

Woodbury Central High School
Schedule Planning
2023-24

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## A Note from the High School Principal

Dear Woodbury Central High School Students,
The information in this booklet is your source for the decisions you must make while in high school. Your choices will help you meet the graduation requirements and educational goals you have set for yourself. Carefully consider each of your classes as you plan each year at WC.

What courses will you take to help meet your educational goals for high school? As you consider this question, be sure to evaluate your academic strengths. Also, focus some of your thoughts towards your occupational goals. Are these goals in line with your strengths and interests?

Discuss your thoughts about this with your parents, teachers and counselor. They can help you understand how to prepare to meet your goals for your post high school years. As you and your parents read through the different components in this course description book, you will find yourself making appropriate choices for your needs at Woodbury Central High School.

Over the years, thousands of students have graduated from Woodbury Central High School. I challenge each of you to continue this proud tradition during your years here. WC provides for you an opportunity to excel in academics, the arts, in sports and in other activities.

Make the most of your high school experience by doing your best in class and getting involved in activities.
I wish you the best of luck with your studies and activities during your years at Woodbury Central.

## Go Wildcats!

## Dan Bormann

Dan Bormann, MS/HS Principal

## Woodbury Central Community School District Graduation Requirements

## 46 Credits Required

| English...................... 4 years $=8$ semesters $=\mathbf{8}$ credits | Math ..................... 3 years $=6$ semesters $=6$ credits |
| :--- | :--- |
| Science ..................... 3 years $=6$ semesters $=6$ credits | Social Studies........ 3 years $=6$ semesters $=6$ credits |
| Microsoft Office ...... 1 year $=2$ semesters $=2$ credits | Physical Education ... 4 years (see below) |
| Financial Literacy.................... 1 semester $=1$ credit (see below) |  |

ENGLISH

Required: 2 semesters each of English I (9th), English II (10th) and English III (11th)
2 semesters of English electives

MATH--------- Required: 6 semesters
SCIENCE -------- Required: 1 semester each of Earth Science and Physical Science (9th), 2 semesters of Biology (10th) and 2 semesters of Science electives

SOCIAL STUDIES - - - Required: 2 semesters of U.S. History (9th), 2 semesters of Government (11th) 1 semester of Social Problems (12th) and 2 semester Social Studies elective

FINANCIAL LITERACY -Required: 1 semester of Financial Math (pg 13), OR Economics (pg 15), OR Independent Living (pg 21)

## *PE -------------Required: 2 semesters of in-class PE or weights and EACH semester, EACH year either in a PE/Weight class OR exempt by filling out a PHYSICAL ACTIVITY CONTRACT

## MICROSOFT OFFICE - Required: 2 semesters

## Other Important Facts

1. Students earn 1 credit per course per semester except band (.5), choir (.5) PE (.6), and some WIT courses.
2. All students must be enrolled in at least 6 academic courses. Exceptions:

- Band + Choir in the same semester = 1 academic course and credit
- WIT courses vary - please see their description (starting on page 24). The number of WC credits earned = the number of academic courses on that student's schedule. For example, 1 credit earned $=1$ course, 1.5 credit earned $=1.5$ courses of the 6 academic course requirement. (Exceptions may apply)

3. P.E./Weight Training: the State of lowa requires that high school students get 120 minutes of physical activity per week.

- All students must take 2 semesters of in-class PE or Weight Training, during the school day or Early Bird Weights before school. We suggest the $\mathbf{2}$ semesters of in-class PE/Weights be completed freshman year.
- Students participating in sports and/or other activities such as weight lifting, marching band, cheerleading, drill team, etc.... can be exempted from PE if the activities provide 120 minutes of exercise per week.
- To be exempt, for whatever reason, students must complete and hand in to the Counselor a parent-signed PHYSICAL ACTIVITY CONTRACT. This form is available in the Counselor's office.


## From your School Counselor, Mrs. Schramm:

Selecting courses for the school year is an important process. Course selections should be based upon future goals and plans after high school. A wide range of courses are available to meet the needs of all students. Please choose a wide variety of classes in order to open your eyes to new ideas. Each time students select a high school subject, he/she opens the door to a career opportunity.

In $8^{\text {th }}$ grade, you completed a 4-year plan. Each year, that plan is adjusted according to you and how you've changed. Your future aspirations may change several times before you complete high school. Please use the time wisely when I meet with you for career lessons. There is so much information available to you to help you choose your next path after Woodbury Central. This information can help you:

- Discover your strengths and interests.
- Match interests, values and skills with education and employment opportunities.
- Explore programs and majors.
- Research financial aid and scholarship options.
- Learn about job outlook and pay.

What are your plans? Please share your thoughts, dreams and plans with me so I can help guide you through your high school choices.

- Military - please sign up to take the ASVAB in the spring of your junior year - you can retake as a senior, if needed
- Work, internship - support your resume with job experience and references
- Community College - go on college visits as soon as possible
- 4-year College - take the ACT spring of your Algebra 2 course and go on college visits


## SUGGESTED COLLEGE PREPARATORY CURRICULUM:

English: 8 credits $\quad$ Math: 6-8 credits $\quad$ Science: 6-8 credits

Social Studies: 6-8 credits Foreign Language: 4-8 credits of the same language
This aligns with the requirements of our State Colleges in lowa; UNI, ISU and IOWA (see page 6-7). Some colleges require fine arts and/or technology credits or have different requirements for certain programs (engineering, nursing.....). Check with your college choice for specific admission requirements.

## ACT test dates 2022-23 Register at: ACT.org

Stop in the Counselor's office for a practice test.

| Test Date | Register by | Test Date | Register by | Test Date |
| :--- | :--- | :--- | :--- | :--- |
| Apr 15, 2023 | Mar 10, 2023 | Oct 21, 2023 | Sept 15, 2023 | April 6, 2024 |
| June 10, 2023 | May 5, 2023 | Dec 9, 2023 | Nov 3, 2023 | Mar 1, 2024 |
| July 15, 2023 | June 16, 2023 | Feb 10, 2024 | Jan 5, 2024 | June 8, 2024 |
| Sept 9, 2023 | Aug 4, 2023 |  |  | July 13, 2024 |

It is suggested students take the ACT the spring of Algebra 2 or spring of Junior year, whichever comes first. Fee waivers are available for students on free/reduced lunch status. Although many colleges do not require an ACT score for acceptance, some scholarships may still be dependent on an ACT score.

## BUILDING YOUR FUTURE

## PREPARING FOR ACADEMIC SUCCESS AT REGENT UNIVERSITIES OF IOWA

Building your future is like building a house. Not somebody else's house-your own. You need to both envision your dream house and create blueprints for building it.

High school is a time of choices. In fact, some of the most important choices you'll make in life face you right now as you sign up for your high school courses.

## TAKE THE CHALLENGE

Be ambitious in your planning. Prepare yourself not only to survive in college but to thrive. The best preparation for college is to take the optimum courses. Experience at all three universities points to one definite conclusion: students who succeed best in college are those who build the best foundations in high school. Even if you're not currently considering attending college, you will still benefit from a strong foundation, since all jobs require much better academic preparation than they did a few years ago.

## DRAFT YOUR BLUEPRINT

## IOWA STATE UNIVERSITY

Office of Admissions
100 Services Center Ames, IA 50011-2011
admissions.iastat
e.edu $800 \quad 262$

3810
admissions.iastate.edu

## 01/ FOUNDATION

Lay your foundation carefully and wisely. It's tempting to choose a course in which you know you could get a good grade, rather than one that might be difficult for you. But a challenging course will help you when you get to college. During high school you need
to develop strong skills in reading, writing, speaking, listening, and reasoning. Courses that will help you do so include English/ language arts, mathematics, sciences with laboratory experience, social studies, and foreign language. Your counselor can help you make the right choices. Taking an ambitious course load in high school means you'll be starting college at an advantage.

## 02/ OPPORTUNITY

Learn to love learning. Every class you take is an opportunity to find something you care about, explore your intellectual horizons, and pursue your interests. View each class as an opportunity and a challenge.

## 03/ FRAMEWORK

Develop a framework of study and work habits. Practice study strategies that have been shown to work in college: listening, note-taking skills, daily study time rather than cramming, revisiting, revising, and reflecting. Make every effort to understand the concepts, theories, and relationships. Students
who come to college with proven work and study patterns have an advantage over students who need to establish them while they're coping with the new experience of being a college freshman.

## 04/ EXPLORE

While you are in high school, consider taking courses that will allow you to explore a future career, cultivate a talent in the arts, or teach you about a field you've known nothing about until now. Participate in extracurriculars. These initiatives broaden your horizons, enhance your total educational experience, and increase your interaction with others. Combined with a strong academic program, these activities will make you a confident and successful college student. Use your senior year wisely. Explore your interests and develop your talents.

