



Saydel High School

5601 NE 7th Street
Des Moines, IA 50313

Registration Guide
2023-2024

www.saydel.k12.ia.us

It is the policy of the Saydel Community School District not to illegally discriminate on the basis of race, color, national origin, sex, disability, religion, creed, age (for employment), marital status (for programs), sexual orientation, gender identity and socioeconomic status (for programs) in its educational programs and its employment practices. There is a grievance procedure for processing complaints of discrimination. If you have questions or a grievance related to this policy, please contact the district's Equity Coordinator, Alex Stubbers, Director of Student Services, 5740 NE 14th Street, Des Moines, IA 50313 (stubbersalex@saydel.net). Office for Civil Rights, Citigroup Center, 500 W. Madison Street, Suite 1475, Chicago, IL 60661.

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INTRODUCTION



Saydel Community Schools has developed rigorous course offerings to meet the needs of all students. Whether you plan on attending college, committing to the military, enrolling in a trade school, or entering the world of work, our offerings will provide the necessary content and skill development for you to be successful after high school.

This course selection guide clearly outlines the course offerings and the requirements to earn a high school diploma. The courses you plan for and select will help you meet your goals both during and after high school. You have people willing to support you with your decisions. Utilize the support of your teachers, counselors, and administrators as you choose the courses for your future.

COLLEGE REQUIREMENTS

Students interested in attending a particular college should contact the admissions office of the college for their specific field of interest, such as medicine, engineering, nursing, teaching, etc., in which they are interested in enrolling. Check annually to learn whether entrance requirements of the college of your choice have been revised.

1. A student must have a high school diploma or equivalent to meet entrance requirements.
2. Depending on the college, applicants may be required to complete the ACT or SAT college entrance test. It is recommended that the ACT test be completed during a student's junior year. It may also be completed or re-assessed during the student's senior year. Applications for the test are available in the Guidance Office or at <http://www.actstudent.org/>.
3. Completion of core courses is one of four factors that are considered in the admission of college freshmen that wish to enroll at an Iowa regent universities. These factors will be used to calculate a Regent Admission Index (RAI) for each applicant, based on the following equation:

$$\text{RAI} = (3 \times \text{ACT composite score}) + (30 \times \text{high school cumulative GPA}) + (5 \times \text{total number of years of high school courses completed in the core subject areas})$$

Students with a RAI of 245 or higher and have met the course requirements, qualify for automatic admission into Iowa State University, the University of Northern Iowa, and the College of Liberal Arts and Sciences at The University of Iowa. Students choosing not to take the ACT will have their application individually reviewed by the chosen university.

4. Seniors planning to attend college may elect to test out of some of the courses they feel proficient in. This is referred to as C.L.E.P. It is possible to test out of an entire freshman year in college, thereby saving time and money. See your counselor for details. Generally, a good background for a four-year college will include the following subject recommendations:

- 4 years of high school English
- 3 years of high school social studies
- 3 years of high school math
- 3 years of high school science
- 2 years of high school foreign language

Four-year college institutions will accept transfer credits from satisfactory performance in a junior college.

NCAA ELIGIBILITY REQUIREMENTS

[Refer to the NCAA initial eligibility brochure and the guide for college-bound student athletes.](#)

NAIA ELIGIBILITY REQUIREMENTS

[Refer to the College-Bound Guide on the NAIA website.](#)

Preparing for Academic Success at Iowa’s Regents Universities

	Minimum Requirements for Admission			Optimum Recommendations for Success
	Iowa State University	The University of Iowa	University of Northern Iowa	
World Languages	2 years of a single world language for admission to the College of Liberal Arts and Sciences and the College of Engineering.	2 years of a single world language are required for admission. For many degrees, the fourth year of proficiency is required for graduation. Nursing – minimum second-level proficiency in one world language.	World language courses are not required for admission. However, two years of a world language in high school with a C- or above in the last course will meet the university graduation requirement.	4 years of a single world language. By taking world language during all four years of high school, you will go beyond the basic skills and begin to use the language and reinforce your fluency.
English	4 years of English/Language Arts emphasizing writing, speaking, reading, as well as an understanding and appreciation of literature.	4 years, with an emphasis on the analysis and interpretation of literature, composition, and speech.	4 years, including one year of composition; also, may include one year of speech, communication, or journalism	4 years of English courses in High school 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 including at least one year each of algebra, geometry, and advanced algebra.	3 years including two years of algebra and one year of geometry for admission to the College of Liberal Arts and Sciences. 4 years including two years of algebra, one year each of geometry and higher math (pre-calculus or equivalent) for admission to the College of Engineering.	3 years including the equivalent of algebra, geometry, and algebra II.	4 years, one in each year of high school. Advanced courses in algebra and trigonometry are optimal. Calculus and statistics courses are also good and will contribute to the development of your higher-level analytical skills.
Natural Science	3 years including at least two years of courses which emphasize elements of biology, chemistry, or physics.	3 years including courses in physical science, biology, chemistry, environmental science and physics for admission to the College of Liberal Arts and Sciences and Engineering. 3 years including one year each of biology, chemistry and physics for admission to the College of Nursing.	3 years including courses in general science, biology, chemistry, earth science, or physics. Laboratory experience is highly recommended.	4 years, one in each year of high school. To be better prepared, take at least one year of biology, chemistry, and physics. These can be taken in any order and may be taught productively in either a separate or integrated fashion, depending on your school’s offerings.
Social Studies	2 years for admission to the Colleges of Agriculture and Life Science, Business, Design, Human Sciences, and Engineering. 3 years for admission to the College of Liberal Arts and Sciences.	3 years with U.S. history and world history recommended for admission to the College of Liberal Arts and Sciences. 2 years with U.S. history and world history recommended for admission to the College of Engineering.	3 years including courses in anthropology, economics, geography, government, history, psychology, or sociology.	3 years is essential, but four is better. Take at least one year each of US and world history. Additional courses in anthropology, economics, political science, psychology, and sociology provide an important understanding of our political, social, and economic institutions.

GRADUATION REQUIREMENTS

Graduation from high school should mean that the student has accomplished some definite goals that were established early in the high school program with the help of parents, teachers, and counselors. The Iowa State Board of Education and the Saydel Board of Education prescribe certain requirements for graduation in order to provide pupils with a carefully planned program that will be of greatest value to them.

