**AGRICULTURE EDUCATION**

Course Title: **ADVANCED AG PROJECT CONSTRUCTION**

Credits: 5 per semester/ 10 per year

Prerequisite: Ag Mechanics

General Description:

This class is for completing construction projects of an advanced size and scope.

Mode of Presentation:

Demonstration, problem solving, and individual project work will be used to complete student goals.

Grading Procedure:

Mechanics skills learned, efficient use of time, and quality of workmanship determine grades.

Student Skills, Knowledge to be Gained:

Individual agricultural mechanics skills will be determined by each student to satisfy student’s goals.

Course Intended for:

Students wishing to gain new agricultural mechanics skills, build on skills previously learned, and complete a quality construction project.

Course Title: **AG EXPLORE**

Credits: 5 per semester

Prerequisite: None

Course Description:

This course will deal with natural resources and how we manage and conserve them.  Natural resources including soil, water, fish, wildlife, waste, pollution, and other environmental resources will be studied. This course will help students understand and make responsible decisions regarding conservation of our natural resources.

Mode of Presentation:

A variety of methods will be used including question-answer-discussion, problem solving, student presentations (both written and oral), advantages vs. disadvantages, lecture, PowerPoint presentations, video presentations, CD-ROM interactive student activities, guest speakers, and field trips.

Grading Procedure:

Student evaluation is comprised of daily work, class participation (including attendance), group and individual presentations, quizzes, and tests.

Students Skills, Knowledge to be Gained.

1. Students will identify procedures and practices, and demonstrate skills appropriate for the management of environmental and natural resource systems.
2. Students will recognize the importance in all aspects of interacting with the natural environment and its resources.

3. Students will investigate natural resource career opportunities

4. Students will explain the impact of past and current environmental issues.

5. Students will identify non-renewable natural resources and suggest strategies for conservation and preservation.

6. Students will identify and suggest strategies to maintain forest resources

7. Students will identify and suggest strategies to properly manage range and/or pasture resources.

8. Students will identify and suggest strategies to properly manage water resources.

9. Students will identify and suggest strategies to properly assess the quality conditions of air as a natural resource

10. Students will identify and suggest strategies to properly manage the natural resources of fish and wildlife.

11. Students will identify and suggest strategies for maintenance of soil resources.

12. Students will identify and suggest strategies to maintain renewable natural resources.

13. Students will practically apply technology in natural resource experiences.

Course Intended for:

**Required for Freshmen**.

Course Title: **AG LEADERSHIP**

Credits: 5 per semester

Prerequisite:

Course Description:

This semester long course is designed to encourage the development of leadership skills that are necessary to be successful in the agricultural industry. Personal and interpersonal leadership traits will be examined. Focus and emphasis on the FFA and the career development activities related to leadership will be used to further develop skills. It also encourages the development of record keeping skills through the requirement of establishing and maintaining a supervised agricultural experience program (SAE) in the AET record books.

Mode of Presentation:

A variety of methods will be used including question-answer-discussion, problem solving methods of instruction, math computation, written and oral presentation, lecture, PowerPoint presentations, video presentations, guest speakers, and field trips.

Grading Procedure:

Grades will be taken on daily work, problems, quizzes and tests, and S.A.E. records.

Students Skills, Knowledge to be Gained:

1. Understand different leadership styles.
2. Identify individual strengths in leadership qualities.
3. Implement leadership skills into daily life and future careers.
4. Complete SAE record books in AET and apply for proficiency award.
5. Use leadership skills developed/learned in class and apply them to FFA contests.

Course Intended for:

Students needing to gain leadership skills that will make them career ready. Also for students that are needing time to properly complete SAE records to apply for FFA State Degree or Proficiency awards.

Course Title: **Ag Mechanics (Welding, Wiring, Small Engines, Masonry, Plumbing)**

Credits: 5 per semester/10 per year

Prerequisite: Agriculture Education Orientation

Course Description:

Fundamentals of Agricultural Mechanics allows the student to develop the fundamentals of mechanical processes as they relate to the areas of agricultural mechanics. Areas to be explored include tool sharpening, plumbing, metal working, arc welding processes, oxy-fuel processes (welding, brazing, cutting), hot and cold metal working, electricity, construction and building materials, sketching, drawing and using plans for construction. An emphasis will be placed on the development of orderly and safe lab procedures for many practical skills that will be developed.

Mode of Presentation

Classroom discussion, problem solving, demonstrations, and individual practice of welding exercises.

Grading Procedure:

Daily welding exercises, quizzes and tests on welding procedure and safety, practical welding tests, and project grades will all be used as well as S.A.E. records.

Students Skills, Knowledge to be Gained

|  |
| --- |
| I. Sketching, Drawing, Interpreting Plans  A. Sketches and Drawings  B. Developing a Bill of Materials |
| II. General Safety (specific safety covered in each unit) |
| III. Tools and tool fitting  A. Identification, selection, safe use  B. Sharpening specific tools |
| IV. Power Tools and Equipment  A. Parts identification and safe use  B. Selection |
| V. Metalworking  A. Procedures and Safety  B. Hot and Cold Metalworking |
| VI. Welding  A. Types of Welding, Procedures and Safety  B. Operation of Arc and Oxy-fuel Welding equipment  C. Development of welding fundamentals |
| VII. Electricity  A. Electrical Terms  B. Circuit Planning  C. Procedures and Safety |
| VIII. Plumbing  A. System Planning and Maintenance  B. Equipment, Tool and Supply Selection  C. Procedures and Safety |
| IX. Small Engines  A. System Planning and Maintenance  B. Equipment, Tool Selection  C. Procedures and Safety |

Course Intended for:

Students interested in gaining lifetime skills and/or occupational skills in Ag Mechanics.

Course Title: **AGRI-BUSINESS MANAGEMENT/EMPLOYMENT/GREENHOUSE**

Credits: 5 per semester

Prerequisite: None

General Description:

This course emphasizes management skills as well as employment skills needed in both ag production and ag businesses. It will also cover greenhouse operation and management that prepares students to produce commercial plants in a controlled environment and to manage commercial and experimental greenhouse operations.

Mode of Presentation:

Classroom discussion, problem solving, demonstrations, role playing, job shadowing, greenhouse labs, and/or on the job instruction will be used.

Grading Procedure:

Grades will be taken on daily work, problems, quizzes and tests, employer grades, and S.A.E. records.

Student Skills, Knowledge to be Gained:

Students will be able to:

1. Describe basic economic principles.

2. Word problems on record keeping, financial management and cash flow, income taxes, and partial budgeting.

3. Describe the essentials of a contract and lease.

4. Develop a marketing plan for a commodity.

5. Describe the human relation skills needed by an employee.

6. Describe proper sales procedures.

7. Understand the biology and technology involved in producing and marketing horticulture crops.

8. Develop skills to manage and operate the school greenhouse.

9. Understand the growing conditions and needs of vegetable crops and annual flowers.

Course Intended for:

Students needing to gain skills in management, marketing, and employment in agriculture occupations and students that want to develop knowledge of how to operate and manage a greenhouse.

Course Title: **Animal Science (LARGE ANIMALS)**

Credits: 5 per semester

Prerequisite: Agriculture Education Orientation

Course Description:

This course will alternate with Plant Science.  This class is a study of animals that have an impact on the agricultural economy of our state and nation.   The class applies scientific method to the production and management of a variety of agricultural species.  Specific items studied include the identification of over thirty breeds of large agricultural animals, feedstuffs and animal nutrition as well as ration-balancing, livestock selection, breeding, genetics and reproduction, animal diseases, parasites and their control, and basic principles in marketing and managing livestock.

Mode of Presentation

A variety of methods will be used including question-answer-discussion, problem solving methods of instruction, math computation, written and oral presentation, lecture, PowerPoint presentations, video presentations, live animal demonstrations, guest speakers, and field trips.

Grading Procedure:

Daily work, class participation (including attendance), group and individual presentations, quizzes, & tests.

Students, Skills, Knowledge to be Gained

1. Discover how the scientific method affects modern animal production.

2. Complete laboratory assignments based on sound scientific method.

3. Prepare written presentations on animal science related careers.

4. Identify breeds of four large animal species, including beef and dairy cattle (bovine), horses (equine), sheep (ovine), and swine (porcine).