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## Building Your Future

## REGENT ADMISSION INDEX (RAI)

Due to the many standardized testing issues caused by the COVID pandemic, Iowa's Regent universities are testoptional for freshman applicants entering Fall 2022 or earlier In other words, these students may choose whether they wish to submit ACT or SAT scores.

## Applicants Who Submit ACT or SAT Scores

These applicants will be considered for admission based upon their Regent Admission Index (RAI) score. Below is the mathematical formula for calculating your RAI score:
ACT composite score x 3

+ Cumulative GPA x 30
+ Number of years of high school core courses x 5
Total = RAI


## Applicants Who Do Not Submit ACT or SAT Scores

These applicants will be considered for admission based upon an individual review of their academic records. Emphasis will be given to high school cumulative GPA and core courses

|  | MINIMUM COURSE REQUIREMENTS FOR ADMISSION |  |  | OPTIMUM <br> RECOMMENDATIO NS FOR SUCCESS |
| :---: | :---: | :---: | :---: | :---: |
|  | IOWA STATE UNIVERSITY |  | I/W/ / <br> University of Northern lowa. |  |
| ENGLISH | 4 YEARS <br> emphasizing writing, speaking, reading, as well as an understanding and appreciation of literature. | 4 YEARS <br> with an emphasis on the analysis and interpretation of literature, composition and speech | 4 YEARS <br> including one year of composition, also may include one year of speech, communication or journalism | 4 YEARS <br> with an emphasis on the communication skills of writing, reading and listening, and the analysis and interpretation of literature. In addition, courses in journalism and media literacy will be valuable. Extracurricular activities in debate, speech contest, newspaper and yearbook will further develop essential competencies. |
| MATH | 3 YEARS <br> including one year each of algebra, geometry and advanced algebra. | 3 YEARS <br> including two years of algebra and one year of geometry for admission to the College of Liberal Arts and Sciences. <br> 4 YEARS <br> including two years of algebra, one year each of geometry and higher math (trigonometry, analysis or calculus) for admission to the College of Engineering. | 3 YEARS <br> including the equivalent of algebra, geometry and algebra II. | 4 YEARS <br> one in each year of high school. While advanced courses like calculus and statistics are good, it's more important that you gain a complete understanding of algebra II and trigonometry. |
| NATURAL SCIENCE | 3 YEARS <br> including at least two years of courses which emphasize elements of biology, chemistry, or physics. | 3 YEARS <br> including courses in physical science, biology, chemistry, environmental science and physics for admission to the College of Liberal Arts and Sciences. <br> 3 YEARS <br> with at least one year each in chemistry and physics for admission to the College of Engineering. Nursing -3 years, including one year each of biology, chemistry and physics. | 3 YEARS <br> including courses in general science, biology, chemistry, earth science or physics. Laboratory experience is highly recommended. | 4 YEARS <br> one in each year of high school. To be better prepared, take at least one year each of biology, chemistry and physics. <br> These can be taken in any order and may be taught productively in either a separate or an integrated fashion, depending on your school's offerings. |
| SOCIAL STUDIES | 2 YEARS <br> for admission to Colleges of Agriculture and Life Sciences, Business, Design, Engineering and Human Sciences. <br> 3 YEARS <br> for admission to the College of Liberal Arts and Sciences. | 3 YEARS <br> with U.S. history and world history recommended for admission to the College of Liberal Arts and Sciences. <br> 2 YEARS <br> with U.S. history and world history recommended for admission to the College of Engineering. | 3 YEARS <br> including courses in anthropology, economics, geography, government, history, psychology or sociology. | 3 YEARS <br> is essential, but four is better. Take at least one year each of U.S. and world history. <br> Additional courses in anthropology, economics, political science, psychology and sociology provide an important understanding of our political, social and economic institutions. |
| FOREIGN LANGUAGE | 2 YEARS <br> of a single foreign language for admission to the Colleges of Engineering and Liberal Arts and Sciences. | 2 YEARS <br> of a single foreign language are required for admission. For many degrees, the fourth year of proficiency is required for graduation. Nursing -4 years in a single language or two years each in two different languages. | Foreign language courses are not required for admission. However, two years of foreign language in high school with a C- or above in the last course will meet the university graduation requirement. | 4 YEARS <br> of a single foreign language. By taking foreign language during all four years of high school, you'll go beyond the basic skills and begin to use the language and reinforce your fluency. |
| OTHER COURSES | Specific elective courses are not required for admission. | Specific elective courses are not required for admission. | 2 YEARS <br> years of additional courses from the required subject areas, foreign language, or the fine arts. | Explore! Courses in the fine arts, performing arts, computers, or technology will help round out your high school experience. Your future field of concentration or career may lie in one of those areas. Follow your interests, talents, and the strengths of your school. Remember to choose courses with high academic standards. |

## COURSE SCHEDULING

## Example Class Schedules

| $9^{\text {th }}$ Grade | $10^{\text {th }}$ Grade |
| :---: | :---: |
| English I - required 2 semesters/ 2 credits | English II - required 2 semesters/2 credits |
| Math - required 2 semesters/2 credits | Math - required 2 semesters/2 credits |
| US History - required 2 semesters/2 credits | **Social Studies - required 1 semester elective |
| Earth Science and Physical Science - required 2 semesters/2 credits | Biology - required 2 semesters |
| *PE or Weights - required 2 semesters/1.2 credits | Spanish II - 2 semesters/2 credits |
| Spanish I-2 semesters/2 credits | Electives - 5 semesters/ 5 credits |
| *Microsoft - required 2 semesters/2 credits | Study Hall - 2 semesters |
| Band or Choir - 2 semesters/1 credit $\quad * \mathbf{2}$ in-class semesters required in HS | **required in HS |
| $11^{\text {th }}$ Grade | $12^{\text {th }}$ Grade |
| English III - required 2 semesters/2 credits | English Electives - required 2 semesters/ 2 credits |
| Math - required 2 semesters/2 credits | $\wedge \wedge$ Math -2 semesters/2 credits |
| Government - required 2 semesters/2 credits | Social Problems - required 1 semester/1 credit |
| Science Electives - required 2 semesters/2 credits | $\wedge \wedge$ Science Electives -2 semesters/2 credits |
| ${ }^{\wedge}$ Spanish III - 2 semesters/2 credits | Electives - 6 semesters/ 6 credits |
| Electives - 4 semesters/4 credits | School To Work - 2 semesters/ 2 credits |
| Study Hall - 2 semesters | Senior privilege |
| ^2 yrs Spanish suggested for all-4 yrs if college bound | $\wedge \wedge 4$ years suggested if 4-year college bound |

Typical schedules based on an 8-period day:

| $9^{\text {th }}$ grade | $10^{\text {th }}$ grade | $11^{\text {th }}$ grade | $12^{\text {th }}$ grade |
| :--- | :--- | :--- | :--- |
| 1. English 1 | English 2 | English 3 | Public Speaking/Independent Literature |
| 2. Algebra 1 | Geometry | Algebra 2 | Pre-Calculus |
| 3. Physical Science | Biology | Chemistry | Science Survey |
| 4. US History | Geography | Government | Social Problems/Economics |
| 5. Band | Choir | Band | Choir |
| 6. Spanish | Spanish | Spanish | School To Work |
| 7. Microsoft | AFNR | Bus Law/Gen Bus | School To Work |
| 8. PE/Study hall | Study Hall | Drawing/Painting |  |

## All courses listed in this course guide may not be offered during any given year. If the course does not have enough students interested, it may be omitted from the schedule.

## ENGLISH

ENGLISH I (Required 9 ${ }^{\text {th }}$ )
FULL YEAR
2 Credits
Students will study fiction, nonfiction, grammar, drama, poetry, and novels. They will learn about and apply several comprehension strategies to each selection. In addition, they will focus on vocabulary on a weekly basis. Students learn the different processes of essay writing and applicable presentation skills. This course utilizes and emphasizes cooperative learning and the discussion format. Students will also study literary works such as To Kill a Mockingbird and Romeo and Juliet.

## ENGLISH II (Required 10 ${ }^{\text {th }}$ )

FULL YEAR
2 Credits
Students will study principles of communication, research processes and public speaking in the first semester. Students can expect to complete an informative speech, a persuasive speech, demonstration speech and several other shorter public speaking projects. During the second semester, students will focus on written communication and composition by completing a narrative essay, a persuasive essay, an argumentative research paper, and a literary analysis over George Orwell's novel Animal Farm.

## ENGLISH III (Required 11 ${ }^{\text {th }}$ )

FULL YEAR
2 Credits
Students analyze American literature from the Native American Period through Modernism. A variety of genres are covered throughout the course. In addition, students study vocabulary on a weekly basis and review grammar through the writing process. They focus on writing a variety of essay formats throughout the year. Projects and presentations play a large role in grading. Students are required to compile a comprehensive portfolio throughout the course and present this portfolio in a formal manner.