<p style="text-align: center;"><u>English - 8 credits</u></p> <p style="text-align: center;">English 9 – 2 English 10 – 2 American Literature – 2 English 12 – 2</p>	<p style="text-align: center;"><u>Social Studies - 6 credits</u></p> <p style="text-align: center;">U.S. History – 2 World History – 2 Government – 1 Contemporary Affairs– 1</p>
<p style="text-align: center;"><u>Math - 6 credits</u></p> <p style="text-align: center;">Algebra 1 – 2 or Essential Algebra 1.0 and 1.5 - 4 Geometry – 2 Math Electives or Algebra 2 - 2 (Students must pass classes through Algebra 2 to meet college admittance requirements at a Board of Regents University)</p>	<p style="text-align: center;"><u>Science - 6 credits</u></p> <p style="text-align: center;">Physical Science – 2 Biology – 2 Science Elective – 2</p>
<p><u>Health – 1 credit</u></p>	
<p><u>Physical Ed. – 2 credits</u></p>	
<p><u>Electives – 19 credits</u></p>	
<p>TOTAL CREDITS – 48 CREDITS</p>	

EARLY GRADUATION

Fewer than eight semesters in the senior high school is considered early graduation. District policy currently states that students may graduate from Saydel High School and terminate attendance at school at the end of the seventh semester.

An early graduation form must be completed by the student during the first semester of the senior year and must be approved by the student, the parent or guardian, the principal, and the counselor. This process of acceleration involves careful planning on the part of the students, parents, and counseling staff.

HIGH SCHOOL FOUR-YEAR PLAN

Suggested Schedule Plan for typical math pathway

Classes in italics and bold are required classes. But could be taken during either semester.

FRESHMAN YEAR

Semester 1

1. ***English 9***
2. ***Algebra 1***
3. ***Physical Science***
4. ***U.S. History***
5. ***P.E.***
6. Elective _____
7. Elective _____

Semester 2

1. ***English 9***
2. ***Algebra 1***
3. ***Physical Science***
4. ***U.S. History***
5. Elective _____
6. Elective _____
7. Elective _____

SOPHOMORE YEAR

Semester 1

1. ***English 10***
2. ***Geometry***
3. ***World History***
4. ***Biology***
5. ***Health (1st or 2nd semester)***
6. Elective _____
7. Elective _____

Semester 2

1. ***English 10***
2. ***Geometry***
3. ***World History***
4. ***Biology***
5. ***P.E.***
6. Elective _____
7. Elective _____

JUNIOR YEAR

Semester 1

1. ***Algebra 2***
2. ***American Literature***
3. ***Science Elective***
4. ***Government***
5. Elective _____
6. Elective _____
7. Elective _____

Semester 2

1. ***Algebra***
2. ***American Literature***
3. ***Science Elective***
4. ***P.E.***
5. Elective _____
6. Elective _____
7. Elective _____

SENIOR YEAR

Semester 1

1. ***English 12***
2. ***P.E.***
3. Elective _____
4. Elective _____
5. Elective _____
6. Elective _____
7. Elective _____

Semester 2

1. ***English 12***
2. ***Contemporary Affairs***
3. Elective _____
4. Elective _____
5. Elective _____
6. Elective _____
7. Elective _____

TOTAL CREDITS = 48

HIGH SCHOOL FOUR-YEAR PLAN

Suggested schedule plan for increased math support

Classes in italics and bold are required classes, but could be taken during either semester.

FRESHMAN YEAR

Semester 1

1. *English 9*
2. *Physical Science*
3. *U.S. History*
4. *Essentials of Algebra 1.0*
5. Elective _____
6. Elective _____
7. Elective _____

Semester 2

1. *English 9*
2. *Physical Science*
3. *U.S. History*
4. *Essentials of Algebra 1.0*
5. Elective _____
6. Elective _____
7. Elective _____

SOPHOMORE YEAR

Semester 1

1. *English 10*
2. *Essentials of Algebra 1.5*
3. *Biology*
4. *World History*
5. *Health (1st or 2nd semester)*
6. Elective _____
7. Elective _____

Semester 2

1. *English 10*
2. *Essentials of Algebra 1.5*
3. *Biology*
4. *World History*
5. *P.E.*
6. Elective _____
7. Elective _____

JUNIOR YEAR

Semester 1

1. *Geometry*
2. *American Literature*
3. *Science Elective*
4. *Government*
5. Elective _____
6. Elective _____
7. Elective _____

Semester 2

1. *Geometry*
2. *American Literature*
3. *Science Elective*
4. *P.E.*
5. Elective _____
6. Elective _____
7. Elective _____

SENIOR YEAR

Semester 1

1. *English 12*
2. *P.E.*
3. Elective _____
4. Elective _____
5. Elective _____
6. Elective _____
7. Elective _____

Semester 2

1. *English 12*
2. *Contemporary Affairs*
3. Elective _____
4. Elective _____
5. Elective _____
6. Elective _____
7. Elective _____

TOTAL CREDITS = 48

NOTICE TO STUDENTS

When you receive your schedule at registration in the fall, **BE SURE TO CHECK IT!** Sometimes the guidance office staff does not find the obvious errors, so it is the responsibility of the student to call the mistake to their attention.

Obvious errors are those where you have been assigned, for example, to Drawing and Painting 2 first semester and Drawing and Painting 1 second semester. You must have Drawing and Painting 1 before Drawing and Painting 2. There are many examples of this - - in Art, Business, and Industrial Arts, so read your schedule carefully. If you think there may be an error, see your counselor immediately.

A prerequisite course must be passed before you can go on to the next advanced class.

REGISTERING FOR CLASSES AND SCHEDULE CHANGES

Students, parents, advisors, and counselors work out a suitable plan for each student for each year. Planning for course selection begins in the first semester of the previous year.

The policy for Saydel High School on dropping a subject or changing a schedule during the school year is as follows:

- 1) Full-year and semester courses must be completed before any credit will be awarded. Any exceptions to this rule will be determined by the administration and counselors.
If a student is doing passing work, permission to drop will be denied.
- 2) If any modifications are necessary on a schedule these must be corrected within the first **three (3) days** after each semester begins.

Any changes on a schedule must be made within the first three (3) days after each semester begins. If a course is dropped after the specified time, the student will drop the course and receive an **“F”**.

After the initial registration and scheduling, student schedule changes may only be made according to the following criteria:

(A) Acceptable reasons for change include:

1. Computer and/or clerical error.
2. Failure of the first half of a yearlong course.
3. Students who must enroll in a course to meet graduation requirements.
4. Students who must enroll in a course to meet college admission requirements.
5. Administration and teacher adjustment in class size.

(B) Non-Acceptable reasons for requesting a schedule change:

1. Student claims not to have requested the course at registration.
2. Student does not like the subject after he/she begins the class.
3. Poor grade or potential failure, which will hurt grade point average.
4. Student is not with friends.
5. There is too much homework.
6. Class interferes with job or early out pass.
7. Student is having trouble getting along with the teacher or other students in the class.
8. Student needs a study hall.
9. Student does not understand the material.