5. Distinguish between natural selection and selective breeding.

6. Practice livestock selection principles using slides, videos, and live animals.

7. Use Expected Progeny Difference (EPD) figures in beef cattle selection.

8. Use a combination of visual appraisal and EPDs to select beef bulls.

9. Describe livestock anatomy using common livestock evaluation terms.

10. Learn the parts of animal skeletal structure using both common and scientific names.

11. Identify twenty different animal feedstuffs.

12. Recommend proper feed ingredients for different species of livestock.

13. Name the six basic nutrients needed by all animals and describe their functions.

14. Balance feed rations for protein using the Pearson Square method.

15. Compare and contrast ruminant and simple stomach digestion.

16. Balance beef cattle rations using dry matter intake method.

17. Identify 25 common meat cuts of beef, pork and lamb.

18. Identify wholesale meat cuts, and identify quality and yield grades.

19. Describe estrous and estrous cycles of several livestock species.

20. List the gestation periods for cattle, sheep, swine and horses.

21. Describe diseases common to cattle, horses, swine, sheep and poultry.

22. Name common animal parasites and their control or prevention.

23. Outline proper sanitation, immunization, disease prevention, and control methods.

24. Work management and marketing problems associated with livestock growth, breeding, reproduction, and finishing.

25. Maintain Supervised Agricultural Experience (S.A.E.) records.

Course Intended for:

Students interested in livestock production and careers in animal science.

Course Title: **COMPANION ANIMALS (SMALL ANIMALS)**

Credits: 5 per semester

Prerequisite: None

General Description:

This course will alternate with Natural Resources. This course offers information required to understand small animal husbandry. Through lectures, practical information is gained into the companion animal's nutritional needs, behavior patterns and preventative health care. They learn what normal and abnormal behavior is and how to advise clients on applying proper training techniques. The emphasis in this course is the prevention of health problems in companion animals.

Mode of Presentation

A variety of methods will be used including question-answer-discussion, problem solving methods of instruction, math computation, written and oral presentation, lecture, PowerPoint presentations, video presentations, demonstrations and laboratory, guest speakers, and field trips.

Grading Procedure:

Daily work, class participation (including attendance), group and individual presentations, quizzes, and tests

Student Skills, Knowledge to be Gained:

1. Students will be able to distinguish the basis on which animals are classified as companion, and characterize the different species within the classification.

2. Students will recognize the signs of normal and abnormal health and necessary management procedures to maintain the health of companion animals.

3. Students will develop an understanding of the specialized nutritional habits and requirements of companion animals at different life stages

4. Students will recognize the role of genetics in reproduction, and the management care required to maximize reproductive efficiencies

5. Students will become aware and informed regarding legal aspects of companion animal ownership.

Course Intended for:

Students interested in small animal husbandry and careers in veterinary sciences, biology, pet care owners, zoology, small animal breeders.

Course Title: **PLANT Science**

Credits: 5 per semester

Prerequisite: Agriculture Education Orientation

Course Description:

This course will alternate with Animal Science.  The class is a study of plant growth and reproduction.  It includes the cultural and scientific aspects of both field crop and horticulture crop production.  Specific items studied include plant identification, greenhouse work, planting seeds, transplanting developing seedlings, crop tillage systems, crop pests and their control, G.P.S. applications, soil testing and fertilizer management, and home gardens and landscapes.

Mode of Presentation

A variety of methods will be used including question-answer-discussion, problem solving, student presentations (both written and oral), and advantages vs. disadvantages, lecture, PowerPoint presentations, video presentations, CD-ROM interactive student activities, guest speakers, and field trips.

Grading Procedure:

Student evaluation is comprised of daily work, class participation (including attendance), group and individual presentations, quizzes, and tests.

Students Skills, Knowledge to be Gained:

First Quarter is Field Crop Production and Management.  Upon completion of this class, the student will be able to:

1. Describe principles of plant germination, growth, reproduction, and life cycles.

2. Identify twenty field crops and forage plants or seeds common to Nebraska.

3. Compose a written presentation on careers in Agronomy.

4. Describe several tillage systems and plan a tillage system for a specific crop.

5. Outline planting and seeding rates, planting depth and timing, and best row spacing for several crops.

6. Identify major and micro nutrients needed for optimum plant growth and yields.

7.   Read fertilizer grades, take soil samples for testing, analyze soil test results.

8.   Calculate amounts and costs of fertilizer according to test results and information.

9.   Use Global Positioning Systems (GPS) equipment to grid map a sample field.

10. Identify twenty weedy or unwanted plants that affect Nebraska grown crops.

11. Describe cultural, mechanical, chemical and other weed control methods.

12. Select proper weed control chemicals for specific crops and weed problems.

13. Calibrate a farm sprayer for proper application, nozzles and spacing.

14. Describe five methods of irrigating field crops and discuss methods of scheduling.

15. Work management and marketing problems associated with field crop production.

16. Initiate and maintain an S.A.E. record book.

Second Quarter is Horticulture Production and Management. Upon completion of this class, students will be

able to:

1. Identify twenty tree and/or shrub samples, ten common vegetable plants, and ten annual and ten perennial ornamental plants.

2.   Propagate greenhouse plants or nursery stock by seeds, cuttings, layering or division.

3.   Complete a variety of laboratory practices associated with plant growth and reproduction.

4.   Compose a written presentation on careers in Horticulture.

5.   Prune fruit, shade, evergreen and ornamental trees and shrubs.

6.   Grow plants in a hydroponics “garden.”

7.   Grow bedding plants in the school “grow-house” for home use or sale.

8.   Select plants for a sample landscape, either indoor or outdoor.

9.   Design a home landscape using paper/pencil “bubble” technique.

10. Use computer software to plan floral and other outdoor landscapes.

11. Complete a floral design.

12. Design a plan for a vegetable garden including common annual and perennial plants.

13. Solve problems in managing a horticultural business.

14. Maintain an S.A.E. record book.

Course Intended for:

Students interested in applied biological sciences, careers in plant production, nursery operations, and careers in agronomy and horticulture.

**BUSINESS EDUCATION**

Course Title: **ACCOUNTING I**

Credits: 5 per semester/10 per year

Prerequisite: Sophomore status

General Description:

Accounting I provides an understanding of the basic principles of the double-entry accounting system. Students will study the accounting cycle for a sole proprietorship, a partnership, and a corporation. Some activities in the course include recording transactions, preparing worksheets, financial statements, payroll, and studying taxes. Keeping up with assignments on a daily basis is essential.

Mode of Presentation:

Lecture, textbook, PowerPoint presentations, discussion, question and answer, online workbook, and computer application.

Grading Procedure:

Grades are derived from a cumulative average of tests, homework, quizzes, and business simulations.

Student Skills, Knowledge to be Gained:

1. Know accounting as it is related to careers and for personal use.

2. Know accounting terminology.

3. Understand accounting concepts, principles, and practices.

4. Apply accounting procedures.

5. Develop a good foundation for further study.

6. Promote good business habits, neatness, and accuracy.

Course Intended for:

This course is intended for any student in Grades 10-12.

Course Title: **ACCOUNTING II**

Credits: 5 per semester/10 per year

Prerequisite: Accounting I

General Description:

Accounting II is a continuation of the Accounting I class. It is designed to help students acquire additional knowledge of accounting procedures and techniques. It covers the accounting cycle, partnership accounting, departmentalized accounting, corporation accounting, cost accounting, and management accounting.

Mode of Presentation:

Lecture, textbook, PowerPoint presentations, discussion, question and answer, online workbook, simulation, and computer simulation.

Grading Procedure:

Grades are derived from a cumulative average of tests, homework, and business simulations.

Student Skills, Knowledge to be Gained:

1. Know accounting as it is related to careers.

2. Know accounting terminology.

3. Understand accounting concepts, principles, and practices.

4. Apply accounting procedures.

5. Develop a good foundation for further study.

6. Promote good business habits.

Course Intended for:

Students on a junior or senior level. **Can be taken for college credit through Northeast Community**

**College.**

Course Title:  **BUSINESS MANAGEMENT AND LEADERSHIP**

Credits: 5 per semester

Prerequisite: None

General Description:

Introduction to Management and Leadership expands student understanding of management. It exposes students to several types of management, including customer relationship management, human resources management, information management, knowledge management, project management, quality management, risk management, and strategic management. Economics, finance, operations, and professional development are also stressed throughout the course. It alsodevelops student understanding and skills in the areas of communication skills and emotional intelligence. Through this course, students acquire an appreciation for the need for self-awareness, teamwork, and leadership skills. By developing these skills and habits early, students are likely to experience greater success in subsequent academic and career courses, as well as perform better in their CTSO activities and professional lives.