## Electives - $\mathbf{2}$ elective credits REQUIRED

YEARBOOK ( $\left.10^{\text {th }}-12^{\text {th }}\right) \quad$ Class size limit: $10 \quad 11^{\text {st }}$ AND $2^{\text {nd }}$ SEMESTER Credit each semester
(Prerequisite: Instructor approval and class size less than 10 for $\boldsymbol{9}^{\text {th }}$ graders to be admitted) Students engage themselves in the writing process and visual arts. The yearbook staff chooses the design and layout of the school's yearbook. With each assigned spread, students: design the layout, write copy about the subject assigned, and obtain pictures necessary for completion of the spread. Students are required to complete ALL assigned spreads. Students also engage themselves in the business side of production. They are required to sell ads and send out billing invoices. They examine how these funds, along with book sales, are used to fund the production of the book. Students may enroll in both semesters if they choose.

DESKTOP PUBLISHING ( $\left.10^{\text {TH }}-12^{\text {TH }}\right) \quad$ Class size limit: $10 \quad 11^{\text {st }}$ AND $2^{\text {nd }}$ SEMESTER 1 Credit each semester
(Prerequisite: two semesters of Yearbook or teacher approval
This class is focused on the production of printed material by means of a computer/on-line software program. The layout of the program includes the integration of text and graphics. Students may also be asked to originate material used in the program.

## INDEPENDENT LITERATURE $\left(11^{\text {TH }}-12^{\text {TH }}\right) \quad$ Class size limit: $24 \quad 1^{\text {st }}$ SEMESTER 1 Credit

This course enables students to explore topics of interest related to all types of literature. The students will choose their own materials/genres and will respond to each selection they choose. Students may enroll in two semesters if they choose.

PUBLICATIONS ( $11^{\text {TH }}-12^{\text {th }}$ ) Class size limit: $10 \quad 1$ 1 OR $2^{\text {nd }}$ SEMESTER 1 Credit
Students analyze the fundamentals of writing methods, and learn the journalism standards and code of ethics. Students write a variety of leads, editorials, features and sports articles. They submit at least one story weekly with a photo. Students stay up-todate with current events around the world and in our area.

ADV PUBLICATIONS ( $\left.11^{\text {TH }}-12^{\text {th }}\right) \quad$ Class size limit: $10 \quad 11^{\text {st }}$ OR $2^{\text {nd }}$ SEMESTER 1 Credit
Students use previous knowledge to complete advanced projects and take charge in the "newsroom". They will take a lead role of finding story ideas.

Students will explore the components of literature through the lens of a writer. Concepts in this course include: characterization, building components of a plot, publishing, presentation, and many others. Students can expect to create a portfolio of creative works. A heavy emphasis will be on fiction writing with focus on student choice.

Please see page 24 for Western Iowa Tech online English elective courses.

## MATH

## ( 6 credits REQUIRED)

## ALGEBRA IA $\left(9^{\text {th }}-11^{\text {th }}\right)$

FULL YEAR
2 Credits
(Prerequisite: teacher recommendation) This course is designed to teach the fundamental concepts of Algebra in depth over a twoyear period. It will cover the same topics as ALGEBRA 1 semester 1, at a slower pace. It is intended to increase the opportunities for practice and the successful development of Algebra 1 skills.

## ALGEBRA IB ( $\left.9^{\text {th }}-11^{\text {th }}\right)$

FULL YEAR
2 Credits
(Prerequisite: Algebra 1A) This course will cover the same topics as ALGEBRA 1 semester 2, at a slower pace. It is intended to increase the opportunities for practice and the successful development of Algebra 1 skills and some Geometry skills.

ALGEBRA I ( $\left.9^{\text {th }}-11^{\text {th }}\right)$
FULL YEAR
2 Credits
(Prerequisite: teacher recommendation) Algebra 1 is an intensive investigation of the basic introductory elements of algebra, including slope and rate of change, the solving and graphing of linear equations and inequalities, the operations and factoring of polynomial expressions, the simplification of radical expressions, the solving of radical and quadratic equations, and the algebraic representations of real world problems.

## GEOMETRY ( $\left.10^{\text {th }}-12^{\text {th }}\right)$

FULL YEAR
2 Credits
(Prerequisite: Successful completion of Algebra 1 OR Algebra 1A and 1B) Geometry is devoted to the comprehension and application of various theorems which involve triangle congruence and similarity, parallel lines, right triangles, and circles. After mastering proofs, students will use the presented theorems to solve real world applications, using area, surface area, volume formulas for plane and solid figures, and the basics of trigonometry.

## ALGEBRA II ( $\left.10^{\text {th }}-12^{\text {th }}\right)$

FULL YEAR
2 Credits
(Prerequisite: Successful completion of Algebra 1 OR Algebra 1A and Algebra 1B) Algebra 2 builds upon topics introduced in Algebra 1 and includes; formulas and graphs of linear, quadratic, exponential and square root functions, complex numbers, rational expressions, probability and statistics, and sequences and series. The course concludes with trigonometry and an introduction to graphing calculators.

FINANCIAL MATH ( $11^{\text {TH }}-12^{\text {TH }}$ )
$1^{\text {ST }}$ OR $2^{\text {ND }}$ SEMESTER
1 credit
This course includes these topics: savings accounts, investments, wealth building, planning for college costs, credit and debt, consumer awareness and marketing, money management and financial responsibility, budgeting, balancing of checking accounts, insurance, taxes, home ownership and rental, risk management, credit scores and how they affect individuals, buying vs leasing cars, types of loans and job search strategies. This course meets the state requirement of one semester of Financial Literacy.

PRE-CALCULUS ( $11^{\text {th }}-12^{\text {th }}$ ) FULL YEAR 2 credits
(Prerequisite: Successful completion of Algebra 2 and Geometry) Pre-Calculus encompasses and extends topics and concepts of intermediate algebra and trigonometry. Its goals are to develop student proficiency with mathematical skills, to expand understanding of mathematical concepts, to improve logical thinking, and to prepare students to succeed in college. A graphing calculator is recommended.
(Prerequisite: Successful completion of Pre-Calculus) A graphing calculator is recommended for CALCULUS. This course includes the study of limits, continuity, differentiation and integration with a strong emphasis on theory and applications.

Please see page 24 for Western Iowa Tech online Math elective courses.

## SCIENCE

## EARTH SCIENCE (Required ${ }^{\text {th }}$ )

$1^{\text {ST }}$ SEMESTER
1 Credit
Earth Science gives students the opportunity to study a variety of topics about the earth such as latitude and longitude, weather, types of rock, the atmosphere, meteorology, plate tectonics, the stars, galaxies and the universe.

## PHYSICAL SCIENCE (Required 9 ${ }^{\text {th }}$ ) <br> $2^{\text {ND }}$ SEMESTER <br> 1 Credit

Students study the structure and properties of matter, as well as energy and many of its forms, uses and conservation. They use the scientific method, simple lab skills and mathematics to study problems related to physical science.

## BIOLOGY (Required 10 ${ }^{\text {th }}$ )

FULL YEAR
2 Credits
(Prerequisite: Successful Completion of Earth Science) The basic principles of biology are introduced in this course, including cell structure and function, biochemistry, genetics, taxonomy, plant and animal structure/function and some of the systems of the human body. Labs include microscope work and a fetal pig dissection. With this exposure, the students will gain a basic understanding and appreciation of life and living things.

## Science

(Electives - 2 elective credits REQUIRED)
PLANT SCIENCE ( $\left.9^{\text {th }}-12^{\text {th }}\right)$
$1^{\text {ST }}$ SEMESTER
1 Credit
Students will learn the basic plant management principles of both agricultural and horticulture crops. Topics to be covered are proper use of fertilizers and pesticides, roles of plants, sustaining plant productivity, plant kingdoms, life cycles, structures and functions, plant reproduction and growth, and conservation practices. All students will have the opportunity to learn through handson labs. Students will have the opportunity to be FFA members and participate in FFA activities.

ANIMAL SCIENCE ( $9^{\text {th }}-12^{\text {th }}$ )
$2^{\text {ND }}$ SEMESTER
1 Credit
This course is designed to provide students with a general overview of the livestock industry. It identifies the ways in which domestic animals serve the basic needs of humans for food, fiber, shelter, protection, fuel, and emotional well-being. Students will develop an understanding of and be able to apply the basic principles of animal selection, breeding, genetics, feeding, health and husbandry. Students will become familiar with the economic and social issues that confront the livestock industry and learn the principles of food animal production and product marketing. Throughout the course, students will become Beef Quality Assurance certified. Students will have the opportunity to be FFA members and participate in FFA activities.