WEIGHTED COURSES

To encourage student participation in college-level and career preparation courses, students are eligible to receive weighted grading for approved courses. Any new courses approved by the Board must indicate if weighted grading is requested. Guidelines for identification for course weighting are as follows:

- ALL AP courses
- ALL DMACC Concurrent Enrollment Courses
- PSEO Courses that transfer/are accepted for credit to Regent Universities
- Credit transferred in from accredited Colleges & Universities that meets district criteria to award credit. Weighting for these courses will be awarded upon request on a case-by-case basis. Typical examples include Drake and Grandview. Students will see their counselor or administrator to initiate the request for weighted credit in these circumstances.
- Select Career Advantage Courses

Course Weighting Notes:

The GPA procedure in its entirety will be published each year in the student handbook. If you are unsure if a course you are taking qualifies for weighting, please ask your administrator or counselor during the course registration process.

Curricular Area/Dept.	Course	Schedule	9th	10th	11th	12th
Art	Introduction to Art	1 Sem.	X	X	X	X
	3-D Studio Art*	1 Sem.	X	X	X	X
	Drawing & Painting 1*	1 Sem.	X	X	X	X
	Drawing & Painting 2*	1 Sem.		X	X	X
	Advanced Studio Arts	1 Sem.			X	X
	(Graphic Design 1* 3 DMACC credits)	1 Sem.		X	X	X
	Graphic Design 2* (3 DMACC credits)	1 Sem.		X	X	X
	AP Studio Art*	1 Yr.			X	X
Business	Principles of Business	1 Sem.	X	X	X	X
	Business Economics	1 Sem.	X	X	X	X
	Principles of Marketing	1 Sem.	X	X	X	X
	Principles of Finance	1 Sem.	X	X	X	X
	Principles of Management*	1 Sem.			X	X
	Business Strategies*	1 Sem.			X	X
	Accounting 1	1 Yr.		X	X	X
	Work Based Learning: Skills* (2 DMACC credits)	1 Sem.				X
	Work Based Learning: Internship* (3 DMACC credits)	Extended periods				X
	Computer Science	Computer Science Essentials	1 Yr.	X	X	X
AP Computer Science Principles*		1 Yr.		X	X	X
Education	Foundations of Education (3 DMACC credits)	1 Sem.			X	X
	Intro to Education Internship* (3 DMACC credits)	Extended periods			X	X
Engineering	Introduction to Engineering Design*	1 Yr.	X	X	X	X

	Principles of Engineering*	1 Yr.		X	X	X
Extended Learning Program	Academic Decathlon	1 Sem.	X	X	X	X
	Life Beyond High School: College Edition	1 Sem.	X	X	X	X
English Language Arts	English 9 or Honors English 9	1 Yr.	X			
	English 10 or Honors English 10*	1 Yr.		X		
	American Literature*	1 Yr.			X	
	Creative Expression*	1 Yr.			X	X
	English 12*	1 Yr.				X
	Multimedia Communication	1 Yr.	X	X	X	X
	AP Language & Composition* (3 DMACC credits)	1 Yr.			X	X
	AP Literature & Composition* (3 DMACC credits)	1 Yr.				X
	Heroes, Myths & Legends*	1 Sem.			X	X
	Choose Your Own Adventure: Reading Exploration	1 Sem.	X	X	X	X
	Newspaper & Yearbook *	1 Sem.	X	X	X	X
	Fundamentals of Reading	1 Sem.	X			
	Strategic Reading	1 Sem.		X	X	X
Family/ Consumer Science	Housing & Interior Design	1 Sem.	X	X	X	X
	Introduction to Food & Nutrition	1 Sem.	X	X	X	X
	Pro Start 1*	1 Yr.		X	X	X
	Pro Start 2*	1 Yr.		X	X	X
	Human Growth & Development	1 Sem.	X	X	X	X
	Internship*	Extended Periods			X	X

Health/ Physical Education	Introduction to Health	1 Sem.	X	X	X	X
	Healthy Lifestyle Management*	1 Sem.			X	X
	Individual & Personal Fitness	1 Sem.	X	X	X	X
	Team Games and Fitness	1 Sem.	X	X	X	X
	Weightlifting	1 Sem.	X	X	X	X
	Athletic Enhancement	1 Y.	X	X	X	X
Industrial Technology	Power Technology	1 Sem.	X	X	X	X
	Intro To Skills Trade	1 Sem.	X	X	X	X
	Metals	1 Sem.	X	X	X	X
	Cabinetry	1 YR		X	X	X
	Advanced Cabinetry	1 YR			X	X
	Intro To Construction	1 YR		X	X	X
	Mechanical & 3D Drafting	1 Sem		X	X	X
	Architectural Drafting	1 Sem			X	X
	Energy, Power & Transportation	1 Sem		X	X	X
	Pre-apprenticeship*	Extended Periods				X
	Post-Secondary Career Academy				X	X
Math	Algebra 1	1 Yr	X			
	Essentials of Algebra 1.0	1 Yr.	X			
	Essential of Algebra 1.5	1 Yr.	X			
	Geometry*	1 Yr.	X	X	X	
	Algebra 2 *	1 Yr.	X	X	X	X
	Precalculus with Trigonometry*	1 Yr.			X	X
	AP Calculus*	1 Sem.			X	X
	Probability and Statistics*	1 Sem.			X	X
	Consumer Math*	1 Sem.	X	X	X	X
	Technical Math*	1 Sem.	X	X	X	X
Music	Band	1 Yr.	X	X	X	X

	Concert Choir	1 Yr.	X	X	X	X
	Vocal Fusion*	1 Yr.		X	X	X
	Music Theory*	1 Sem.			X	X
	Introduction to Finale*	1 Sem.			X	X
	Music Technology	1 Sem.	X	X	X	X
Science	Physical Science	1 Yr.	X			
	Biology	1 Yr.		X		
	Astronomy	1 Sem.		X	X	X
	Environmental Science*	1 Sem.			X	X
	Principles of Biomedical Science	1 Yr.	X	X	X	X
	Human Body Systems*	1 Yr.		X	X	X
	Physics*	1 Yr.			X	X
	Chemistry*	1 Yr.			X	X
	AP Biology*	1 Yr.			X	X
	AP Chemistry*	1 Yr.			X	X
	Scientific Research and Design*	1 Sem.	X	X	X	X
Social Studies	World Cultures	1 Sem.	X	X	X	X
	Sociology	1 Sem.	X	X	X	X
	Psychology	1 Sem.	X	X	X	X
	U.S. History	1 Yr.	X			
	World History*	1 Yr.		X		
	US Government*	1 Sem.			X	X
	AP US History*	1 Yr.		X	X	X
	AP US Government and Politics*	1 Yr.			X	X
	Contemporary Affairs*	1 Yr.				X
World Language	Spanish 1	1 Yr.	X	X	X	X
	Spanish 2*	1 Yr.		X	X	X
	Spanish 3*	1 Yr.			X	X
	Spanish 4	1 Yr.			X	X

* This course has a prerequisite

Highlighted courses are weighted.