Mode of Presentation:

Lecture, textbook, PowerPoint presentations, discussion, question and answer, module simulations.

Grading Procedure:

Grades are derived from a cumulative average of tests, homework, and quizzes.

Student Skills, Knowledge to be Gained:

1. Understand various management systems.

2. Know the importance of customer relations.

3. Understand information management

4. Understand economics, finance and professional development.

5. Develop a good foundation for further study.

6. Promote good business habits.

7. Understand the importance of developing good leadership qualities.

Course Intended for:

This course is intended for any students in grades 10-12.

Course Title: **COMPUTER APPLICATIONS**

Credits: 5 per semester/10 per year

Prerequisite: None

General Description:

This class covers many aspects of computer usage in today’s society. It includes hands-on experience with computers.

Mode of Presentation:

Lectures, simulations, white board, videos, demonstrations, multimedia presentations, and guest speakers.

Grading Procedure:

2/3 daily work: hands on work, homework, projects, study guides, journals, quizzes, meeting deadlines, and individualized work habits

1/3 tests: written and application

Student Skills, Knowledge to be Gained:

1. Trends in technology.

2. Basics of operating systems.

3. Intermediate word processing.

4. Introductory database

5. Intermediate spreadsheet

6. Concepts of Merging and Integration

7. Telecommunications

8. Expanded Internet usage concepts

9. Introductory multimedia presentation

10. Issues of security, privacy, and computer ethics

11. Introduction of podcasting concepts

Course Intended for:

This course is available for those in grades 9-12 who are planning to use the computer in everyday life, in college, or in the workplace.

Course Title: **ECONOMICS**

Credits: 5 per semester

Prerequisite: None

General Description:

This course is designed to help students understand economic principles as applied to current events and issues. Emphasis includes economic structures and systems, supply and demand, opportunity costs, inflation, price mechanisms, markets, role of competition, money and monetary policy, role of labor organizations, and productivity.

Mode of Presentation:

Lecture, textbook, PowerPoint presentations, discussion, question and answer.

Grading Procedure:

Grades are derived from a cumulative average of tests, homework, and quizzes.

Student Skills, Knowledge to be Gained:

1. Know economics as applied to current events.

2. Know economics structures and systems.

3. Understand supply and demand.

4. Understand monetary and fiscal policy.

5. Develop a good foundation for further study.

6. Promote good business habits.

Course Intended for:

This course is offered to students in grades 9-12.

Course Title: **ENTREPRENUERSHIP**

Credits: 5 per semester

Prerequisite: None

General Description:

Introduces students to a wide array of entrepreneurial concepts and skills, including the role of entrepreneurship in our economy, entrepreneurial discovery processes, ideation, and preliminary start-up venture planning. Students also develop an appreciation for marketing’s pivotal role in the development and success of a new business. They become acquainted with channel management, pricing, product/service management, and promotion. Students conduct thorough market planning for their ventures: selecting target markets; conducting market, SWOT, and competitive analyses; forecasting sales; setting marketing goals and objectives; selecting marketing metrics; and setting a marketing budget. The capstone activity in the course is the development of detailed marketing plans for students’ start-up businesses.

Mode of Presentation:

Lecture, textbook, PowerPoint presentations, discussion, question and answer, module simulations.

Grading Procedure:

Grades are derived from a cumulative average of tests, homework, and quizzes.

Student Skills, Knowledge to be Gained:

1. Understand entrepreneurial qualities.

2. Develop an understanding of the entrepreneurial discovery process.

3. Understand channel management, pricing, product/service management, and promotion.

4. Demonstrate an understanding of market planning for their ventures.

5. Develop a good marketing plan.

6. Promote good business habits.

7. Understand the importance of developing good leadership qualities.

Course Intended for:

This course is offered to students in grades 9-12.

Course Title: **INTRODUCTION TO BUSINESS/EXPLORE**

Credits: 5 per semester

Prerequisite: Freshmen status

General Description:

Introduction to Business is designed to give the student insight into the world of owning and operating a business. Topics in this area include small business operation, basic economics, human resource management and diversity, groups affecting business, marketing, finance, and business ethics. Additionally, students will learn about various consumer issues such as decision making, consumer rights and responsibility, and investing.

Mode of Presentation:

Lecture, discussion, question and answer, textbook, overhead transparencies, white board, workbook,

individual simulations, research, films, videos, and computer simulations.

Grading Procedure:

Grades are derived from a cumulative average of tests, daily work, quizzes, and individual simulations.

Student Skills, Knowledge to be Gained:

1. Improvement in knowledge of basic economics.
2. Understanding of how businesses operate.
3. Increased knowledge of business vocabulary.
4. Increased knowledge of solving of business problems and activities.
5. Increased knowledge of consumer and personal finance issues.

Course Intended for:

This course is **required for students in grades 9.**

Course Title: **Personal Finance**

Credits: 5 per semester/10 per year

Prerequisite: Freshmen status

General Description:

Understanding and managing personal finances are key to one’s future financial success. This one semester course presents essential knowledge and skills to make informed decisions about real-world financial issues. Students will learn how choices influence occupational options and futures earning potential. Students will learn to apply decision-making skills to evaluate career choices and set personal goals. The course content is designed to help the learner make wise spending, saving, and credit decisions and to make effective use of income to achieve personal financial success.

Mode of Presentation:

Textbooks, workbook, lecture/discussion, videos, computer simulations, field trips, guest speakers, case studies, community projects, question and answer, and reports.

Grading Procedure:

Grades are derived from a cumulative average of tests, quizzes, reports, and daily work.

Student Skills, Knowledge to be Gained:

The student should have an understanding of:

1. Choosing and planning a career.

2. Work laws and responsibilities.

3. Job search techniques.

4. Money management & Taxes.

5. Checking accounts and other banking services.

6. Saving and investing.

7. Credit, credit laws and responsible use of credit.

8. Resource management.

9. Risk management and insurance.

10. Consumer rights and responsibilities

Course Intended for:

This course is offered to students in grades 9-12. **This class is articulated for transfer to Northeast** **Community College. (Contact teacher/guidance counselor for confirmation)**

**ENGLISH**

Course Title: **CREATIVE WRITING**

Credits: 5 per semester

Prerequisite: English 9

General Description:

This course emphasizes practice in oral and written creative uses of the English language. Students will also put together and publish a school newspaper and/or literary magazine.

Mode of Presentation:

Teacher and student story writing, interviewing, computer usage, interpretive skills, writing/media critiquing skills, and public speaking skills.

Grading Procedure:

Grading is heavily weighted toward student presentations, papers, projects, and quizzes.

Student Skills, Knowledge to be Gained:

1. To improve use of the conventions of the English language.

2. To learn and put to use creative writing techniques.

3. To evaluate their own and others’ compositions using the 6 Traits of Good Writing as a guide.

4. To learn to write, edit, and lay out various types of stories on the computer.

5. To develop skills in oral interpretation of prose, poetry, and drama.

6. To apply interpretive (critical analysis) skills to the works being studied for oral interpretation.

7. To study effectively.

8. To learn to analyze and critique different forms of media.

9. To improve comprehension, analysis, and evaluation of various types of literature.

10. To develop an awareness of cultural differences.

Course Intended for:

This is an elective course to expose students to the many different avenues of the written English language, and to teach students the fundamentals of different types of presentations.

Course Title: **ENGLISH 9**

Credits: 5 per semester/10 per year

Prerequisite: None

General Description:

This course emphasizes an integrated approach to reading, writing, listening, and speaking. Outlining skills are emphasized.

Mode of Presentation:

Students will read literature in a variety of genres and write in a variety of modes. Grammar will be studied in conjunction with student compositions. Students can also expect to do projects relating to the current topic and to give oral reports on their projects to the class.

Grading Procedure:

Grading is heavily weighted toward tests, quizzes, and major projects.

Student Skills, Knowledge to be Gained:

1. To improve use of the conventions of the English language.

2. To learn and put to use composition techniques.

3. To evaluate their own and others; compositions using the 6 Traits of Good Writing as a guide.

4. To improve vocabulary.

5. To develop critical thinking skills.

6. To learn to use available resources effectively, including print and electronic sources of information.

7. To study effectively.

8. To improve public speaking and listening skills.

9. To improve comprehension, analysis, and evaluation of various types of literature.

10. To develop an awareness of cultural differences.

Course Title: **ENGLISH 10**

Credits: 5 per semester/10 per year

Prerequisite: English 9

General Description:

This course emphasizes various genres of literature and technical/business writing.