SCIENCE SURVEY ( $11^{\text {th }}-12^{\text {th }}$ )
$1^{\text {st }}$ AND $2^{\text {nd }}$ SEMESTER
1 Credit each semester
Science survey is a two-semester elective course, and students may take 1 or both semesters in any order. This course gives students the opportunity to study a variety of areas of science. Students study environmental sciences, weather and climate. To enhance the lessons, students will complete hands-on activities, which will connect science in the classroom to "real world" lessons. Labs are conducted throughout the course to facilitate student understanding.
(Prerequisite: Successful completion of Biology) Advanced Biology students gain a basic understanding and working knowledge of the organization and function of several systems in the human body. Students use a college-level anatomy/physiology text. Labs are conducted throughout the course to facilitate student understanding.
CHEMISTRY ( $\left.11^{\text {th }}-12^{\text {th }}\right) \quad$ FULL YEAR 2 Credits
Chemistry gives students a solid base upon which to build their scientific knowledge. Students study the structure and behavior of atom and molecules as well as acids, bases and oxidation-reduction reactions. The theme of the course is that the properties of matter are a consequence of its structure.
ADVANCED CHEMISTRY ( $12^{\text {th }}$ ) FULL YEAR 2 Credits
(Prerequisite: Grade of B or better in Chemistry) Topics covered in Advanced Chemistry are acids and bases, kinetic behavior of atoms, the quantum mechanical model, nuclear chemistry, and organic chemistry. College-type labs are used to prepare students for college chemistry.

PHYSICS ( $\left.11^{\text {th }}-12^{\text {th }}\right)$
FULL YEAR
2 Credits
(Prerequisite: Successful completion of Algebra 2) Topics covered in physics are momentum, energy, electrostatic fields, quantum nature of light, electromagnetic radiation, sound and elementary particle physics. This course is geared to produce a genuine understanding of the physical laws fundamental to all sciences.

Please see page 24 for Western lowa Tech online Science elective courses.

## SOCIAL STUDIES

## UNITED STATES HISTORY (Required ${ }^{\text {th }}$ )

FULL YEAR
2 Credits
United States History is a study of the nation's past from Reconstruction to the early 1950's. It gives students an understanding of the democratic ideals that have helped form the American Government and way of life. The importance of individuals in America's growth is stressed, as well as the economic, political, and social issues.

## AMERICAN GOVERNMENT (Required $11^{\text {th }}$ )

FULL YEAR
2 Credits
American Government includes the study of the history of our U.S. Government from the Second Continental Congress through the $27^{\text {th }}$ Amendment. It covers the principles of our Constitution, as well as an understanding of Federalism, Civil Rights and Due Process of Law. Students also study the different roles of the three branches of government, as well as state and local governments.

SOCIAL PROBLEMS (Required 12 ${ }^{\text {th }}$ )
$1^{\text {ST }}$ OR $2^{\text {ND }}$ SEMESTER
1 Credit
Social Problems informs students of the wide variety of social problems facing our society today. Emphasis is placed on identifying and defining a social problem, carefully examining all the relevant information about the problem, and proposing solutions to resolve the problem.

# Social Studies Electives - one elective credit REQUIRED 

WORLD GEOGRAPHY ( $\left.10^{\text {th }}-12^{\text {th }}\right)$
$1^{\text {st }}$ AND $2^{\text {nd }}$ SEMESTER
1 Credit each semester
World Geography introduces students to various aspects of geography and to the relationship between man and his natural environment. This knowledge helps students understand why different cultures developed the way they did. Geography also helps students develop a name/place relationship of our world. Students may enroll in both semesters if they choose.

World History introduces students to the origins and varieties of culture and human accomplishment throughout the ages. Semester one covers the times from early Greeks, Roman Empire, Middle Ages, Islam, Renaissance, Reformation, and World Exploration. Second semester students analyze the change in World Culture/Politics through events such as the Industrial Revolution, and Imperialism, as well as conflicts like the French Revolution, World Wars, and the Cold War. Students may enroll in both semesters.

PSYCHOLOGY ( $11^{\text {TH }}-12^{\text {TH }}$ or $10^{\text {th }}$ with teacher approval) $1^{\text {ST }}$ OR $2^{\text {nd }}$ SEMESTER 1 Credit
Students will be introduced to the scientific study of observable behavior and internal experiences. Psychological facts, principles, and theories associated with methods of analysis, learning, memory, brain functioning, sensation, perception, motivation, emotions, personality, social behavior, human development, and psychological disorders and treatment will be introduced. Students will learn to understand human behavior by examining the influences of biological, psychological, and social cultural factors.

## MODERN WORLD HISTORY ( $\left.11^{\text {th }}-12^{\text {th }}\right)$

$1^{\text {st }}$ SEMESTER
1 Credit
This course provides an overview of the history of human society from the $20^{\text {th }}$ Century to the present day - exploring political, economic, social, religious, military, scientific, and cultural developments. Topics will include the following: World War I, Post War Era, World War II, Cold War, Issues in the Middle East, and etc.

ECONOMICS ( $11^{\text {th }}-12^{\text {th }}$ )
$2^{\text {nd }}$ SEMESTER
1 Credit
Economics deals with the American free enterprise system, government regulation of business, and the United States' role in the world's economy. Students will learn how the economic choices of larger groups, like businesses and governments, affect them and others. This course meets the state requirement of one semester of Financial Literacy.

Revolutionary War (Grade)
$2^{\text {nd }}$ SEMESTER
1 Credit
The course is a deep dive into the Revolutionary War time period. Students will begin the class looking at the tensions leading up to the breaking away from the British, moving through the war, and finally exploring the formation of the US Constitution after the failure of the Articles of Confederation.

Please see page 25 for Western lowa Tech online Social Studies elective courses.

## FOREIGN LANGUAGE (Electives)

Prerequisite: the successful completion of the previous level of high school Spanish is required before taking the next level.
SPANISH 1 ( $\left.9^{\text {th }}-12^{\text {th }}\right)$
FULL YEAR
2 Credits
Spanish I includes developing the four skills of listening, speaking, reading, and writing within the context of today's Spanishspeaking world. Students deal with the language on a concrete level as they learn to express simple needs and basic courtesies. The focus is to develop a solid base of grammar skills to foster communication skills in the target language.

SPANISH $2\left(10^{\text {th }}-12^{\text {th }}\right) \quad$ FULL YEAR 2 Credits
Spanish II furthers the students' skills of writing, listening, reading, and speaking. Students can carry on longer conversations and begin to personalize language. While the focus is still on communication, students will master the competence of communicating in proper tense forms.

## Spanish III and IV are suggested for students planning to attend a four-year university:

SPANISH 3 ( $11^{\text {th }}-12^{\text {th }}$ )
FULL YEAR
2 Credits
Spanish III includes a concise review of the grammar points that pose the greatest difficulty to English-speaking students. Listening, speaking, reading and writing skills are presented in an integrated format. Students move from a teacher-directed conversational approach to a freer, more natural dialogue. Reading includes journals and literature formats. Listening skills are developed through classroom interaction, videos and music.

Spanish IV combines advanced composition and beginning literary analysis. Students improve their listening, speaking, reading, and writing skills through everyday conversation, creative writing and reading short stories, novels and newspapers. Mastery of difficult grammar concepts will also be expanded as will knowledge of Spanish culture.

## HEALTH AND PHYSICAL EDUCATION

## (See pg 5 for PE REQUIREMENTS)

HEALTH ( $\left.9^{\text {th }}-12^{\text {th }}\right) \quad$ Class size limit: $20 \quad 11^{\text {st }}$ AND 2 ${ }^{\text {nd }}$ SEMESTER $\quad 1$ Credit each semester

Health is a two-semester elective course, and students may take 1 or both semesters in any order. Health class focuses on concepts designed to provide students with the opportunity to learn about personal health in a systematically organized and focused classroom setting. Units include but are not limited to Personal Wellness, Risk and Management, Choices and Consequences, Nutrition, Personal Fitness, Disease, Substance Use and Abuse, Mental and Emotional Health, Relationships, Family Life, Personal Safety, Consumer Health, Environmental Health, First Aid and CPR.

## WEIGHT TRAINING $\left(9^{\text {TH }}-12^{\text {TH }}\right) \quad 1^{\text {st }}$ AND $2^{\text {nd }}$ SEMESTER 6 Credit each semester

Weight Training is an exercise program involving the use of weights to develop the overall strength of the body, as well as boost selfesteem. Programs may be established for individuals to improve performance in specific sports, or to develop and maintain a healthy lifestyle. Anatomy and nutrition information is discussed throughout the year. Weight Training helps fulfill the WC Physical Education requirement. Students may enroll in as many semesters as they choose.