Supporting and Special Programs

iJAG 9-12

Success Program (At-Risk) 9-12

Emerging Bilinguals 9-12

Extended Learning Program (ELP) 9-12

Credit Recovery 9-12
Special Education 9-12



Introduction to Art (9-12)

1 credit

Skinny

Prerequisite: None

This is an introductory class that introduces students to the various mediums, ways of thinking and creative problem solving. Students will study and create art through exploration of 2-D, 3-D, Mixed Media and other design concepts.

3-D Studio Arts (9-12)

1 credit

Skinny

Prerequisite: Introduction to Art

This is an exploration in the craft of 3-D art. We will do extensive hand building in slab, coil, pinch, armature, and sculpting techniques. Some wheelwork will also be included in the curriculum. Student will learn about the different sculpture techniques and more specifically clay bodies, firing, glazing techniques and vocabulary.

Drawing & Painting 1 (9-12)

1 credit

Prerequisite: Introduction to Art

Students will demonstrate the ability to draw, shade, mix colors, and experiment with various techniques through a variety of media. Reference to artists throughout history and their influence on art will also be included.

Drawing & Painting 2 (10-12)

1 credit

Prerequisite: Introduction to Art, Drawing & Painting 1

Students will continue to master drawing and painting techniques through further exploration of color, themes, various mediums and self-reflection driven artworks.

Graphic Design 1 (10-12)

1 weighted credit

3 DMACC credits

Prerequisite: Introduction to Art

Students will focus on beginning graphics techniques in the latest professional graphics software (Photoshop, Illustrator & InDesign). Students will follow the DMACC curriculum, and the class will be offered as dual credit. The class will include demonstrations, exploration, student projects and study of graphics professionals and careers.

Graphic Design 2 (10-12)

1 weighted credit

3 DMACC credits

Prerequisite: Introduction to Art, Graphic Design 1

Students will focus on intermediate to advanced graphics techniques in the latest professional graphics software (PHOTOSHOP ONLY). Students will follow the DMACC curriculum, and the class will be offered as dual credit. The class will include demonstrations, exploration, student projects and study of graphics professionals and careers.

AP Studio Art (10-12)

2 weighted credits

Prerequisite: Introduction to Art, (student must have taken at least 5 fine arts credits)

Students will work on focused themes and mediums to create, finalize and submit a fine arts portfolio. Portfolios will be reviewed by the College Board for possible college credit. In order for college credit certain criteria must be met. This class is very focused, goal driven and for students looking to push their skills to the next level.

Advanced Studio Art (11-12)

1 credit/semester

Prerequisite: AP Studio Art

Advanced Studio Arts provides a structure for students already well grounded in a discipline of art to engage in advanced level work beyond courses normally offered by the department. The student will carefully define a semester's work that complements their previous study and initiate a proposal with the instructor.



Principles of Business (9-12)

1 credit

Prerequisite: None

Q: What do your favorite rock group's tour schedule, the logo on a coffee mug, and the Wall Street Journal have in common? A: Business. It's everywhere. Principles of Business will open your eyes to the world of business. During the course you will be introduced to some of the major areas of business administration (marketing, management, and finance) through fun, real world projects.

Business Economics (9-12)

1 credit

Prerequisite: None

Ever thought about the choices that the Three Little Pigs made from an economic perspective? In Business Economics, you will consider how decisions (such as work vs. play or sticks vs. straw) affect businesses and individuals in the short and long term. You will also conduct research and examine business problems as you learn about microeconomic, macroeconomic and international economic concepts.

Principles of Marketing (9-12)

1 credit

Prerequisite: None

Why would Volkswagen choose an email campaign over a television commercial? How does Nike determine its pricing strategy? Through projects and problem solving you will get inside marketers' heads and find out what makes them tick. Projects in the course will challenge you to analyze the business world around you, work through key marketing decisions such as pricing and product image, and use your knowledge to develop a marketing strategy.

Principles of Finance (9-12)

1 credit

Prerequisite: None

Can you imagine a company president who doesn't understand finances? Learning how companies manage their money is important in any business career. In this course, you will face issues that concern financial markets and institutions. This includes how companies get money for improvements (a new building, a Super Bowl advertisement), make money (sales of products, investments), and keep track of money (understanding financial reports, making smart and ethical decisions). An online investing project provides hands-on experience (and fun!) in this important area of business.

Principles of Management (11-12)

1 credit

Prerequisite: Principles of Business, Business Economics, Principles of Marketing, Principles of Finance

Get an up-close look at managing. You'll learn first-hand how to manage projects and people—and how to do it ethically and legally. This course includes individual and group work as you conquer problems in the different areas of management, including human resources management, risk management, project management, and knowledge management.

Business Strategies (11-12)

1 credit

Prerequisite: Principles of Business, Business Economics, Principles of Marketing, Principles of Finance, Principles of Management

Here's where it all comes together. In this course you will run your own business. Using the smarts gained in previous High School of Business™ courses, you'll start by writing a real business plan. Then you'll put that plan to action by opening and operating a business. You will tackle problems real business professionals face, such as interviewing, hiring and supervising staff, keeping financial records, evaluating results, and much more. Along the way you'll find out how the areas of a company (marketing, finance, management, etc.) work together.

Accounting (10-12)

2 credits

Prerequisite: None

Accounting is a yearlong course. This course teaches students how to make money in the business world. Students learn to apply the internationally recognized Generally Accepted Accounting Principles (GAAP) while preparing financial statements, payroll records, and tax forms. Specific topics include receivables, inventories, long-term assets, current liabilities, and computerized accounting. Whatever career you're thinking about – musician, athlete, homemaker, CPA, or entrepreneur – or if you're off to college soon, you'll need accounting skills for success in the real world.

Work Based Learning: Skills (12)

1 **weighted** credit (fall semester only)

2 DMACC credits

Prerequisite: 12th grade

Co-requisite Work Based Learning: Internship

This class is designed for students to become a highly effective member of the workplace. Students will investigate careers and workplace expectations. Other areas of focus include: résumé building, conflict resolution, money management and ethics.

