Standards for more detailed information.

The Natural World: (One Semester)

<https://www.youtube.com/watch?v=wfEQTKTA7s4>

The *Natural World* course will be concerned with earth, space, and environmental sciences. Through the coursework, students will receive instruction on various topics related to the world around us...on land, in the water, in the Earth's atmosphere, and beyond. Covered topics will include: chemical reactions and energy in the environment, matter/energy in ecosystems/organisms, interdependent relationships in ecosystems, natural selection and evolution, space systems, history of Earth, weather and climate, and human sustainability. Coursework will involve laboratory activities, projects, textbook materials, journal writings, and engineering design relating to global environmental issues.

Refer to Next Generation Science High School Standards for more detailed information.

Designer Genes: (One Semester) (Prerequisite: Biology)

<https://www.youtube.com/watch?v=e6kKN7JtwKs&t=6s>

The *Designer Genes* course will be offered as a science elective with an emphasis on genetics. The study of genetics relates to heredity and traits being passed from parent to offspring. First and foremost, students will gain knowledge about the fundamentals of genetics related to Mendel's research. Other course topic goals include: how genes are inherited, genetic diseases, the role of genetic factors in various cancers, chromosomal abnormalities, the human genome project, advancements in the field of genetic engineering, and ethical concerns related to the science. Furthermore, students will understand the role of genetic testing in today's society. Delivery of coursework will be lecture, online lab simulations, tests, research projects, and other various activities.

Refer to Next Generation Science High School Standards for more detailed information.

SOCIAL SCIENCES

04101 American History

Required (Year)

https://youtu.be/dEN8UYI_xOs

US History - Comprehensive course provides students with an overview of the history of the United States, examining time periods from discovery or colonialism through World War II. This course typically includes a historical overview of political, military, scientific, and social developments. Course content may include some history of the North American peoples before European settlement.

04109 American History II

(One Semester)

U.S. History courses examine the history of the United States from World War II to the present era. These courses typically include a historical review of political, military, scientific, and social developments.

04051 World History

Required (Year)

<https://youtu.be/Hqtc1QNJ3g8>

World History—Overview courses provide students with an overview of the history of human society from early civilization to the contemporary period, examining political, economic, social, religious, military, scientific, and cultural developments. World History—Overview courses may include geographical studies, but often these components are not as explicitly taught as geography.

04151 American Government

(One Semester)

<https://www.youtube.com/watch?v=LVoA5LuHm6k>

U.S. Government—Comprehensive courses provide an overview of the structure and functions of the U.S. government and political institutions and examine constitutional principles, the concepts of rights and responsibilities, the role of political parties and interest groups, and the importance of civic participation in the democratic process. These courses may examine the structure and function of state and local governments and may cover certain economic and legal topics.

04254 Psychology

(One Semester)

<https://www.youtube.com/watch?v=HcwAKrYX9G8>

Psychology courses introduce students to the study of individual human behavior. Course content typically includes (but is not limited to) an overview of the field of psychology, topics in human growth and development, personality and behavior, and abnormal psychology.

04258 Sociology

(One Semester)

https://www.youtube.com/watch?v=_JDBpU1cA8A

Sociology courses introduce students to the study of human behavior in society. These courses provide an overview of sociology, generally including (but not limited to) topics such as social institutions and norms, socialization and social change, and the relationships among individuals and groups in society.

04001 World Geography (One Semester)

World Geography courses provide students with an overview of world geography, but may vary widely in the topics they cover. Topics typically include the physical environment; the political landscape; the relationship between people and the land; economic production and development; and the movement of people, goods, and ideas.

04106 Current Issues (One Semester)

<https://www.youtube.com/watch?v=ZPB8nQgcYUE>

Contemporary U.S. Issues courses study the political, economic, and social issues facing the United States, with or without an emphasis on state and local issues. These courses may focus on current issues or may examine selected issues that span throughout the 20th century to the present.

04201 Economics (One Semester)

<https://www.youtube.com/watch?v=XQ4dpTndKcQ>

Economics courses provide students with an overview of economics with primary emphasis on the principles of microeconomics and the U.S. economic system. These courses may also cover topics such as principles of macroeconomics, international economics, and comparative economics.

Economic principles may be presented in formal theoretical contexts, applied contexts, or both.

04251 Anthropology (One Semester)

<https://youtu.be/cW5RogJAXas>

Anthropology courses introduce students to the study of human evolution with regard to the origin, distribution, physical attributes, environment, and culture of human beings. These courses provide an overview of anthropology, including but not limited to both physical and cultural anthropology.