EARLY BIRD WEIGHTS $\left(9^{\text {th }}-12^{\text {th }}\right) \quad 1^{\text {st }}$ AND $2^{\text {nd }}$ SEMESTER 6 Credit each semester
Same description as Weights above except that this class meets before school for 45 minutes between 6:00 A.M. and 7:00 A.M. Students may enroll in as many semesters as they choose.

PHYSICAL EDUCATION $\left(9^{\text {th }}-12^{\text {Th }}\right)$. $1^{\text {st }}$ AND $2^{\text {nd }}$ SEMESTER 6 Credit each semester
Instruction focuses on fitness, team sports, recreational activities, individual and dual sports and lifetime activities. Class meets three days a week. Students must wear proper gym clothes. Students may enroll in as many semesters as they choose.

ADVANCED PHYSICAL EDUCATION $\left(9^{\text {TH }}-12^{\text {TH }}\right) \quad 1^{\text {st }}$ AND $2^{\text {nd }}$ SEMESTER 6 Credit each semester
(Prerequisite: 1 semester of PE) Instruction focuses on team sports, recreational activities and dual sports. Class is generally highly competitive. Students may enroll in as many semesters as they choose.

## NURSE AIDE** $\left(10^{\text {th }}-12^{\text {th }}\right) \quad 2^{\text {nd }}$ SEMESTER 1.5 Credit

(Prerequisite: 16 yrs old, physical, updated immunizations \& background check - forms provided) This course is designed for students interested in nursing skills at the college entry level. It includes all of the necessary competencies and skills to work as a Nurse's Aide. This 75-hour basic nursing course includes 15-30 hours of lab based clinical dependent upon available clinical locations due to the Covid-19 pandemic. The curriculum is developed and updated by the University of Iowa and Area Vocational Schools. Upon successful completion of this course, students are eligible to take the CNA competency test through WIT.

## Class size limit: 6 <br> **This is a 4-credit WIT College Course - HSC 173/174

Please see page 24 for Western Iowa Tech online Health Science and Coaching elective courses.

## FINE ARTS DEPARTMENT (Electives)

**A student who earns an A- or better in a **designated course may take an advanced level of the same course.
DRAWING** $\left.9^{\text {th }}-12^{\text {th }}\right) \quad$ Class size limit: $20 \quad 11^{\text {st }}$ SEMESTER FEE: \$3.00 1 Credit
Drawing class helps us understand the way we see and represent various natural and human-made images and objects. Students will use pencil, pen and ink, charcoal, pastels, markers, and other drawing instruments to create various drawings.

## PHOTOGRAPHY** $\left(9^{\text {th }}-12^{\text {th }}\right) \quad$ Class size limit: $12 \quad 1^{\text {st }}$ SEMESTER FEE: \$5.00 1 Credit

Students will learn about a variety of aspects of photography including the history of photography, various famous photographers, social issues related to photography, how to take better pictures in film and digital, and how to take, develop, and print film photographs. This is a busy and fast paced course that requires personal management and a willingness to work outside of class time. Students do not need to supply their own cameras.
GRAPHIC DESIGN** ( $\left.^{\text {th }}-12^{\text {th }}\right) \quad$ Class size limit: $12 \quad 1^{\text {st }}$ SEMESTER FEE: $\$ 3.00 \quad 1$ Credit

Graphic Design examines visual communication to audiences, both large and small. Basic design skills, symbols, illustrations, and the power of persuasion are all discussed, along with how these impact the world of advertising. Students will explore print and digital design through projects involving developing computer skills, as well as traditional handmade art and design.
2-D Art** ${\left(9^{\text {th }}-12^{\text {th }}\right)}_{\text {) }}$
Class size limit: 20
$2^{\text {nd }}$ SEMESTER
FEE: \$3.00
1 Credit

Design is a general arts class exploring personal expression through a variety of media including painting, drawing, India ink, cut paper, printmaking, and others. The class is geared towards using art to communicate and solve visual problems while also experimenting and exploring with art.
PAINTING** $\left(9^{\text {th }}-12^{\text {th }}\right) \quad$ Class size limit: $18 \quad 2^{\text {nd }}$ SEMESTER FEE: \$3.00 1 Credit
Painting explores the process and techniques of tempera, acrylic, and watercolor painting mediums. Students will learn about and research art movements and styles, along with the work and lives of individual artists. Focus is on creative, analytical and independent thinking.

POTTERY/SCULPTURE** $\left(9^{\text {th }}-12^{\text {th }}\right) \quad$ Class size limit: $18 \quad 2^{\text {nd }}$ SEMESTER FEE: \$3.00 1 Credit
Students will explore various art problems by creating three-dimensional solutions. Students explore their imaginations as they create with clay, paper, plaster, cardboard, and found objects. They are introduced to various pottery creation techniques.

CONCERT BAND $\left(9^{\text {th }}-12^{\text {th }}\right) \quad$ FULL YEAR 1 Credit
Students will study and perform instrumental music of different composers, styles and difficulty levels. Students are eligible to audition for the Northwest lowa Honor Band, All-State Band, other select ensembles and individual solo contests. Students perform at home athletic events and school functions. Marching Band, Jazz Band and Pep Band are an important part of the band program. Marching band fields one show each year and performs at home football games, parades and travels to competitions. Marching Band is open to students enrolled in band, as well as students in the district's auxiliary unit. Jazz Band plays a variety of repertoire from the jazz genres, travels to multiple competitions, and offers the opportunities for outside performances. Participation in Jazz Band is optional. Students are required to participate in Marching Band and Pep Band if they choose to be in Concert Band. Students may enroll in as many semesters as they choose.
CHOIR ( $9^{\text {th }}-12^{\text {th }}$ )
FULL YEAR
1 Credit

All choir groups will study/apply proper vocal technique, study/review basic music theory and terminology, develop sight-reading, study function and structure of the human voice, study the development of vocal health techniques, and experience an overview of music theory through the performance of various styles of choral music. Each ensemble will prepare performance music to be presented at specific concerts, festivals, and competitions. Students are expected to perform in all concerts scheduled for their group. Singers are eligible to participate in State Solo and small Ensemble Contests, as well as Honor Choirs. Students may enroll in as many semesters as they choose

MUSIC THEORY ( $\left.11^{\text {th }}-12^{\text {th }}\right)$
$1^{\text {st }}$ AND $2^{\text {nd }}$ SEMESTER
1 Credit each semester
(Prerequisite: enrolled in either band or choir, or have teacher approval) Music Theory is an academic music course that explores how music is constructed in its most basic forms (rhythm, pitch, musical form, etc.) Students will also study basic composition rules including intervals, chords, and cadences, as well as more modern composition techniques. Students may enroll in both semesters.

Please see page 25 for Western Iowa Tech online Fine Arts (Humanities) elective courses.

## EDUCATION

## (Elective)

Early Childhood Education $\left(9^{T H}-12^{T H}\right) \quad 2^{\text {ND }}$ semester 1 Credit
Early Childhood Education prepares students for a career working with children. Primary developmental theorists and their corresponding theories are studied in depth. Students will also explore the physical, social, emotional, and intellectual development of children ages 3-6, all while experiencing an in-district practicum experience. Students will complete observations in the school's preschool and TK classrooms throughout the semester. While this class is perfect for students interested in working with young children, any student looking into a career in education is encouraged to take Early Childhood Education.

Foundations of Education** $\left(11^{\text {TH }}-12^{\text {TH }}\right) \quad 11^{\text {st }}$ SEMESTER 1 Credit
This course is offered in the FALL only, and sometimes every other year. It offers an introduction to professional education, providing a historical and philosophical background from which the student can examine his or her own commitment to education. Current challenges and issues in education will be discussed in the context of school organization, funding, curriculum, professionalism, legal issues, and effective teacher characteristics. THIS COURSE IS A PREREQUISITE FOR A SENIOR WANTING A WOODBURY CENTRAL TEACHER PLACEMENT FOR SCHOOL TO WORK. $\quad * *$ This is a 3-credit WIT College Course - EDU 210

Please see page 24 for Western lowa Tech online Education elective courses.

## CAREER AND TECHNICAL EDUCATION

## WEB PAGE, DIGITAL/MULTIMEDIA AND INFORMATION RESOURCE DESIGN

1. MICROSOFT OFFICE
2. WEB PAGE
3. COMPUTER SCIENCE
4. SCHOOL TO WORK

FULL YEAR
1 OR 2 SEMESTERS
1 SEMESTER
1 OR 2 SEMESTERS

## BUSINESS/COMMERCE

1. MICROSOFT OFFICE
2. BUSINESS LAW
3. GENERAL BUSINESS
4. ACCOUNTING

FULL YEAR
1 SEMESTER
1 SEMESTER
FULL YEAR

## MICROSOFT OFFICE ( $9^{\text {TH }}-12^{\text {TH }}$ REQUIRED) Class size limit: $20 \quad$ FULL YEAR 2 Credits

Office familiarizes students with the Microsoft Office software package. Students have hands-on experiences with Power Point, Excel, Access, Publisher, Email, Printing, Google Docs, Formatting, Digital media, Scanning and other necessary computer literacy components. Semester 1 and 2 are a graduation requirement.