Work Based Learning: Internship (12)

3 **weighted** credits

3 DMACC credits

Prerequisite: 12th grade

Co-requisite Work Based Learning: Skills

This course is designed to provide students with an opportunity to apply their skills and talents in a professional setting. Students will be partnered with an area business or professional to learn career related skills. Student progress will be measured utilizing journals and mentor evaluations. Acceptance is conditional upon:

- Recommendations from two teachers
- A record of excellent attendance during the junior year
- Demonstration of good citizenship – as recorded in the Assistant Principal’s office
- A history of quality academic performance and support relative to the student’s career interests.
- Available space in the student’s senior schedule
- Internship availability

Interns must provide their own transportation and may need to supply workplace appropriate attire. Employers may require drug tests, health screenings, background checks and credit examinations. Unethical behavior may result in students being removed from the internship.

Post-Secondary Career Academy (11-12)

Each of these academies is offered on DMACC’s Ankeny Campus, unless otherwise noted. These classes provide area high school students with excellent educational opportunities. Registration in these courses is handled by the guidance counselor. Specific courses may be subject to change.

- **Business:** The Business Academy is an exploratory academy for students who have an interest in entering the business profession but are not sure what pathway to take. Students are provided a foundation of courses that will prepare them for entrance into multiple business-related postsecondary opportunities.



COMPUTER SCIENCE



Computer Science Essentials (9-12)

2 credits

This yearlong course gives students an excellent opportunity to explore different aspects of computer science. Students will be exposed to fundamental coding concepts, computational thinking concepts and computing tools that will allow them to build a deeper understanding of computers and how they work. Students will work collaboratively on projects and address topics that are meaningful to them.

Students will explore coding using block and text-based coding to design websites, create animations, and even explore basic elements of game design.

AP Computer Science Principles (10-12)

2 credits

Prerequisite: Computer Science Essentials

This yearlong course builds on the skills that students developed in Computer Science Essentials by deepening their understanding of how the computer represents data and the workings of the Internet. Students will get to program at a much more involved level than in Computer Science Essentials. By putting an emphasis on top down program design and using functions, students will learn how to simplify the design of programs that have reusable parts.

Post-Secondary Career Academy (11-12)

Each of these academies is offered on DMACC's Ankeny Campus, unless otherwise noted. These classes provide area high school students with excellent educational opportunities. The guidance counselor handles registration in these courses.

- **Computer-Aided Design Technology:** If you're a dependable team member with mechanical aptitude, attention to detail, and analytical thinking, CAD Tech could be for you. Careers are available in computer-aided design (CAD), including drawing in both two-dimensional and three-dimensional realms, designing new products, creating models, and more. Through DMACC's CAD technology program, you'll learn how to use a variety of software packages, create prototypes, practice reverse engineering, perform geometric dimensioning, and more.
- **Computer Programming:** These courses provide an introduction to the latest in computer science and programming.
- **Cybersecurity:** As technology becomes increasingly sophisticated, the demand for an experienced and qualified workforce to protect our nation's networks and information systems will continue to grow. Cybersecurity is a rapidly-growing industry with ever-increasing workforce needs.



Foundations of Education (11-12)

2 **weighted** credits

3 DMACC credits

Prerequisite: None

Examines American education from a historical, philosophical, and sociological perspective. Challenges and issues in education today will be discussed in the context of school organization, politics, funding, curriculum, professionalism, legal issues, and effective school and teacher characteristics. Strong reading and writing skills are needed to be successful in this course, as is the ability to be a self-directed learner.

Intro to Education Internship (11-12)

2 **weighted** credits

2 DMACC credits

Prerequisite: Successful completion of Foundations of Education

Course will provide opportunities to enhance understanding of the teaching profession and assist with decisions to pursue a career in education. Students will explore teaching as a profession, observing 60+ hours in a classroom, and attending required weekly seminars. Students will apply knowledge from Foundations of Education and will submit weekly assessments of teaching strategies and their impact on student learning.



ENGINEERING



Introduction to Engineering Design (9-12)

2 credits

Pre or Corequisite: Algebra 1

Introduction to Engineering Design (IED) is a course for students interested in design, engineering or other technical careers. The major focus of the IED course is to expose students to a design process, problem solving, as well as design and technical documentation. IED gives students the opportunity to develop skills in technical research, teamwork, technical writing and engineering design using hands-on problem-based, project-based learning. Students will learn to use industry standard 3D solid modeling software as a means for solving complex problems. Students should have an interest in science, technology, engineering or math (STEM). Visit www.pltw.org for further information.

Principles of Engineering (10-12)

2 credits

Prerequisite: Introduction to Engineering Design

Corequisite Course: Geometry or higher

Principles of Engineering (POE) is the second of three foundation courses in the Project Lead The Way (PLTW) high school engineering program. The class is a high school-level survey course of engineering. The course exposes students to some of the major concepts that they will encounter in a college engineering course of study. Students have an opportunity to investigate engineering and high-tech careers. POE gives students the opportunity to develop skills and understanding of course concepts through activity-, project-, and problem-based (APPB) learning. Students will employ engineering and scientific concepts in the solution of engineering design problems. Students will develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges. Students will also learn how to document their work and communicate their solutions to their peers and members of the professional community.



ENGLISH LANGUAGE ARTS



English 9 (9)

2 credits

Prerequisite: None

This course focuses on integrating reading, writing, critical thinking, and speaking skills. Both required and self-selected readings provide students with opportunities to experience classic and modern literature representing various different genres, cultures, and time periods. We will explore the following genres during our literary journey: short story, drama, novel, nonfiction, mythology, and poetry. In addition to our study of literature, students will enhance skills in the following areas: writing (both formal and informal), vocabulary, and conventions of Standard English.

Honors English 9 (9)

2 credits

Prerequisite: Teacher Approval

This class is an accelerated and enriched version of English 9. Students in this class will cover the same concepts and content as students in English 9, but material will be covered more in-depth and at a faster pace, allowing for more texts to be studied throughout the year. In addition, writing will be highly emphasized in this course.

English 10 (10)

2 credits

Prerequisite: English 9

In tenth grade, students study multi-ethnic/cross-cultural texts from around the world, including short stories, novels, dramas, poetry and non-fiction text. Students will study how the cultural context and perspective of the text impact the characters and people involved. The units focus on text, themes, and literacy techniques and devices that further critical thinking and analytical reading and writing skills.

Honors English 10 (10)

2 credits

Prerequisite: Teacher Approval

This class is an accelerated and enriched version of English 10. Students in this class will cover the same concepts and content as students in English 10, but material will be covered more in-depth and at a faster pace, allowing for more texts to be studied throughout the year. In addition, writing will be highly emphasized in this course.