Mode of Presentation:

Lecture, discussion, and student presentations.

Grading Procedure:

Grading is heavily weighted toward tests, quizzes, and major projects. Grammar will be studied in conjunction with student compositions.

Student Skills, Knowledge to be Gained:

1. To improve use of the conventions of the English language.

2. To develop skills in business and technical writing.

3. To evaluate their own and others’ compositions using the 6 Traits of Good Writing as a guide.

4. To improve comprehension, analysis, and evaluation skills for various genres of literature.

5. To improve public speaking and listening skills.

6. To improve vocabulary.

7. To use available resources effectively, including print and electronic sources of information.

8. To study effectively.

9. To develop an awareness of cultural differences.

Course Title: **ENGLISH 11**

Credits: 5 per semester/10 per year

Prerequisite: English 10

General Description:

The course emphasizes the principles of literature and composition. Specific composition topics covered are creative writing (poetry, short stories, etc.), expository writing, and the research paper. The remainder of the course will be devoted to literature, grammar, and vocabulary improvement.

Mode of Presentation:

Lecture, discussions, demonstrations, student presentations, and videos.

Grading Procedure:

Grading is heavily weighted toward tests, essays, and major papers and projects.

Student Skills, Knowledge to be Gained:

1. To improve use of the conventions of the English language.

2. To improve composition techniques.

3. To evaluate their own and others’ compositions using the 6 Traits of Good Writing as a guide.

4. To improve comprehension, analysis, and evaluation skills for various genres of literature.

5. To develop a general understanding of how American cultures are revealed in the literatures they produce.

6. To develop a general understanding of major themes in American literature.

7. To improve public speaking and listening skills.

8. To improve vocabulary skills.

9. To master research skills, including use of electronic resources.

10. To study effectively.

11. To develop an awareness of cultural differences.

12. To learn and correctly use literary terms.

Course Title: **ENGLISH 12**

Credits: 5 per semester/10 per year

Prerequisite: English 11

General Description:

This course emphasizes British literature prior to the 20th century and various modes of writing. Students should expect to do a research paper, reading response journals, critical literary analyses, and several other types of compositions.

Mode of Presentation:

Lecture, discussion, group work, and student presentations and videos.

Grading Procedure:

Grades are heavily weighted toward tests, quizzes, and major projects.

Student Skills, Knowledge to be Gained:

1. To improve use of the conventions of the English language.

2. To improve composition techniques.

3. To evaluate their own and others’ compositions using the 6 Traits of Good Writing as a guide.

4. To improve comprehension, analysis, and evaluation skills for various genres of literature.

5. To develop a general understanding of the roles literature has played in shaping the British culture(s).

6. To develop a general understanding of major themes in British literature.

7. To improve speaking skills and listening skills.

8. To improve vocabulary skills.

9. To master research skills, including use of electronic resources.

10. To study effectively.

11. To develop an awareness of cultural differences.

Course Title: **INDEPENDENT LITERATURE I-II**

Credits: 5 per semester

Prerequisite: English 9

General Description:

This course emphasizes learning through reading of literature. The course is independent reading and

books will be focused on topics the student and teacher have discussed and agreed upon.

Mode of Presentation:

Lecture, discussion, videos, student presentation and literature based.

Grading Procedure:

Grading is heavily weighted on reading logs and journals, some tests and quizzes, major presentations

and projects.

Student Skills, Knowledge to be Gained:

1. To improve the use of literature for learning and pleasure.
2. To improve comprehension, analysis, and evaluation skills for various genres of literature.
3. To develop a general understanding of major themes and genres that literature offers.
4. To improve public speaking and listening skills.
5. To improve vocabulary skills.
6. To study and pace independent learning through literature.
7. To develop an awareness of cultural differences.

Course Intended for:

This course is intended for students in 10-12 grade.

**FOREIGN LANGUAGE**

Course Title: **SPANISH I**

Credits: 5 per semester

Prerequisite: None

General Description:

Spanish I is designed to give the student a basic Spanish background in pronunciation, vocabulary, grammar, conversation, reading, listening comprehension, writing, and culture.

Mode of Presentation:

Done through SKYPE with small group discussion, worksheets and projects.

Grading Procedure:

Grades are based upon quizzes, test scores, daily work, and classroom participation in learning exercises.

Student Skills, Knowledge to be Gained:

1. To learn the basic pronunciation guidelines.

2. To learn and use vocabulary orally and in writing.

3. To learn and use the Spanish language structure orally and in writing.

4. To develop basic conversational skills in Spanish.

5. To be able to read and comprehend basic Spanish passages.

6. To study various Hispanic cultures.

Course Intended for:

Students interested in foreign language in grades 9-12. This course is recommended for those students who will be attending a college where a high school foreign language is required and anyone wishing to gain a deeper understanding of language and culture.

Course Title: **SPANISH II**

Credits: 5 per semester

Prerequisite: Spanish I

General Description:

Spanish II is directed to those students who have successfully completed Spanish I and wish to further their education in the field of foreign language.

Mode of Presentation:

Done through SKYPE with small group discussion, worksheets and projects.

Grading Procedure:

Grades are based upon quizzes, test scores, daily work, and classroom participation in learning exercises.

Student Skills, Knowledge to be Gained:

1. To improve pronunciation.

2. To learn and use vocabulary orally and in writing.

3. To learn and use the Spanish language structure orally and in writing.

4. To continue to develop conversational skills.

5. To be able to read and comprehend basic Spanish passages.

6. To study various Hispanic cultures.

Course Intended for:

Students interested in foreign language in grades 10-12. This course is recommended for those students who will be attending a college where a high school foreign language is required.

**MATHEMATICS**

Course Title: **ALGEBRA I**

Credits: 5 per semester/10 per year

Prerequisite: None

General Description:

This course contains the standard topics of Algebra I. Signed numbers are emphasized, as well as positive, negative and zero exponents, and scientific notation. Systems of 2x2 linear equations are practiced. Emphasis is on graphs of and equations of linear functions. Word problems are included in many problem sets. Emphasis is also on identifying word problems by type and learning the solving procedures for each type.

Mode of Presentation:

Teacher presentations and lectures, discussion on topics as needed, textbook, use of whiteboard and overhead, and emphasis on daily assignment preparation.

Grading Procedure:

Grades will be based on cumulative average of daily assignments, chapter tests, effort, and final tests.

Student Skills, Knowledge to be Gained:

1. To understand the uses of algebra.

2. To perform operations on real numbers.

3. To make algebraic sentences and solve word problems.

4. To learn about graphing and linear functions.

5. To gain knowledge of systems of sentences.

6. To learn about and work with exponents and radicals.

7. To work with polynomials and do factoring.

8. To understand and work with quadratic functions and equations.

9. To be able to work with rational expressions.

10. To deal with structure and proof.

Course Intended for:

This course is intended for students in grades 9-12. This class is designed for college prep students and those interested in studying the principles of algebra.

Course Title: **ALGEBRA II**

Credits: 5 per semester/10 per year

Prerequisite: PASS Algebra I

General Description:

This course is designed to complete the automation of the beginning skills of algebra. Problem solving skills are studied throughout the class. Students will solve systems of 2x2 linear equations and nonlinear equations for half the course and 3x3's for the rest of the course. Area and volume and unit conversion problems along with right triangle trigonometry (sine, cosine, and tangent only) are covered. Students will also convert rectangular to polar and polar to rectangular. Addition of vectors, similar triangles and problems on the equation of a line are also emphasized. Students will work with complex numbers, solve problems by completing the square, and derive and use the quadratic formula. The overall emphasis is on second level skills of algebra.

Mode of Presentation:

Teacher presentations and lectures, discussion on topics as needed, textbook, use of whiteboard and overhead, and emphasis on daily assignment preparation.

Grading Procedure:

Grades will be based on cumulative average of daily assignments, chapter tests, effort, and final tests.

Student Skills, Knowledge to be Gained:

1. To gain skills in working with all types of linear and quadratic equations and the graphing of the same.

2. To gain skills in working with inequalities and graphing of the same.

3. To achieve skills multiplying monomials, binomials, and factoring polynomials.

4. To understand complex numbers and their uses.

5. To understand uses of direct and inverse variations.

6. To attain knowledge and skill of working various algebraic problems, such as those with one, two or three unknowns.

7. To understand some of the trigonometry functions.

8. To learn how to work with different powers and roots of numerals.

9. To obtain the skills necessary to enter the senior math course.

Course Intended for:

This course is intended for students in grades 10-12 who wish to further their understanding in algebra. It is required for students to take this course as an essential part of their high school curriculum.