04065 Military History (Particular Topics in World History) (One Semester)

<https://youtu.be/CvDh-kgiLUs>

Course will introduce students to the art of war, looking specifically at battle assessments and planning, strategic attacks, and the disposition of forces, all while drawing from past military engagements as examples.

Study Skills- Resource Room**22003 Study Skills** (Year Course)

<https://youtu.be/5oJ3CvivsRY>

Study Skills is year long class that offers students the opportunity to hone skills necessary for succeeding in academics. Student goals will be discussed and established, as well as looking at the positives of using a planner, be it daily, weekly or monthly. Strategies and skills will be presented for test-taking and note taking. Visual aids will be a topic to discuss as to interpreting them and creating aids for assignments or projects. Graphic organizers, strategies for remembering information, and interpreting graphs are also topics in this class.

WORLD LANGUAGES**06101 Spanish 1** (Year Course)

<https://drive.google.com/file/d/0B5wo-FICFz5acmFGU2JGS2tBUjQ/view?usp=sharing>

Designed to introduce students to Spanish language and culture, Spanish I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Spanish culture is introduced through the art, literature, customs, and history of Spanish-speaking people. Students wishing to move on to Spanish 2 need to earn a C or above in the last trimester.

06102 Spanish 2 (Year Course)

<https://drive.google.com/file/d/0B5wo-FICFz5aSDJJWC1ic0RkSIU/view?usp=sharing>

Spanish II courses build upon skills developed in Spanish I, extending students' ability to understand and express themselves in Spanish and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Spanish-speaking people to deepen their understanding of the culture(s). Students wishing to move on to Spanish 3 need to earn a C or above in the last trimester.

06103 Spanish 3

(Year Course)

<https://drive.google.com/file/d/0B5wo-FICFz5ac3BjcUJDWER1SVU/view?usp=sharing>

Spanish III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

06104 Spanish 4

(Year Course)

<https://drive.google.com/file/d/0B5wo-FICFz5aMnJ0UXBvdXBjWVE/view?usp=sharing>

Spanish IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Spanish language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

GIFTED & TALENTED**22106 Gifted and Talented (GT) Course Offering (One Semester) Student must be identified for TAG placement**

The high school Talented and Gifted Program is designed to provide intellectual and creative challenges to those students who have already been identified for the TAG program. The emphasis of the TAG class is to provide opportunities for gifted students to devote time to an intensive, research based independent study in an area of personal interest. Other topics or competitions that students may participate in include, but are not limited to: understanding their personal giftedness, book analysis, class research projects, inductive and deductive logic. Students may also pursue Advanced Placement opportunities through the Iowa Online Academy. There will also be vocabulary study and affective domain projects completed as part of this course.

The 21st Century Gifted Learner (One Semester *Student DOES NOT have to be identified as Gifted for this course.<https://www.youtube.com/watch?v=u9VprBtcNhQ&t=3s>

The *21st Century Gifted Learner* will be offered as an elective course for students in grades 9-12. Throughout the duration of the class, students will strengthen their *21st Century Skills* through inventive, imaginative, innovative, artistic, and creative activities. The goal of the coursework is to prepare students for college and work by improving the following skill set: collaboration, teamwork, creativity, imagination, critical thinking, problem solving, flexibility, adaptability, initiative, and leadership. The development of these skills will help students thrive in today's world and will enhance their future endeavors, whether academic or work related. Refer to Iowa Core Curriculum: 21st Century Skills for more detailed information.

CHARACTER LEADERSHIP & DEVELOPMENT**22101 Character Leadership and Development**

Required (One Semester)

This is a junior/senior level course that will involve reading, discussion, film clips, and daily writing. Students will learn about various role models that exemplify character traits. Ethical dilemmas will engage students in discussion. Writing is extensive.

NICC (Northeast Iowa Community College)**Pre-Employment Strategies* SDV:153**

2 college credits

Basic introduction to skills necessary for entry-level employment positions. Networking with local employers will be a key component. A work performance rating and a National Career Readiness Certificate will be awarded based on WorkKeys testing results which will be recognized in interviewing and compensation practices of some local employers. Stresses options for continuing education through NICC programs. This course is a requirement for students in the Youth Career Link program through NICC.