American Literature & Composition (11)

2 credits

Prerequisite: English 10

American Literature and Composition focuses on the study of prominent American authors and works. Students will continue to develop vocabulary, critical thinking, analytical skills, research, and writing skills, demonstrated through various assessments including projects, and informal and formal literary analysis.

Creative Expression (11-12)

1 credit

Prerequisite: English 10; Elective Only OR by teacher approval for English credit

Creative Writing is an elective course for proficient writers who seek an overview of the basic aspects of creative writing techniques, emphasizing the use of the writing process. Producing individual writing assignments to develop and enhance students' writing skills is the major goal of the course. The course is designed to provide students the opportunity to write in a variety of genres, including poetry, short story, memoir, autobiography, letters, and scripts. Students will write for the purposes of description, narration, exposition, and persuasion. The aim of the class is for students to produce multiple kinds of writing, with an additional emphasis on revision and editing skills.

English 12 (12)

2 credits

Prerequisite: American Literature

This course will focus on preparing students for life after high school. Students will work on an essay they may use for college or scholarship applications, will learn the subtle art of persuasion, and will analyze texts ranging from Shakespeare to contemporary novels. By the end of this course, students will expand their knowledge to texts outside the literary canon, celebrate diversity in literature, and hone their writing skills.

Multi-Media Communication (9-12)

1 credit

Prerequisite: None

During this semester-long course, students will sharpen their digital literacy skills for diverse, real-life situations. They will not only work on communication through multimodal platforms but they will also develop informational literacy skills through various short, research-based activities such as podcast episodes, website creation, and video productions. Many opportunities will be provided for students to apply their digital literacy skills and knowledge of digital media processes through group collaboration, written work, presentations, and relevant media creation.

AP Language and Composition (11)

2 **weighted** credits

Prerequisite: Honors English 9, Honors English 10, OR Teacher Approval

AP Language & Composition is a course that will be taught much like a college-level freshman composition class. It focuses heavily on developing your writing skills to adapt them for diverse purposes and audiences. Through frequent drafting, revision, and editing of a wide variety of essays, you will become skilled at writing effective paragraphs and smooth transitions as well as

providing evidence to logically support arguments. You will also learn to recognize different patterns of composition in texts and blend the patterns in your own writing. Students in this course also practice the test-taking skills necessary to perform well on the AP Language & Composition exam.

AP Literature and Composition (12)

2 **weighted** credits

Prerequisite: AP Language and Composition

AP Literature & Composition is similar to a college-level freshman composition class. Students will understand and apply the rhetorical situation and rhetorical appeals in their own writing, as well as the analysis of the writing of others. Students will engage in the process of writing, from planning, drafting, revising, and will participate in peer feedback workshops. In this course students will take part in practice exams on the AP College Board digital classroom. If offered as a dual-credit course, students will receive DMACC credit for Composition I & II.

Heroes, Myths, and Legends (11-12)

1 credit

Prerequisite: English 9 & 10 or teacher approval

This course focuses on exploring heroes, myths, and legends from various cultures and time periods. This will include the following units of study: Heroes/Heroines of Ancient Greece, (including *Antigone* by Sophocles and *Heroes, Gods and Monsters of the Greek Myths* by Bernard Evslin), *Star Wars*, *Beowulf*, Everyday Heroes/ Modern Heroes, Urban Myths and Legends, Folktales/Folklore, and Comics and Superheroes. Aside from reading and critical discussion, students will write both formal and informal writing assignments.

Choose Your Own Adventure: Reading Exploration (9-12)

1 credit

Prerequisite: None

Are you someone who will read just about anything put in your hands? Or are you someone who is super picky about what you read and are tired of not being able to pick the books you read in class? Either way, this course is for you! In this course YOU pick the books that you would like to read. YOU decide what you would like to learn about. YOU get to set your reading and learning goals. By the end of this course, you will have built up your reading stamina, you will know so many vocabulary words your friends will start calling you Webster, and you will give a TED Talks-worthy presentation that “Wows” your audience with your expertise on whatever topic or theme you decide to investigate throughout the semester. Other than cookies every day, what more could you want in a class?!

Yearbook (10-12)

2 credits

Prerequisite: English 9 & Teacher Approval

This course will focus on producing the Eagle yearbook. In order to produce a quality yearbook, students will focus on the following topics: laws and ethics, journalistic writing and editing, design (including typography, layout), photography, and will learn how to use Herff Jones' eDesign program. Students are expected to have excellent attendance, work ethic, responsibility, and time management. Equally important, students need to be able to get along with others and work as a team.

Fundamentals of Reading/Writing (9)

2 credit

Prerequisite: Instructor Approval

This course covers the basic fundamentals of reading, including reasoning, information and vocabulary skills, sight word building, oral reading and comprehension. Basic sentence structure writing and paragraph writing are also included in this yearlong course.

Strategic Reading (10-12)

2 credits

Prerequisite: Instructor approval

Strategic Reading courses are intended to improve a student's vocabulary, critical-thinking and analysis skills, or reading rate and comprehension level. Although these courses typically emphasize works of fiction, they may also include works of nonfiction (including textbooks). Strategic Reading courses often have a time-management focus, offering strategies for note-taking or for understanding and evaluating the import points of a text.



FAMILY & CONSUMER SCIENCE



Housing and Interior Design (9-12)

1 credit

Prerequisite: None

Study will include exploration of the design profession: the history, industry and related career areas. Emphasis in the course includes: fundamentals of housing styles, furniture styles, wall finishes, flooring and window treatments. Design principles and elements are also considerations for creating the designs of exterior and interior space and enabling students to communicate with homeowners, contractors, or decorators to achieve the desired plan. Students will learn to understand, select and through analysis, explain the integrity of good design. Projects will carry students through rooms of a home, using creativity and an understanding of the customer to coordinate structure, floors, wall coverings, window treatments and accessories.

Introduction to Food and Nutrition (9-12)

1 credit

Prerequisite: None

The first semester course in the Commercial Food sequence provides a student with knowledge and hands-on experience in the following area of food production: kitchen safety/sanitation, use and care of equipment, standard recipe use, nutrition, preparation, and evaluation of foods. Students will spend approximately 2-3 days per week in the foods lab and 2-3 days studying principles of preparation.

Pro Start One (10-12)

2 credits

Prerequisite: Introduction to Food and Nutrition

The ProStart Program is a career and technical education program that combines the food service industry and the classroom setting, teaching culinary skills and restaurant management principles for the advanced student. Class time is spent focusing on the employability skills, communication, teamwork, professionalism and time management, in addition to food preparation. Topics like marketing, food cost controls and cost accounting are also covered. Whether a student plans to go on to college or head straight for a career, the business skills that the ProStart program develops will benefit them in the restaurant and hospitality industry. National ProStart certificates of achievements and examinations given at the end of the year. This certificate tells both future employers and college admission officers of young person's commitment to a restaurant and food service career and often is translated into scholarships and articulation agreements.