Course Title: **GEOMETRY**

Credits: 5 per semester/10 per year

Prerequisite: PASS Algebra I

General Description:

This course emphasizes the strong relationship that exists between geometric content and geometric applications in the physical world. Theorems (basic conclusion) motivated by a physical problem will be applied to that problem to provide a solution. Most lessons are structured around theorems. Proof-writing skills are developed by beginning with the simplest of situations (a simple concept) and then lead gradually to more complex proofs. Critical thinking, logical reasoning and problem solving skills will be developed to provide creative development. Problem solving is a prominent strand in this course. Problem solving is emphasized in each problem set. An emphasis is placed on opportunities to experiment and apply inductive reasoning skills.

Mode of Presentation:

Teacher presentations and lectures, discussion on topics as needed, textbook, use of whiteboard and overhead, and emphasis on daily assignment preparation.

Grading Procedure:

Grades will be based on cumulative average of daily assignments, chapter tests, effort, and final tests.

Student Skills, Knowledge to be Gained:

1. To develop proficiency with geometric skills.

2. To expand understanding of geometric concepts.

3. To improve logical reasoning.

4. To be able to outline the steps involved in logical reasoning.

5. To develop the abilities in the area of mental visualization of geometric concepts.

6. To gain a knowledge of the authorities used in the formulation of proofs.

Course Intended for:

Required that all students take this class.

Course Title: **TRIGONOMETRY\***

Credits: 5 per semester

Prerequisite: PASS Algebra I, Algebra II, and Geometry or permission of instructor

General Description:

This course encompasses and extends topics and concepts of intermediate algebra. This course will:

1. Introduce and explore various topics of college algebra.

2. Consider circular functions and present an optional approach to the study of periodic functions.

3. Include a concise course in analytic geometry.

4. Provide an introductory course in limits, derivatives, and integrals.

Mode of Presentation:

Teacher presentations and lectures, discussion on topics as needed, textbook, use of whiteboard and overhead, and emphasis on daily assignment preparation.

Grading Procedure:

Grades will be based on cumulative average of daily assignments, chapter tests, effort, and final test.

Student Skills, Knowledge to be Gained:

1. To apply relations and functions to real situations.

2. To learn theory of equations and the concept of limits.

3. To work with matrices, determinants and vectors.

4. To work with circular functions from a wrapping function.

5. To graph trigonometry functions and their inverses.

6. To apply trigonometry functions.

7. To identify and solve arithmetic and geometric sequences and series.

8. To develop relationships between rectangular/polar coordinate systems.

9. To apply exponents and logarithms to real world situations.

10. To learn all functions of the straight line.

11. To distinguish the features of the circle, parabola, ellipse, and hyperbola.

12. To identify and work with permutation, combinations, and probability.

13. To work with statistics related to specific sets of data.

14. To cover theory of limits, theory and application of the derivative, and the definition and application of integration.

Course Intended for:

This course is intended to prepare the student in grades 11-12 for further study at the college level. It may be taken in conjunction with Geometry if Algebra I and Algebra II have been completed (only with instructor's permission). **\*This course may be taken for college credit through Northeast Community College. (Contact teacher/guidance counselor for confirmation)**

**PHYSICAL EDUCATION**

Course Title: **LIFETIME SPORTS**

Credits: 5 per semester/10 per year

Prerequisite: Physical Education/Health 9

General Description:

Lifetime Sports is directed to help students develop physically, socially, emotionally, and intellectually. Special emphasis is placed on activities with high carry-over value for use later in life for leisure-time recreation. Such activities include softball, basketball, golf, swimming, badminton, archery, tennis, bowling, tennis baseball, hoover ball, and pickle ball.

Mode of Presentation:

Lecture and demonstration.

Grading Procedure:

Participation, written assignments, and written reports.

Student Skills, Knowledge to be Gained:

1. To help the students to enjoy participation in sports and games.

2. To help the students improve their physical fitness.

3. To help the students develop the ability to perform various skills.

4. To help the students acquire a working knowledge of the rules and etiquette of the various games and sports.

5. To help the students develop interest and knowledge in activities that will lead to the wholesome use of leisure time.

6. To develop in the student’s attitudes and behavior that is socially acceptable.

7. To help students acquire knowledge of various sports and sports figures.

Course Intended for:

This course is intended for students in grades 10-12.

Course Title: **PHYSICAL EDUCATION/HEALTH 9**

Credits: 5 per semester/10 per year

Prerequisite: None

General Description:

Physical Education is directed to help students develop physically, socially, emotionally, and intellectually. Such activities include soccer, speed ball, physical fitness testing, flag football, softball, badminton, hockey, basketball, tumbling, volleyball, weight training, and other minor activities.

In Health, students will acquire health knowledge and attitudes necessary to help them achieve and maintain their potential for total health. Health units include: nutrition, CPR, suicide, dangers of smoking, drug and alcohol awareness, personality, and first aid and safety.

Mode of Presentation:

Lecture and demonstration.

Grading Procedure:

Physical Education will make up 75% of the grade and Health, 25%.

Student Skills, Knowledge to be Gained:

1. To help the students to enjoy participation in sports, games, and rhythmic activities.

2. To help the students improve their physical fitness.

3. To help the students develop the ability to perform various skills.

4. To help the students acquire a working knowledge of the rules and etiquette of the various games and sports.

5. To help the students develop grace, efficiency of movement, rhythm, and agility.

6. To help the students develop interest and knowledge in activities that will lead to the wholesome use of leisure time.

7. To develop in the student’s attitudes and behavior that is socially acceptable.

8. To help students develop self-confidence, initiative, cooperation, and sociability.

9. To help the students better understand themselves and to achieve and maintain total health.

Course Title: **STRENGTH AND CONDITIONING**

Credits: 5 per semester/10 per year

Prerequisite: Physical Education/Health 9

General Description:

Students will learn how to develop strength through proper strength training. They will learn proper techniques and how to set up a program. Students will also learn about conditioning through strength training, aerobic, and anaerobic conditioning.

Mode of Presentation:

Lecture and demonstration.

Grading Procedure:

Grades are determined from a cumulative average of skills tests, written assignments, participation, written tests, and group projects.

Student Skills, Knowledge to be Gained:

1. To learn the basic concepts of human movement.

2. To learn the role of the center of gravity related to proper human movement.

3. To learn and perform exercises which develop muscular strength, muscular endurance, cardiovascular endurance, and flexibility.

4. Knowledge of proper goal setting and rewards associated with goal setting.

5. To learn how to set up their own fitness program.

Course Intended for:

This course is intended for students in grades 10-12.

**SCIENCE**

Course Title: **BIOLOGY I**

Credits: 5 per semester/10 per year

Prerequisite: None

General Description:

This course will concentrate on the characteristics and processes of living things.

Mode of Presentation:

This course will be presented through the use of teacher's lectures, textbooks and laboratory manuals, audio visual aids, demonstrations, laboratory experiments, question/answer sessions, and computer simulations.

Grading Procedure:

Grades are determined from a cumulative average of tests, homework, laboratory exercises, quizzes, and class participation.

Student Skills, Knowledge to be Gained:

1. To help the students understand the basic biological principles and processes that governs life.

2. To help students gain a sense of the importance and existence of an interdependence among all living organisms.

3. To study biological related careers.

Course Intended for:

This course is intended as an introductory course in biology at the sophomore level.

Course Title: **BIOLOGY II\***

Credits: 5 per semester/10 per year

Prerequisite: Biology I

General Description:

This course will focus on advanced topics in biology including physiology, population biology, ecosystems, and environment. Current topics in biology and research will also be a part of this course.

Mode of Presentation:

The instructor will present this course through the use of lecture and discussion, textbooks, laboratory experiments, research projects, papers, and computer simulations.

Grading Procedure:

Grades are determined from a cumulative average of tests, homework, reports, laboratory exercises, quizzes, and class participation.

Student Skills, Knowledge to be Gained:

1. The students will learn how to do biological research.

2. Students will learn the basic concepts of animal physiology.

3. Students will learn the interrelationships of living things through the study of ecology and environment.

Course Intended for:

This course is intended for students who have an interest in Biology and will be useful to students who intend to pursue any type of science career. \***This course may be taken for college credit through Northeast Community College**. **(Contact teacher/guidance counselor for confirmation)**

Course Title: **CHEMISTRY**

Credits: 5 per semester/10 per year

Prerequisite: Physical Science + Algebra or permission of instructor

General Description:

This course deals with the atomic nature of matter. The focus will be on an in-depth study of the periodicity of the elements, chemical reactions, and stoichiometry. This course will emphasize the theoretical nature of chemistry.