WEB PAGE $\left(9^{\text {th }}-12^{\text {th }}\right) \quad$ Class size limit: $10 \quad 1^{\text {st }}$ AND $2^{\text {nd }}$ SEMESTER $\quad 1$ Credit ea semester
Web Page manages the school web site through research and design activities. Students may enroll in both semesters if they choose.
BUSINESS LAW ( $10^{\text {th }}-12^{\text {th }}$ ) $1^{\text {st }}$ SEMESTER 1 Credit
Business Law familiarizes students with the basic principles of law, and their applications to daily life. The course covers law history, individual rights, contracts as well as civil, criminal and juvenile law. Students participate in a mock trial and attend a state or federal trial in Sioux City as part of the course.

GENERAL BUSINESS ( $\left.10^{\text {th }}-12^{\text {th }}\right) \quad$ Class size limit: $20 \quad 2^{\text {nd }}$ SEMESTER 1 Credit
General Business deals with business issues important to students. Subjects covered include the stock market, resumes, job applications, interviewing process, insurance, banking, investing, budgeting, personal credit, auto/life insurance and business careers.

COMPUTER SCIENCE ( $10^{\text {th }}-12^{\text {TH }}$ )
$1^{\text {st }}$ OR $2^{\text {nd }}$ SEMESTER
1 Credit
(Prerequisite: Successful completion of $\mathbf{2}$ semesters of Microsoft Office) This class is an introductory coding class in which students will gain a foundational knowledge of programming in $C+$ using the Unity development platform.

Accounting offers fundamental knowledge and practice of recording and analyzing business transactions for various types of businesses. Students study the elements of a double entry process of recording and analyze business transactions. The course introduces basic principles, concepts, and bookkeeping procedures for sole proprietorships, partnerships and corporations. Students also learn to record, read and interpret financial data.

## SCHOOL TO WORK (12 ${ }^{\text {TH }}$ ) <br> $1^{\text {st }}$ AND 2nd SEMESTER <br> 1 Credit each semester

The purpose of the School to Work program is to provide an opportunity for all SENIORS to develop employment skills necessary to succeed through career guidance, exploration and management. Seniors may take 2 periods of STW each semester. Students may choose one or two periods of School To Work each senior semester.

Please see page 25 for Western Iowa Tech online Business elective courses.

# FAMILY \& CONSUMER SCIENCE <br> <br> 1. FOODS 1 \& FOODS 2 <br> <br> 1. FOODS 1 \& FOODS 2 <br> 1 SEMESTER EACH <br> 2. PROSTART 1 \& PROSTART 2 <br> 2 SEMESTERS EACH 

FOODS 1 ( $\left.9^{\text {th }}-12^{\text {th }}\right)$
Class size limit: 16
$1^{\text {st }}$ SEMESTER
1 Credit
Foods 1, an introductory course in food preparation, examines proper use of small and large equipment, safety and sanitation procedures, and nutrition of the basic food groups. Students examine food principles, create, sample and evaluate foods in the following units: fruits, vegetables, quick breads, eggs, dairy and meat.
FOODS 2 ( $\left.9^{\text {th }}-12^{\text {th }}\right)$
Class size limit: 16
$2^{\text {nd }}$ SEMESTER
1 Credit
Prerequisite: Foods 1
In Foods 2, students have the opportunity to develop advanced food preparation skills while applying the nutrition information and food preparation skills learned in Foods 1. Students explore areas of interest which may include cultural and regional cuisines, convenience foods, creating and adapting recipes, cake decorating, and careers in food and nutrition-related occupations.
EARLY CHILDHOOD EDUCATION ( $9^{\text {TH }}-12^{\text {TH }}$ )
$2^{\text {ND }}$ semester
1 Credit

Early Childhood Education prepares students for a career working with children. Primary developmental theorists and their corresponding theories are studied in depth. Students will also explore the physical, social, emotional, and intellectual development of children ages 3-6, all while experiencing an in-district practicum experience. Students will complete observations in the school's preschool and TK classrooms throughout the semester. While this class is perfect for students interested in working with young children, any student looking into a career in education is encouraged to take Early Childhood Education.

## INDEPENDENT LIVING $\left(9^{\text {TH }}-12^{\text {TH }}\right)$ <br> $1^{\text {ST }}$ SEMESTER <br> 1 Credit

Independent Living introduces students to life skills needed once they have graduated from high school. Students will explore goal setting, job searching, personal finance, insurance, laundry, meal planning, childcare, and communication skills. The goal of this course is to meet the needs of the current enrolled students, so topics may change based on the class's interests and goals. This course meets the state requirement of one semester of Financial Literacy.

PROSTART I ( $\left.10^{\text {th }}-12^{\text {th }}\right)$
Class size limit: 16
FULL YEAR
2 Credits
Prerequisite: Foods 1 and Foods 2, or instructor approval
ProStart introduces students to restaurant and foodservice concepts not found in the traditional Foods courses. ProStart I prepares students for entry level (or above) jobs in the hospitality/food industry and/or future culinary training. Students will learn about
advanced quantity food preparation techniques, forms of meal service, production management, and customer relations. Selected students will have the opportunity to compete in the State ProStart competition for Restaurant Management and/or Culinary.

PROSTART II ( $\left.10^{\text {th }}-12^{\text {th }}\right)$
Class size limit: 16
FULL YEAR
2 Credits
Prerequisite: ProStart 1 or instructor approval
ProStart II continues to build fundamental skills and combines daily food work with hands-on kitchen practice. Students may earn the ProStart National Certificate of Achievement which can open the door to scholarships and college credits, as well as increased employment opportunities in the industry. Selected students will have the opportunity to compete in the State ProStart competition for Restaurant Management and/or Culinary.

## AGRICULTURE

3. INTRODUCTION TO AG, FOOD \& NATURAL RESOURCES (AFNR)
4. AGRICULTURE CONSTRUCTION
5. ANIMAL SCIENCE
6. PLANT SCIENCE
7. ADVANCED STUDIES IN AGRICULTURE
8. AGRICULTURAL WELDING

FULL YEAR 1 SEMESTER 1 SEMESTER 1 SEMESTER

1 OR 2 SEMESTERS
1 SEMESTER

In each of the following courses, students will have the opportunity to be FFA members and participate in FFA activities.
AG, FOOD AND NATURAL RESOURSES (AFNR) $\left(9^{\text {th }}-12^{\text {th }}\right)$ Class size limit: $20 \quad$ FULL YEAR 2 Credits
This class promotes leadership development through FFA. The National FFA Organization is introduced with regard to public relations, record keeping, leadership roles and contest events. Animal science topics learned cover general care, nutrition and reproduction. Plant science topics learned cover plant anatomy, physiology, reproduction and crops. Other topics include environmental concerns and horticulture. Science, math, reading, writing and technology are intertwined into advancing students' knowledge on these ag topics. Students will work hands-on to solve problems, conduct research, analyze data and work in teams.

## AGRICULTURE CONSTRUCTION $\left(9^{\text {th }}-12^{\text {th }}\right)$ Class size limit: $10 \quad 1^{\text {st }}$ OR $2^{\text {nd }}$ SEMESTER 1 Credit

Woods is recommended before taking this course. Students will learn how to maintain, evaluate, design and build agricultural structures using approved construction techniques. Theory and hands-on experience provide opportunities for students to develop basic knowledge and skills in building technology and in the mechanics laboratory. Instructional areas include the basic fundamentals of construction, industry terminology, common building materials and safety using construction tools. Because of the project-nature of this class, students should expect to purchase materials as needed.
PLANT SCIENCE ( $9^{\text {TH }}-12^{\text {TH }}$ )
Class size limit: 20
$1^{\text {st }}$ SEMESTER
1 Credit

Students will learn the basic plant management principles of both agricultural and horticulture crops. Topics to be covered are proper use of fertilizers and pesticides, roles of plants, sustaining plant productivity, plant kingdoms, life cycles, structures and functions, plant reproduction and growth, and conservation practices. All students will have the opportunity to learn through handson labs.
ANIMAL SCIENCE ( $\left.9^{\text {th }}-12^{\text {th }}\right)$
Class size limit: 20
$2^{\text {nd }}$ SEMESTER
1 Credit

This course is designed to provide students with a general overview of the livestock industry. It identifies the ways in which domestic animals serve the basic needs of humans for food, fiber, shelter, protection, fuel, and emotional well-being. Students will develop an understanding of and be able to apply the basic principles of animal selection, breeding, genetics, feeding, health and husbandry. Students will become familiar with the economic and social issues that confront the livestock industry and learn the principles of food animal production and product marketing. Throughout the course, students will become Beef Quality Assurance certified.