Pro Start Two (11-12)

2 credits

Prerequisite: Pro Start 1

ProStart II continues to develop the restaurant and foodservice concepts established in ProStart I. Students will further develop knowledge and skills for the restaurant industry and focus on catering opportunities. In addition, students will explore the history of the foodservice and lodging industry as well as the tourism and retail industry. Students will have hands-on preparation of potatoes and grain products, desserts and baked goods, meat, poultry, seafood, stocks, soups, and sauces. Students will continue to develop techniques to demonstrate the art of food preparation, teamwork and customer service while exploring marketing and the menu options.

Human Growth and Development (9-12)

1 credit

This course is a study of human development through the lifespan; including physiological, social, emotional, cognitive, language and cultural influences. This course explores typical and atypical growth and development of human beings from conception through adulthood, with an emphasis on birth through adolescence. This course introduces students to responsible nurturing and basic applications of child development theory. Emphasis is on responsibilities of parents, readiness for parenting, and the influence parents have on children while providing care and guidance. Skills in planning, communication, resource management, and problem solving are reinforced.

Internship (11-12)

1 credit

Prerequisite: Pro Start 2

Students will be placed at training sites in the area such as the Marriott, Hy-Vee, Panera Bread and Saydel Food Service to gain experience in the food service industry. Students will also complete requirements for articulation with DMACC in the Culinary Arts and Hotel and Restaurant areas. Students must have instructor approval before registering for this class.

Post-Secondary Career Academy (11-12)

Each of these academies is offered on DMACC's Ankeny campus, unless otherwise noted. These classes provide area high school students with excellent educational opportunities. The guidance counselor handles registration in these courses. Specific courses may be subject to change.

- **Culinary Arts**: Students are introduced to the scientific principles used in food preparation, the hospitality industry, and fundamentals of dining and sanitation.



Introduction to Health (9-12)

1 credit

Prerequisite: None

Intro to health is designed to help students understand basic concepts of living a healthy lifestyle. Units and concepts that will be covered include: nutrition, physical fitness, eating disorders, emotional and social health, STDs, pregnancy, drugs and alcohol, stress, CPR and first aid. Students will be required to learn basic first aid and CPR techniques, but will not become certified.

Healthy Lifestyle Management (11-12)

1 credit

Prerequisite: Introduction to Health

To promote healthy life-long decisions regarding a student's health and well-being by providing the student with accurate information through creative learning strategies and 21st Century health literacy skills to help with complex decisions he or she has to make.



PHYSICAL EDUCATION



Individual and Personal Fitness:

.25 credit

Prerequisite: None

Individual and Personal Fitness provides each student with the base knowledge required to maintain a healthy fitness level throughout his/her lifetime. Students will track their workouts with an emphasis on improving their overall health. This course will provide students the opportunity to work out using noncompetitive activities and incorporate technology to improve health.

Team Games/Fitness:

.25 credit

Prerequisite: None

Team Games/Fitness provides each student with the knowledge base required to maintain fitness through sports and activities. Students will be given opportunities to improve their overall health and fitness levels through the games and activities provided. Use of heart rate monitors is required, and an emphasis will be placed on learning and enhancing technique and skills in selected activities.

Weightlifting

.25 credit

Prerequisite: None

Weight training provides each student with the base knowledge required for maintaining strength training throughout his/her lifetime. This class is for students who are motivated to improve their strength and self-confidence. Activities focus on building muscular strength and overall fitness.

The Healthy Kids Act of Iowa requires that all students in grades 9-12 need to engage in physical activity for a minimum of 120 minutes per week. To monitor these minutes, each student must sign a contract that simply states what activities they do on their own outside of class. This will be done each semester.

Students must wear clothing that is suitable for physical activity. This includes a change of shoes that are non-marking and rubber soled and shorts or sweatpants, and a t-shirt or sweatshirt.

Athletic Enhancement (9-12)

1 credit/year

This course will be utilized to assist athletes enhance their ability using a training format that reflects those ran after school during practice time. The benefit to this course will allow the athlete to maximize training and practice time.



INDUSTRIAL TECHNOLOGY



Power Technology (9-12)

1 credit

Prerequisite: None

This course will provide an opportunity to learn about power technology. Students will explore safety, measurements, basic machines, mechanical systems (small engines), and fluid power systems. Students will work in the lab on projects involving the disassembly and reassembly of small engines. Students will also be able to work on an individual project of their choosing, such as a lawn mower, weed eater, or snow blower as time permits.

Introduction to Skilled Trades: (9-12)

1 credit/semester

Prerequisite: None

Introduction to Industrial Trades is a required course for all other cabinetmaking and construction classes. This course is strictly for first year woodworking students. It exposes students to the tools and machines that they may encounter in vocational trade occupations and enable them to develop the skills they need to use these tools in various applications. Students will be expected to demonstrate a working knowledge of skills learned throughout the course by completing a selected project that covers the techniques developed through the semester. Course topics include, but are not limited to, drawing and planning, woodwork, finish and hardware processes and basic metal work. Concepts from this course will not only be beneficial for future cabinetmaking classes, but also for industrial technology field. Certain elements of applied mathematics will be exercised along with emphasizing in general safety and career exploration education. These skills will prepare students for classes that will branch off into a variety of industrial trades courses.

Metals (9-12)

1 credit/semester

Prerequisite: Introduction to Skilled Trades

This is a course designed to develop the student's awareness of industrial welding processes as well as fabrication concepts. Students deciding to enter the field of welding and metal fabrication will be introduced to the basics of safety and sanitation, as well as equipment identification and use. Students learn about the variety of careers available in the welding and metal fabrication, hand tools and shop equipment industry. Different modes and techniques of welding and joint concepts used in the fabrication processes are demonstrated then exercised by practicing on various materials. The welding and cutting process of Arc (SMAW "Stick Welding" and Oxy-Acetylene will be taught as a major part of the class. Students will be introduced to each process throughout the semester. Technology related mathematics, reading, writing, vocabulary,

blueprint reading and science are integrated throughout the curriculum to prepare students for the next course.

Cabinetry: (10-12)

2 credits/year

Prerequisite: Introduction to Skilled Trades

Cabinetry is the first of two courses available through the industrial technology program. The students will build on the knowledge presented to them in Introduction to Skilled Trades. This course will enable them to develop the skills they need to use in numerous applications such as planning and design, carpentry, finish work and other applied technology fields. The course will once again allow the students to utilize certain elements of applied mathematics as well as technology experiences. Skills expected to be demonstrated are planning and design, finish and hardware processes and woodworking fabrication at a more advanced level.