Mode of Presentation:

Lecture with demonstration, laboratories, daily assignments, and computer simulations.

Grading Procedure:

Grades are determined from a cumulative average of tests, homework, reports, laboratory exercises, quizzes, and class participation.

Student Skills, Knowledge to be Gained:

Students will become familiar with:

1. Atomic structure.

2. The periodic table.

3. Chemical reactions.

4. Chemical bonding.

5. The mole.

6. Gas laws.

7. Reaction rate and equilibrium.

8. Acids, bases, and salts.

Course Intended for:

College prep students, especially those interested in scientific or medical fields.

Course Title: **BASIC NURSE AIDE/CNA**

Credits: 2.5 per semester/5 per year

Prerequisite: None

General Description:

This course is designed to meet the Nebraska Health & Human Services System training requirements for nurse aide certification and employment in long-term care facilities. Upon completion of this course, the student is eligible to take the state written and practical skills exam. After successfully passing this examination and completing the application procedure, the student’s name will be placed on the basic nurse aide registry at the Nebraska Health and Human Services Regulation and Licensure, Credentialing Division.

Mode of Presentation:

This course combines classroom lecture and laboratory application for the development of basic skills

needed to provide safe, effective, and caring services to the elderly or chronically ill patient of any age, in a long-term care facility.

Grading Procedure:

Percentage of daily participation, labs (clinical practicum), quizzes and tests.

Student Skills, Knowledge to be gained:

Upon completion of this course, the participant will be able to:

1. Define the key terms of the course
2. Understand different health care systems and their consumers
3. Understand the role, responsibilities and limitations as a nursing assistant
4. Understand the components and types of communication
5. Understand the principals of patient and nurse assistant safety
6. Demonstrate knowledge of medical abbreviations and terms
7. Understand /demonstrate each procedure included in this course
8. Understand the basic structure and function of each body system, changes of aging and common health conditions of the elderly
9. Understand observations and actions nursing assistants can make related to health conditions of the elderly
10. Understand the emotional, social, spiritual, sexual and cultural needs of the elderly

Course intended for:

Students interested in a basic nurse aide job or a future in the medical field.

Course Title: **HUMAN ANATOMY AND PHYSIOLOGY**

Credits: 5 per semester/10 per year

Prerequisite: Grades 10-12, successful completion of Biology I

General Description:

Students will learn the structures and functions of the human body’s major systems. Students will also explore health issues and their effect on the body’s functions.

Mode of Presentation:

Use of lecture, texts, coloring workbook, visual aids, demonstrations, laboratory experiments, daily assignments, and question/answer sessions.

Grading Procedure:

Grades are determined from a cumulative average of tests, homework, coloring workbook, reports, laboratory exercise, and weekly quizzes.

Student Skills, Knowledge to be Gained:

1. List and identify the general structures and functions of the 10 major human body systems.

2. Understand the role of chemistry in the function of the human body.

3. Explore and describe the following special senses: vision, hearing and balance, smell and taste.

4. Explore new medical advances relating to human anatomy.

5. Understand the possible consequences when body structures are damaged or when needs of the body are not met.

Course Intended for:

This course is intended for sophomores through seniors who want to explore health related fields.

Course Title: **INDEPENDENT SCIENCE RESEARCH**

Credits: 2.5 per semester

Prerequisite: None

General Description:

An elective course available for completion of science fair projects or research projects.  Students enrolled in this course have priority consideration for entry into regional science fairs.  Students that are interested in science fair entry but cannot take Independent Science Research will be considered on a case by case basis and must meet deadlines to be eligible.

Grading Procedure:

Grading is based on completion of individualized weekly tasks.

Course Intended for:

This class is recommended for students that are self-disciplined and are interested in science, math, engineering or a health career post-secondary education.

Course Title: **INTRODUCTION TO HEALTH CAREERS**

Credits: 5 per semester

Prerequisite: Grades 10-12, successful completion of Biology I

General Description:

This course is an introduction overview of health careers trends in the medical field, and expectations of any professional occupation.

Mode of Presentation:

Classroom discussion, textbook, lectures, demonstration, internet research, facility tours, job shadowing, guest speakers, student led presentations, clinical skills practice, occupational research, educational films, and portfolio completion.

Grading Procedure:

Assessment is from a variety of the following: participation, tests, group discussion, worksheets, projects, completion of documentation, and clinical performance checks.

Student Skills, Knowledge to be Gained:

Students will become familiar with:

1. History, organizational structure, and future trends in health and health related fields.
2. Technology and research in the medical field.
3. Availability and use of resources to explore health careers. The class introduces general groups of careers and then students search individually for more specific interest areas.
4. Educational requirements, time requirements, and other considerations for college and career planning.
5. Legal, ethical, and responsible practices expected of any professional. Confidentiality training to meet HIPAA regulations.
6. Basic understanding of medical terminology, human development, nutrition, anatomy and physiology.
7. Cultural diversity and special considerations during patient care including religion, culture, and other beliefs. Patient Bill of Rights. Living wills and advanced directives.
8. Safety, first aid, CPR, and patient evaluation. CPR certification will be awarded upon a passing grade in the CPR module.
9. Non-Profit organizations, charities, and other support groups for health fields.
10. Creating resumes, completing applications, practicing job interview skills, basic insurance information, and understanding realistic salary expectations.
11. Basic medical mathematics: Calculations, estimating, Roman numerals, angles, measurement, and military time.
12. Creating a professional portfolio that can be used in higher education, career planning, and scholarship application.

Course intended for:

College or technical school preparation especially for students interested in a medical field or biology.

Course Title: **MEDICAL TERMINOLOGY**

Credits: 5 per semester

Prerequisite: None (Biology I or Anatomy & Physiology are recommended but not required.)

General Description:

Students will become familiar with the meaning, spelling, and usage of Latin and Greek language elements as word parts, enabling the student to interpret and understand complex medical terms.

Mode of Presentation:

Lecture, reading assignments, worksheets, classroom activities, flashcards, computer generated review games, and short applicable films will be used as presentation methods.

Grading Procedure

Grading will primarily be from quizzes, tests, and homework. Grading will follow the regulations according to Northeast Community College policy.

Skills, Knowledge to be Gained

Students will be able to recognize prefixes, roots, and suffixes. Terms covered will include occupational titles, procedures, diagnostics, diseases, disorders, organization of the body, basic anatomy, basic physiology, medical transcription, and commonly used abbreviations.

Course Intended for

Students entering a career in a medical or biological field. **This class can be duel credit through Northeast Community College in Norfolk. 3 Credit hours can be gained. Grading is based on the requirements at the collegiate level therefore a “B” is an 80%-89%.** **This course is part of the Health Careers Academy.**

Course Title: **SUMMER BIOLOGY FIELD RESEARCH/SHELLCREEK WATERSHED**

Credits: 5 per summer course

Prerequisite: Completion of Physical Science

General Description:

This course will involve summer field research with focus on water quality monitoring of the Shell Creek.

Mode of Presentation:

This course will primarily be field work, collecting and analyzing water quality parameters. It will also involve lab work and presenting results to the public.

Grading Procedure:

Grades will be determined by degree of participation and contributions to the program.

Student Skills, Knowledge to be Gained:

1. Learn procedures for monitoring water quality, including dissolved oxygen, phosphates, nitrates, total solids, biological oxygen demand, turbidity, fecal coliform, pH, and flow rates.
2. Learn the relationship between water quality and macroinvertebrates.
3. Learn how to be responsible citizen scientists.

Course Intended for:

This course is intended for students in grades 10-12.

Course Title: **PHYSICAL SCIENCE**

Credits: 5 per semester/10 per year

Prerequisite: Freshman

General Description:

This class is structured to explore topics in chemistry and physics.

Mode of Presentation:

Use of lecture, texts, audio visual aids, demonstrations, laboratory experiments, and question/answer sessions.

Grading Procedure:

Percentage of daily assignments, labs, quizzes, and tests.

Student Skills, Knowledge to be Gained:

1. Use of the scientific inquiry method and to be proficient in science problem solving.

2. The use of proper laboratory techniques.

3. To understand and interpret the physical and chemical laws governing the universe.

4. Develop an awareness of the interdependence of humans and their environment.

Course Intended for:

This course is intended as a foundation for high school science.