## ADVANCED STUDIES IN AGRICULTURE ( $10^{T H}-12^{\text {TH }}$ ) Class size limit: $20 \quad 11^{\text {ST }}$ AND $2^{\text {ND }}$ SEMESTER 1 Credit each semester

(Prerequisite: AFNR) Students will learn more advanced aspects of the different facets of agriculture, while focusing on career opportunities in agriculture, animal and plant science, agriculture technology and other areas of interest in the agriculture industry. Students may enroll in both semesters if they choose.

AGRICULTURE WELDING $\left(11^{\text {th }}-12^{\text {th }}\right) \quad$ Class size limit: $10 \quad 11^{\text {st }}$ OR $2^{\text {nd }}$ SEMESTER 1 Credit
In this course, students learn about welding safety, careers in welding, welding types and positions, and the use of different welding tools. Students will learn a variety of welding techniques using various electrodes. Because of the project-oriented nature of the class, students should expect to purchase materials as needed.

Please see page 25 for Western lowa Tech online Agriculture elective courses.

|  | CONSTRUCTION |  |
| :--- | :--- | :--- |
| 1. MECHANICAL DRAFTING | 1 SEMESTER |  |
| 2. 3D CAD | 1 SEMESTER |  |
| 3. WOODS | FULL YEAR |  |
| 4. ARCHITECTURAL DRAFTING | 1 SEMESTER |  |

## MECHANICAL DRAFTING ( $9^{\text {TH }}-12^{\text {TH }}$ )

Class size limit: 10
1st SEMESTER
1 Credit
Drafting introduces the fundamentals of all types of drafting. Students will learn about measurements, basic tools, line types, types of drawings, and dimensioning. Students will progressively work towards more complex drawings. Part way through the semester, the students will be introduced to basic commands and operation of computer aided drafting through Autodesk AutoCAD. As time allows, the students will draw single view, multiview, isometric and section views in one or both of these types of drafting.

3D CAD ( $\left.9^{\text {th }}-12^{\text {th }}\right)$
Class size limit: 10
2nd SEMESTER
1 Credit
(Prerequisite: Mechanical Drafting) 3D CAD teaches the fundamentals of solid modeling and 3D design using SolidWorks. The students will learn about commands and operation of the software, and will work progressively through a series of exercises and drawings. The students will work on basic commands and operation, printed drawings, basic techniques and features, 3D design and assemblies. The students will also have an opportunity to 3D print objects they design in class as time allows.
WOODS ( $9^{\text {TH }}-12^{\text {TH }}$ )
Class size limit: 10
FULL YEAR
2 Credits
(Drafting highly recommended before taking Woods) Woods is an introductory class that focuses on the fundamentals of safe and proper use of hand tools and power tools. Students will learn about safety, measurement, materials, fasteners, hand tools, power tools and finishing practices.
ARCHITECTURAL DRAFTING $\left(10^{\text {th }}-12^{\text {th }}\right) \quad$ Class size limit: $5 \quad 11^{\text {st }}$ SEMESTER 1 Credit

## Western Iowa Tech Community College Course Offerings

Students interested in one of WIT'S Diploma, Certificate, or Associate Degree programs could earn many of these credits during high school, if they are successful with the online aspect or decide to drive to on-campus classes.

Proficiency on lowa Assessments and/or a 2.5 GPA is required to take most WIT courses.
Students earn college credit, while also earning high school credit. These are considered DUAL CREDIT courses. For example, Introduction to Sociology is a 3 -credit college course. After successful completion of the course you would earn 3 WIT college credits and 1 Woodbury Central credit. (WIT3=WC1) All courses are one semester long (16 week), or shorter.

Students may take a class to explore an interest in a certain area, or they may choose to take a basic general education class that should transfer to most state or local colleges. As soon as a student knows what college they will attend, we can match what they take through WIT with what their college will accept as transfer credits.

Students must meet any prerequisites or assessment requirements of WIT. Textbooks must be picked up and returned by students to the WIT bookstore, unless the class has an internet imbedded text.

As soon as a student registers for a WIT course, they become a college student with a college GPA. Each WIT course might have a different grading scale so it is important to read your instructor's syllabus. It is the responsibility for a college student to communicate any questions or concerns with instructors. Parents should not do this for you.
WIT's course description book can be found at:
http://catalog.witcc.edu/

## Logging in:

username wit-----------@ witcc (-------is your ID\#)

# HELP DESK 712-274-8733 extension 1461 Please call for any technology questions, logging in problems, and/or accessing an online textbook. Common ONLINE courses our students register for: 

Consider those in RED as "BEGINNER COURSES" - 2 of these should be taken before others<br>*Indicates college course taught at Woodbury Central

## COLLEGE SUCCESS

SDV 108 (WIT1=WC.5) College Experience - introduces students to the College's expectations, environment, and resources

## ENGLISH AND SPEECH

ENG 105 (WIT3=WC1) Composition I - exploration of writing as a process with attention to audience, purpose and patterns of exposition
ENG 106 (WIT3=WC1) Composition II (Prereq: ENG 105) - emphasis on developing more complex, sophisticated forms of exposition, includes a research paper
LIT 101 (WIT3=WC1) Introduction to Literature (Prereq: ENG 105) - introduction to the study of short fiction, poetry, and drama
LIT 105 (WIT3=WC1) Children's Literature - survey of children's literature suitable for elementary education
MMS 101(WIT3=WC1) Mass Media - media forms including journalism, broadcast, public relations, advertising, world wild web
SPC 112 (WIT3=WC1) Public Speaking - speech performance skills and delivery, preparation, organization, support and audience analysis
COM 723 (WIT3=WC1) Workplace Communications - communication as applied to occupational and personal use through reading, writing and speaking
SPC 122 (WIT3=WC1) Interpersonal Communication - communication theory, listening, self-concept, language, perception and nonverbal communication
The University of Iowa accepts Comp I + Comp II + Public Speaking TOGETHER to complete a Rhetoric course requirement. Iowa State University and the University of Northern Iowa accept all three of them separately.

## SCIENCE AND MATH

BIO 105 (WIT4=WC1.5) Intro to Biology - biochemistry, molecular/cellular biology, genetics, evolution, plant/animal classification \& ecology BIO 116 (WIT4=WC1.5) General Biology 1 - lectures and labs about the science of living things, genetics and evolution
BIO 151 (WIT3=WC1) Nutrition (Prereg: PAGE 36) - relationship between nutrition, good health, digestion, metabolism, vitamins, exercise and the life cycle BIO 163 (WIT4=WC1.5) Essentials of Anatomy \& Physiology - human organ system, medical terminology, homeostasis, cell and tissue structure and function BIO 168 (WIT4=WC1.5) Human Anatomy and Physiology w/lab (Prereq: PAGE 36) - structure/function/homeostasis, skeletal/muscular/nervous systems CHM 122 (WIT4=WC1.5) Intro to General Chemistry - combined lecture and lab covering the basics of inorganic chemistry
ENV 111 (WIT4=WC1.5) Environmental Science - ecosystems, pollution, population, extinction, ethics, energy, food, conservation, and their interrelationships MAT 102 (WIT4=WC1.5) Intermediate Algebra (Prereq: ACT Math 19/ALEKS 27) - graphs/data, radical/quadratic equations, variations, exponential functions MAT 111 (WIT4=WC1.5) Math for Liberal Arts (Prereq: ACT Math 20/ALEKS 29) - mathematical knowledge to calculate, analyze, and solve day-to-day problems MAT 121 (WIT4=WC1.5) College Algebra (Prereq: ACT Math 21/ALEKS 32) - quadratics, conics, linear systems, series, permutations, and probability MAT 772 (WIT3=WC1) Applied Math - fundamental arithmetic concepts and more routine algebraic operations

## HEALTH SCIENCE

HSC 114 (WIT3=WC1) Medical Terminology - language of medicine, spelling, pronunciation and usage, emphasis on word analysis and construction of definitions *HSC 173/174 (WIT4=WC1.5) Nurse Aid Theory/Clinical - (Students must be age 16) patient care in the health care environment; anatomy, \& physiology HSC 105 (WIT1=WC.5) Health Occupations - career options in the health care industry through research and projects
HSC 109 (WIT3=WC1) Exploring Health Careers and Building Teams - study of team dynamics and communication techniques, career exploration HSC 111 (WIT3=WC1) Issues in Health and Society - overview of current issues, concepts and theories in health care
HSC 143 (WIT3=WC1) Pharmacology - framework to recognize medication, rational for treatment, side effects, allergic effects and health care issues HSC 218 (WIT3=WC1) Clinical Pathology (Prereq: HSC114 or BIO163 or BIO168) - introduction to a variety of medical and surgical conditions