PICC (Placement in College Courses): These are online course options for juniors and seniors only. They are independently taken during a class period that fits for the student. Students must meet testing prerequisites for certain courses and deadlines to register for courses as set up by our district and NICC. **Textbook purchasing or renting is the student's responsibility.** Our district will not purchase or rent textbooks for PICC courses, and students are responsible for obtaining their texts in a timely fashion for their coursework.

PICC offerings vary from semester to semester. Courses are to be taken through the Northeast Iowa Community College; if there is a course that NICC does not offer that NIACC does, we will ask for approval from NICC in order for the student to take the course through NIACC.

To find current PICC courses, go to nicc.edu and click on "Search for Courses". Click "Search for Credit Courses". Then select the term and "online" for location in order to see the courses available.

To find NIACC courses, go to niacc.edu. Under "Quick Links", click on "Web Advisor" under "Student Tools". Then click on "Prospective Students". Click on "Search for Sections", then select the term and "Web-Based" for online course location.

Mrs. Hocken will assist students in picking and registering for courses. There is a registration form students need to fill out for any PICC course.

FAMILY & CONSUMER SCIENCE

Child Development 1

<https://www.youtube.com/watch?v=ed9Fvi10Sys>

This is a semester long course that meets every day and is offered to any student in grades 10-12. Students will learn and discuss topics such as conception, prenatal development, the birthing process, and early childhood development.

Child Development 2

<https://www.youtube.com/watch?v=ed9Fvi10Sys>

This is a semester long course that meets every day and is offered to students in grades 10-12. Students will continue exploring the development of toddlers and elementary aged children.

Sports Nutrition

<https://www.youtube.com/watch?v=AL70xxoRLg8>

This is a semester long course that meets everyday and introduces students to the world of nutrition (food groups, nutrients, and exercise) and how the food they eat affects their body and performance along with what and how to eat in order to keep your body healthy. This class is not only for athletes but for those students who want to live a healthy lifestyle. Learn how to get the peak performance from your body by eating and training in a healthy manner.

ProStart 1 (Pre-requisite: Sports Nutrition with a passing grade of at least a 'C+')

https://www.youtube.com/watch?v=77B3r_P61lw

This is a year-long course that introduces students to the world of food service. Students will have the opportunity to take a national test and earn college credit. Topics include the following:

1. Foodservice history
2. Keeping Food Safe
3. Workplace Safety
4. Kitchen Essentials
5. Stocks, Sauces, and Soups
6. Communication
7. Management Essentials
8. Fruits & Vegetables
9. Serving Your Guests
10. Potatoes & Grains
11. Building a Successful Career in the Industry

ProStart 2 (Pre-requisite of ProStart 1 with a passing grade of at least a 'C+')

This is a year-long course that introduces students to the world of food service. Students will have the opportunity to take a national test and earn college credit. Topics include the following:

1. Breakfast Food & Sandwiches

2. Nutrition
3. Cost Control
4. Salads and Garnishing
5. Purchasing and Inventory
6. Meat, Poultry, and Seafood
7. Marketing
8. Desserts and Baked Goods
9. Sustainability in the Restaurant and Foodservice Industry
10. Global Cuisine 1: The Americas
11. Global Cuisine 2: Europe, the Mediterranean, the Middle East, and Asia

FACS of Life (Recommended for grades 11 and 12)

This is a semester long course that meets everyday and helps students learn the skills that are necessary to live independently after high school. Students will cover the following topics, money and credit management, cleaning and organization, basic cooking, career interests, resume writing, job interview etiquette, and housing.

COMPUTER SCIENCE

10156 Introduction to Computer Science (one semester)

Eligibility: Must have Iowa Assessment scores in math in science in the 90th% or above. Offered for freshmen through seniors. It will be offered as a semester course during a regular school period. Only five students may enroll in this course at a time as a maximum.

Description taken from https://edhesive.com/courses/apcs_introduction

"This is an interactive introductory course for students brand new to programming that teaches the foundations of computer science using the Python language. Not only will this semester-long course prepare students for AP Computer Science A and AP Computer Science Principles, but it will teach students how to think computationally and solve complex problems, skills that are important for every student."

10012 Computer Science Discoveries (Year Course)

An introductory computer science course that empowers students to create authentic artifacts and engage with computer science as a medium for creativity, communication, problem solving, and fun.

Semester 1

CSD Unit 1 - Problem Solving

CSD Unit 2 - Web Development

CSD Unit 3 - Animations and Games

Semester 2

CSD Unit 4 - The Design Process

CSD Unit 5 - Data and Society

CSD Unit 6 - Physical Computing