Course Title: **PHYSICS**

Credits: 5 per semester/10 per year

Prerequisite: Physical Science + Algebra I or permission of instructor

General Description:

This course is an applied physics course designed for students who learn more effectively with a hands-on approach. This course includes instruction and application of principles of physics such as force, motion, power, energy, rate, work, force momentum, waves and vibration. Application of the principles is conducted in a laboratory setting. This course was designed to present the discipline of physics in the context of how it is practically experienced in the world.

The course is also a general study of the physical behavior of matter, placing a high emphasis on use of mathematical calculations. Students will study motion, action of forces, and forms of energy including heat, sound, light, electricity, and nuclear energies.

Mode of Presentation:

Use of lecture, texts, audio visual aids, demonstrations, laboratory experiments, and question/answer sessions.

Grading Procedure:

Percentage of daily assignments, labs, group work participation, quizzes, and tests.

Student Skills, Knowledge to be Gained:

1. Ability to apply basic laws of force, motion, energy and calculate quantities involved.
2. Understanding speed velocity and acceleration.
3. Understanding motion, fluids, and force through use of robotics.
4. Use of vectors to represent forces operating at angles.
5. Understanding of general wave theory.
6. Understanding and application of forms of energy such as heat, light, electricity, and nuclear.

Course Intended for:

This course is intended for college prep students, especially those interested in scientific study.

**SOCIAL STUDIES**

Course Title: **AMERICAN GOVERNMENT**

Credits: 5 per semester/10 per year

Prerequisite: Senior Status

General Description:

Students will study about: concerns we have relating to government; the foundations of government; political life; state and local government; the federal legislative branch; the federal executive branch; the federal judicial branch; the federal agencies; the government in relation to the working world; the governmental system of other nations; law and the Bill of Rights; and current events. There will also be an emphasis on world problems and current news.

Mode of Presentation:

Lecture, discussions, small groups, class projects, questioning sessions, films, video, Internet, Headline News or other immediate news outlet, etc.

Grading Procedure:

Grades will be derived from a cumulative average of tests, pop quizzes, quizzes, homework, papers, class participation, class presentations, projects, and current events.

Student Skills, Knowledge to be Gained:

1. To gain insights into the origins, history, structure, functions, and processes of the American political system.

2. To recognize how citizens, political parties, and interest groups influence and are influenced by the political system.

3. To identify the relationship between local, state, and national levels of government.

4. To describe the interaction of the three branches of national government and the federal bureaucracy as they carry out their duties.

5. To increase their awareness of the roles of the political and economic systems of the United Sates in the world around them.

6. To develop the knowledge and skills necessary for citizenship in the complex, participatory democracy of the United States (these skills involve critical thinking, writing, reading, speaking, questioning, etc.)

7. To gain an awareness of world events and how they affect American government and American life.

Course Intended for:

Open to Juniors and Seniors. **Required for graduation.**

Course Title: **AMERICAN HISTORY**

Credits: 5 per semester/10 per year

Prerequisite: Junior Status

General Description:

An emphasis on American History since the end of the Civil War and Reconstruction. Major topics covered will include The Progressive Era, American Imperialism, the two World Wars, the Great Depression, the Roaring Twenties, the Korean and Vietnam Wars, and the Civil Rights movement.

Mode of Presentation:

Lecture, discussions, video, textbook, and small group work.

Grading Procedure:

Grades will be determined by the following classroom activities: tests, quizzes, classroom preparation, discussion, research projects, book reports, essays, notebooks, and homework.

Student Skills, Knowledge to be Gained:

1. To develop an awareness and appreciation of history within the student.

2. To develop in the student an intellectual curiosity.

3. To develop an understanding of the interrelationship of nation, state, community, school, and the student's responsibilities.

Course Intended for:

Open to Sophomores, Juniors, and Seniors. **Required for graduation.**

Course Title: **WORLD GEOGRAPHY**

Credits: 5 per semester/10 per year

Prerequisite: None

General Description:

This is a study in cultural, physical, and political geography. Emphasis will be placed on physical, political, cultural, and economic aspects of life.

Mode of Presentation:

Lecture, question and answer, textbook, workbook, maps, and globes.

Grading Procedure:

Grades will be determined by tests, quizzes, notebook, daily work, and homework.

Student Skills, Knowledge to be Gained:

1. Find countries, cities, and other geographical features on the map.

2. Be able to discuss cultural aspects of general areas of the world.

3. Be able to describe economic aspects of general areas of the world.

4. Develop a "geographical" way of thinking.

Course Intended for:

Any student in grades 9-12. **Required for graduation or World History.**

Course Title: **WORLD HISTORY**

Credits: 5 per semester/10 per year

Prerequisite: None

General Description:

A study of the world's history from prehistoric time to the 20th century.

Mode of Presentation:

Lecture, workbook, textbook, videos, and discussion.

Grading Procedure:

Grades will be determined by tests, quizzes, worksheets, notebooks, and papers.

Student Skills, Knowledge to be Gained:

1. To develop an awareness and appreciation of history within the students.

2. To develop an awareness of relationships between nations of the world.

Course Intended for:

Any student in grades 9-12. **Required for graduation or World Geography.**

**VISUAL AND PERFORMING ARTS**

Course Title: **ART I**

Credits: 5 per semester/10 per year

Prerequisite: None

General Description:

This course is intended to allow students to explore a basic variety of art media and methods. Students will cover the basic fundamentals of pencil, water color, mixed media, collage, acrylic, abstraction, and tempera.

Mode of Presentation:

Lecture, demonstration, videos.

Grading Procedure:

Daily lab grades will be given based upon the student’s ability to work constructively on a given task. Projects will be grades on an individual basis based upon the student's ability to fulfill the assignment criteria. Quizzes and tests will be included.

Student Skills, Knowledge to be Gained:

1. Basic knowledge of the fundamentals of media types.

2. Creativity.

3. Basic knowledge of art history.

Course Intended for:

Students in grades 9-12 who want to learn beginning artistic technique.

Course Title: **ART II & ART III**

Credits: 5 per semester/10 per year

Prerequisite: Have to take full year of Art I for Art II and full year of Art II for Art III.

General Description:

This course is intended to allow students to further their exploration of media and media methods. Students will refine their skills in the areas of acrylic, media, abstraction, realism, pencil, charcoal, clay sculpture, watercolor, and tempera.

Mode of Presentation:

Students will present a list of goals and objectives they wish to achieve for each project they develop. Individual lecture, demonstration, and assistance will be given to each student based upon the designed project.

Grading Procedure:

Daily lab grades will be given based upon the student’s ability to work constructively. Projects will be grades upon individual work as well as the criteria established by each student on their individual project. Quizzes and tests will be included.

Student Skills, Knowledge to be Gained:

1. Creativity and individuality.

2. Improved expertise of media and art fundamentals.

Course Intended for:

Students who want to learn advanced artistic technique and have been successful in Art I.

Course Title: **INSTRUMENTAL MUSIC -- BAND**

Credits: 2.5 per semester/5 per year

Prerequisite: Previous instruction on band instrument.

General Description:

1. Groupings:

a. concert band

b. solos and ensembles

2. Lecture at times for historical background of composer and the music.

Mode of Presentation:

1. Rehearsing of the ensemble:

a. instrumental grouping b. entire group rehearse together

c. individuals play their parts d. sectional rehearsals

2. Performance by any of the groups or soloists.

3. Must know basic skills of playing and reading music.

4. Instruction given to facilitate skills and prepare for performance.

Grading Procedure:

1. Follow the school grading scale.

2. Determination of grade:

a. contribution to group

b. being present at all times possible when group performs

c. progress on playing of instrument

d. self-discipline in class and at performances

e. music theory – notes and rhythms testing

Student Skills, Knowledge to be Gained:

It is expected that students, through practice, will improve:

1. playing skills and techniques

2. music reading skills

3. listening skills (intonation)

4. physical endurance

5. be able to recognize certain styles

Course Intended for:

This course is intended for students in grades 9-12.