COACHING (Completion of these four classes lead to an Iowa Coaching Certificate)
PEC 110 (WIT1=WC.5) Coaching Ethics, Technique \& Theory - theory and techniques of coaching, related responsibilities, duties and problems
PEC 115 (WIT1=WC.5) Athletic Development and Human Growth - physical, psychological and social growth related to physical and competitive athletics
PEC 120 (WIT1=WC.5) Body Structure and Function - physiological processes and anatomical features of the body related to and affected by physical activity
PEC 126 (WIT2=WC1) Athletic Injury Prevention - conditioning programs and training methods that tend to prevent athletic injuries

## EDUCATION

*EDU 210 (WIT3=WC1) Foundations of Education - introduction to professional education providing a historical and philosophical background
EDU 220 (WIT3=WC1) Human Relations - development of sensitivity to and the understanding of the values, beliefs, lifestyles and attitudes of those in education
EDU 240 (WIT3=WC1) Education Psychology - child/adolescent development, learning, motivation, instructional techniques and assessment/evaluation
EDU 245 (WIT3=WC1) Exceptional Learner - overview of special education regulations, policies and programs in K-12 educational settings
ECE 103 (WIT3=WC1) Intro to Early Childhood Education - history, overview of assessment, and early childhood careers
ECE 133 (WIT3-WC1) Child Health, Safety, Nutrition - role of culture, language and ability on health, safety, and nutrition decisions
ECE 158 (WIT3-WC1) Early Childhood Curriculum - children's' development stages, learning opportunities, interactions and environment for support

## SOCIAL AND BEHAVIORAL SCIENCES

ECN 120 (WIT3=WC1)Principles of Macroeconomics - economy performance, topics of monetary policy on inflation, unemployment and economic growth ECN 130 (WIT3=WC1) Principles of Microeconomics - households, firms and governments and how their choices affect domestic/international market structures HIS 110 (WIT3=WC1) Western Civilization (Ancient to Early Modern) - change, dynamics and interrelationships of events of Ancient, Medieval, and Renaissance HIS 111 (WIT3=WC1) Western Civilization (Early Modern to Present) - western history from the Age of Enlightenment in the Eighteenth century to present day HIS 151 (WIT3=WC1) US History to $\mathbf{1 8 7 7}$ - basic people, issues, movements, and events from Pre-Columbian times to the Civil War \& Reconstruction HIS 152 (WIT3=WC1) US History Since 1877 - basic people, issues, and events from the Reconstruction era to the present
GEO 121 (WIT3=WC1) World Regional Geography - survey of nations and continents emphasizing important physical characteristics of major regions
PSY 102 (WIT3=WC1) Human and Work Relations - psychological theory and practice, conflict resolution, leadership skills, and communication
PSY 111 (WIT3=WC1) Intro to Psychology - nervous system, learning, memory, cognition, perception, motivation, emotion, personality
PSY 121 (WIT3=WC1) Developmental Psychology (Prereq: PSY 111) - process of physical, cognitive, social and psychosocial development
PSY 222 (WIT3=WC1) Child Psychology - psychological development of the child in relation to conditions from prenatal to adolescent stages
PSY 224 (WIT3=WC1) Adolescent Psychology (Prereq: PSY 111) - prenatal to adolescent theories of growth, development, personality, social learning, and language
PSY 241 (WIT3=WC1) Abnormal Psychology (Prereq: PSY 111) - behavioral changes; diagnosis and treatment, brain and personality disorders
PSY 251 (WIT3=WC1) Social Psychology (Prereq: PSY 111) - interpersonal relations, social attitudes, group dynamics, inter-group relations, class, culture
PSY 171 (WIT3=WC1) Health Psychology (Prereq: PSY 111) - psychological aspect of illness, hospitalization and lifestyle choices that affect health
SOC 110 (WIT3=WC1) Introduction to Sociology - human social interaction, theory, culture, social structure, socialization, groups and formal organizations
SOC 120 (WIT3=WC1) Marriage \& Family - examines family as a basic institution from courtship \& dating to marriage during middle \& older years
SOC 212 (WIT3=WC1) Diversity - study of gender, race, class, social justice. Students are engaged in diversity conscious social action
CRJ 100 (WIT3=WC1) Introduction to Criminal Justice - history of law enforcement, theories of criminal behavior, law enforcement terminology and technology
CRJ 101 (WIT3=WC1) Ethics in Criminal Justice - professional behavior for police officers and others placed in positions of public trust
CRJ 120 (WIT3=WC1) Intro to Corrections - correctional theory, trial, sentencing, and rehab
CRJ 200 (WIT3=WC1) Criminology- study of crime, police, courts, rehabilitation and punishment
CRJ 201 (WIT3=WC1) Juvenile Delinquency - causes of delinquency, family, home and social environments as contributors and causes of juvenile crime
POL 111 (WIT3=WC1) American National Government - American system of government and U.S. Constitution
POL 112 (WIT3=WC1) American State \& Local Government - American government at the state, local and municipal levels
POL 121 (WIT3=WC1) International Relations - study of foreign policies, diplomacy, economics, security and organizations

## HUMANITIES

HUM 101 (WIT3=WC1) Intro to Humanities - influence of philosophy, literature, drama and the fine arts upon cultures \& approaches to living
ART 101 (WIT3=WC1) Art Appreciation - explores the creative process emphasizing art as a visual form of communication, criteria for eval. and enjoyment of art DRA 101 (WIT3=WC1) Introduction to Theatre - audience/performer relationships, dramatic forms/literature, history of theatre, dramatic theory and criticism MUS 100 (WIT3=WC1) Music Appreciation - musical form, media, genres, musical periods and the essential role of music in life and culture
PHI 101 (WIT3=WC1) Introduction to Philosophy - an emphasis on the systematic questioning of basic assumptions about reality, knowledge, meaning, and values PHI 105 (WIT3=WC1) Introduction to Ethics - examines concepts and arguments used in moral reasoning, and applies ethical theories to personal and social issues.

## ACCOUNTING AND BUSINESS

BUS 102 (WIT3=WC1) Introduction to Business - broad overview of economics, marketing, entrepreneurship and management
BUS 130 (WIT3=WC1) Introduction to Entrepreneurship - small business management issues
BUS 150 (WIT3=WC1) E-Commerce - current \& emerging electronic commerce technologies using the internet
BUS 197 (WIT3=WC1) Leadership Development - leadership styles effective in the workplace
ADM 154 (WIT3=WC1) Business Communications - principles of business writing, emphasizing the most important and frequently written business correspondence
ACC 111 (WIT3=WC1) Introduction to Accounting - recording entries, preparing financial statements, utilizing cash management skills
MKT 110 (WIT3=WC1) Principles of Marketing - consumer and organizational buying behavior, targeting market opportunities, dev/managing new products
MKT 150 (WIT3=WC1) Principles of Advertising (Prereq: MKT 110) - designing a complete advertising campaign, including budget and design
MGT 101 (WIT3=WC1) Principles of Management - planning, organizing, staffing, directing, and controlling formal \& informal organizations
MGT 170 (WIT3-WC1) Human Relations Management - job design, employee selection, development, appraisal and termination
MGT 200 (WIT3=WC1) Managing Diversity - workplace cultures explored; ethnic groups, men, and women, gay persons, those with disabilities, age
FIN 121 (WIT3=WC1) Personal Finance - personal financial planning with emphasis in the areas of money management and investments
MMS 101 (WIT3=WC1) Mass Media - media forms including journalism, broadcast, public relations and advertising including the world wide web

## AGRICULTURE

AGA 114 (WIT3=WC1) Principles of Agronomy - reasons and methods of soil and crop management, along with the science involved

AGS 113 (WIT3=WC1) Survey of Animal Industry - spectrum of animal science; beef, swine, sheep, dairy, horse, poultry production AGS 226 (WIT3=WC1) Beef Cattle Science - understanding of the retail beef industry, management decisions, prevention and treatment AGS 242 (WIT3=WC1) Animal Health - cause, nature, prevention and treatment of common health problems of farm animals AGS 270 (WIT3=WC1) Foods of Animal Origin - the world's food needs and supplies
AGS 319 (WIT3=WC1) Animal Nutrition - digestive systems, nutrition, and practical applications
AGB 235 (WIT3=WC1) Intro to Agriculture Markets - structure, economics, organization, and function of the world food marketing systems
AGB 330 (WIT3=WC1) Farm Business Management - principles of farm management in developing a farm or farm business operation
AGB 466 (WIT3=WC1) Ag Finance - terminology and tools of ag finance and bookkeeping
AGC 216 (WIT2=WC1) Career Seminar - explore and discover agricultural career opportunities

## SUMMER \& FALL/SPRING WIT COURSES

Students are responsible for their own transportation to/from WIT in Sioux City for on-campus courses.


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