Course Title: **VOCAL MUSIC -- CHORUS**

Credits: 2.5 per semester/5 per year

Prerequisite: None

General Description:

1. Performing groups.

2. Develop basic skills to sing and read music.

3. Individual help to realize skills.

4. Groups:

a. mixed chorus b. girls’ choir c. boys choir

d. show choir e. soloists and small ensembles

Mode of Presentation:

Rehearsal of the group:

1. voice grouping

2. individual singing

3. entire group

Grading Procedure:

1. Follow the school grading scale.

2. Determination of grade:

a. contribution to group

b. enthusiasm for group

c. attendance at all group performances

d. progress in use of basic skills

e. discipline in class and at performances

f. music reading – notes and rhythms testing

Student Skills, Knowledge to be Gained:

Through practice, students will improve:

1. singing skills

2. reading of choral music

3. physical skills needed for singing

4. be able to recognize styles

5. listening skills

6. harmonizing with others

Course Intended for:

This course is intended for students in grades 9-12.

Course Title:  **SHOW CHOIR**

Credits: 2.5 per semester/5 per year

Prerequisite: Sing/Dance

General Description:

1. Performing Group
2. Combine singing with dancing
3. Compete in competitions
4. Work together as a team

Mode of Presentation:

Rehearsal of the group:

1. Voice
2. Dance
3. Sections
4. Group

Grading Procedure:

1. Follow the school grading scale.
2. Determination of grade:
3. contribution to group
4. being on time
5. present at all concerts and contests
6. self-discipline in class and at performances
7. music reading-notes, vocal rhythms, testing

Student Skills, Knowledge to be Gained:

It is expected that students, through practice, will improve:

1. singing/dancing skills and techniques

2. music reading skills

3. listening skills (intonation)

4. physical endurance

5. be able to recognize certain styles

6. harmonizing with others

Course Intended for:

This course is intended for students in grades 9-12.

Course Title: **YEARBOOK I-III**

Credits: 5 per semester/10 per year

Prerequisite: Permission of instructor - Grades 10-12

General Description:

An introductory course dealing with the art of good photo composition, including the concepts of leading lines, S curves, triangles, balance, framing, and mergers. Students will study the basic techniques and skills of photography and demonstrate these skills by designing and producing the school yearbook.

Mode of Presentation:

Lectures, textbooks, audio-visual aids, demonstration, and question/answer sessions will be used the first semester. The second semester is hands-on production of the yearbook.

Grading Procedure:

First semester grades will be based on accumulative points from tests, quizzes, and assignments. Second semester grades will be based on effort and results in yearbook production.

Student Skills, Knowledge to be Gained:

1. To help students understand basic photographic composition.

2. To help students learn basic camera handling techniques and picture editing.

3. To help students learn the skills necessary to produce a school yearbook, including page design, copy writing, photography, and Desktop Publishing.

Course Intended for:

Students interested in the arts and journalism. Registration priority will be given to upperclassmen. **This class will be limited to 12 students**.

**OTHER EDUCATIONAL OPPORTUNITIES**

Course Title: **HUMAN DEVELOPMENT (LIFESPAN DEVELOPMENT)**

Credits: 5 per semester/10 per year

Prerequisite: None

General Description:

Students will become familiar with the stages of a human life. Focus will be placed on sexual health issues, prenatal care, pregnancy, child development, and transitioning from childhood to old adulthood. Personal relationships, education goals, personal values, career choices, and self-esteem will all be topics covered.

Mode of Presentation:

Presentation of materials will include lectures, films, journals, worksheets, class discussion,

field trips (possible), project work, research, demonstration activities including mechanical babies,

and tests. Research will primarily be over current events.

Grading Procedure:

Due to the participation nature of this class, points will be awarded for classroom stewardship. A make-up assignment will replace missed time in class discussion. Failure to do the make-up assignment will result in the loss of points for that day. All projects will be graded by rubric. Students will have access to the rubric before they begin each assignment. Assignments will be graded using points. Tests and major projects will have higher point values than daily work and weekly research articles.

Student Skills, Knowledge to be Gained:

After completion of this class students should be able to

1. Recognize life stages from conception to old age and death.
2. Understand early child development.
3. Understand typical and atypical growth and development.
4. Meet the needs of young children through proper, culturally acceptable childcare practices.
5. Perform basic first aid for care of young children and other family members.
6. Identify varied needs of individual family members throughout the life cycle.
7. Understand educational psychology and the different theories of human learning and behavior.
8. Identify and compare traditional and non-traditional life styles.
9. Understand cultural differences in our changing world.
10. Analyze intrapersonal and interpersonal communication.
11. Understand the psychological, emotional, intellectual, and social needs of humans.

Course Intended for:

9-12 students interested in human psychology, childcare, education, social services, health careers, and criminal justice. This class is highly recommended for students that are involved in child care.

Course Title: **DRIVER’S EDUCATION**

Credits: 2.5 upon completion

Prerequisite: Driver’s Permit

General Description:

The course will cover all the information needed to earn their driver’s license and be a safe and secure driver.

Mode of Presentation:

Presentation of materials will include lectures, films, class discussions, practice driving behind the wheel of a vehicle. The course will require 20 hours of classroom time and 5 hours of behind the wheel training.

Grading Procedure:

Grades will be based on participation, self-discipline in class, progress of skills and completion of the class.

Student Skills, Knowledge to be Gained:

1. Prepare for permit test.
2. Learn techniques for safe driving.
3. Get an insurance discount upon completion.
4. Certificate of Completion.

Course Intended for:

Students who will be trying to get their school permit or driver’s license within the next year.

Course Title: **WORK STUDY**

Credits: 5 per semester/10 per year

Prerequisite: Senior Status

General Description:

The school district sponsors a Work Study Program as a career awareness program in which a senior may work during the school day as long as they are enrolled in and passing 20 credits each semester and are on track in meeting all graduation requirements.  Work must be secured for 5 days a week.

Mode of Presentation:

Students will be at the work site performing duties assigned by their supervisor at their job.

Grading Procedure:

Students will receive 5 credits per semester when enrolled in Work Study

Student Skills, Knowledge to be Gained:

After completion of this class students should be able to:

1. Show Punctuality
2. Communication skills improved by communicating with cooperating business and school
3. Comply with standards of employment
4. Work Ethic

Course Intended for:

Senior students on track for graduation and interested in obtaining skills through work.

School History

When the town site of Newman Grove was laid, a log house was built on the east corner from our present Shell Creek Church by Lewis Warren, one of the first settlers.  This was used rent free for the first term under the Public School System.  School continued in small buildings until 1889.  Then a school was built on our present site in keeping with the needs of the district, the course of study extended.

In 1894, E.H. Gerhart came from Lancaster County PA, to become Superintendent of Newman Grove Schools and the following year to increase the high school from eleven grades to twelve.  The first commencement was held Friday, June 5 1896, at eight p.m. at the Newman Grove Opera House with two graduates, Ida Gutru and Ita Pryor.

Athletics included girls and boys basketball and track.  Football was added around 1923, with Kennie Hinman as the first coach.  During the early years, teams used to travel from town to town by train.

In 1911, the first annual, "The Josholite," reported 66 students in the high school.  Domestic science, consisting of preparing food and sewing, was added.  Teas and luncheons were prepared by students inviting mothers and friends.  There was also manual training, a type of carpentry, with the boys furnishing their own materials.  Extra-curricular activities were girls’ reserves, Future Teachers Club, music consisting of a men's quartet, girls and boys chorus, an Acappella choir, band, and dramatics.  Later, wrestling and volleyball were added along with a Home Economics Club.

School hours were 9 a.m. to 4 p.m. with two study halls.  There were no buses for transportation.  It was the students' parents' responsibility to transport students to athletic games out of town.

Many of the high school students from the country stayed in Newman Grove during the school week.  During the war years, students collected scrap metal for the government to recycle.

A new building was dedicated September 12, 1908.  The old school building had been moved to a lot on main street and our city library occupied the first floor and, the Masonic Lodge the second floor until the building was destroyed by fire.

During the years, the course of study was increased.  In 1910, the following was offered: four years Latin, two years chemistry with lab, English, history, civil government, two years algebra and Normal Training.  In Normal Training, after passing a state examination, graduates could teach in the rural school.

The second Newman Grove gymnasium was built in 1968-69 and used for basketball, also volleyball for girls and other activities.  The old gym now is used for class plays, musicals and school activities.  A fully equipped kitchen was installed for the school lunch program.

Our Newman Grove Schools have been administered by many fine superintendents, principals, and teachers.  The curriculum and extra curriculum activities are much larger, as well as teaching staff plus a non-certified staff to assist.  The Newman Grove Public Schools are an important part of Newman Grove.

With tax money and grants, we were able to build a new school, which was dedicated in 1998.