Advanced Cabinetry: (11-12)

2 credits/year

Prerequisite: Introduction to Skilled Trades

This course will expose students to the tools and machines learned in the previous Industrial Tech courses detailing advanced concepts in woodworking and other trade industries including commercial millwork, custom cabinetry, equipment set up, and joinery techniques. Students will continue to exercise applied mathematics and technology along with demonstration of advanced skillset. *Any semester dropped classes will require teacher signature and reimbursement of any workshop fees.*

Introduction to Construction: (10-12)

2 credits/year

Prerequisite: Introduction to Skilled Trades

Students enrolled in this course will study the proper care and operation of various hand and power tools. The skills acquired are used daily in construction and basic carpentry practices that will be a major part of the course. Framing, interior and exterior finish, residential electrical, plumbing, door and window installation, roofing, interpretation of building blueprints and specifications will be applied to complete various construction projects. Students will demonstrate a basic knowledge of these skills along with utility concepts such as plumbing and electrical code standards.

Mechanical & 3D Drafting (10-12)

1 credit/semester

Prerequisite: Introduction to Skilled Trades

In this course the students will learn to solve architectural problems by reading rulers, scales and drawings derived from 3D models. Students will construct a floor plan and front elevation on the board following all drafting standards, be introduced to Computer-Aided Drafting, Autodesk Software Inventor and Fusion 360.

Architectural Drafting (11-12)

1 credit/semester

Prerequisite: Introduction to Skilled Trades & Mechanical & 3D Drafting

Students will learn the concepts of computer drawings to solve architectural problems in drawings, develop home construction layers, floor plans and interior/ exterior 3D renderings. Along with CAD learned in prerequisite, students will also learn Revit and AutoCAD Architecture.

Energy, Power & Transportation (10-12)

1 credit/semester

Prerequisite: Intro to Skilled Trades and Mechanical & 3D Drafting

Students will gain knowledge of many new technologies. This class is mostly partner-based with a focus on problem solving. Some major projects include CO2 car races, mouse trap pullers, solar hotdog cookers, and various projects including renewable energy. Class for students interested in careers in automotive, renewable energy, or any other areas relating to energy, power, and transportation. Students will also become familiar with the components and operating principles of the small engine. Topics covered include the similarities and differences in 2-stroke and 4-stroke engines. Basic servicing, tune-up and complete engine overhaul will be completed as well as engine part identification and definitions of terms related to small engines.

Pre-apprenticeship (12)

2 credits

Prerequisites: Skilled Trades 1, Skilled Trades 2, Electricity, and Plumbing

Students will begin work toward their apprenticeship programs in a chosen career. The first portion of the class will go more in depth in the skills covered in Skilled Trades 1 and 2. This content will match the skills and understanding addressed in the core curriculum portion of the apprenticeship program. Throughout the 1st semester, this course will focus on developing skills and understanding both in and out of the classroom. During the 2nd semester, students will be working in the field with an employer sponsor. Upon completion of the class, it is intended that students will have 1/2 year of their 4-year apprenticeship completed.

Post-Secondary Career Academy (11-12)

Each of these academies is offered on DMAACC's Ankeny Campus, unless otherwise noted. These classes provide area high school students with excellent educational opportunities. The guidance counselor handles registration in these courses. Specific courses may be subject to change.

- **Auto Collision**: This program introduces students to the highly technological industry of Auto Collision and Repair. Students will gain experience in the areas of basic shop operations and procedures, welding, painting, and shop safety.
- **Automotive Technology**: This program is designed to prepare students for employment in the automotive service industry. This technological program allows students to gain experience with shop tools, automotive engines, brakes, suspension, and alignment.
- **Diesel Technology**: This program prepares students for a career in the area of diesel repair. Instruction is in the repair, maintenance, and testing of diesel engines, power trains, and components of trucks and construction equipment.



MATHEMATICS



Essentials of Algebra 1 (9)

2 credits

Prerequisites: Ability to perform the fundamental operations with whole numbers, fractions, and decimals.

This course is the first year of a three-year series; Essentials of Algebra 1, Essentials of Algebra 1.5, and Essentials of Algebra 2. It involves solving equations, using proportional reasoning, probability, mastering linear functions, using properties of exponents, and simplifying and factoring polynomials.

Algebra 1 (9-12)

2 credits

Prerequisite: Ability to perform the fundamental operations with whole numbers, fractions, and decimals.

This course involves solving equations and inequalities, using properties of exponents, simplifying and factoring polynomials, and data analysis and statistics using tables and graphs.

Essentials of Algebra 1.5 (9-10)

2 credits

Prerequisite: Essentials of Algebra 1

This course is the second year of a three-year series; Essentials of Algebra 1, Essentials of Algebra 1.5, and Essentials of Algebra 2. It involves solving equations and inequalities, solving systems of equations, simplifying radical and rational expressions, linear relations and functions, and matrices.

Geometry (9-12)

2 credits

Prerequisite: Algebra 1

Deductive and inductive reasoning are emphasized. Among the units to be studied are: types of logic, elements of constructions, coordinate systems, congruent triangles, parallel lines, similar figures, right triangle trig, circles, areas and volumes of geometric figures, and transformations.

Algebra 2 (9-12)

2 credits

Prerequisite: Algebra 1

This course is an extension of Algebra I. Covered areas will include equations, inequalities, quadratic, polynomial, rational, and logarithmic functions, radicals, and continued work with statistics and data analysis and trigonometric functions.

Precalculus with Trigonometry (11-12)

2 credits

Prerequisite: Algebra 2

This course continues the study of linear, quadratic, and polynomial equations begun in Algebra 2. We will also extensively cover trigonometry, including study of the unit circle, Law of Sines and Law of Cosines, trigonometric identities and equations, matrices, set theory, compositions, and we will finish with an introduction to Calculus.

AP Calculus (11-12)

2 credits

Prerequisite: Precalculus with Trigonometry

Calculus is equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. The course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.

Probability & Statistics (11-12)

1 credit

Prerequisite: Geometry, Algebra II

This semester course focuses on deepening students' understanding of statistical concepts, probability and data analysis. Students will learn about different types of visual data, different data gathering techniques, standard deviation, and many different types of probability. This will be done with a variety of different real-world data sets and activities built around interpreting them.

Consumer Math (11-12)

1 credit

Prerequisite: Algebra I and Geometry

This course will provide students the opportunity to explore topics that focus on their role as consumers. Topics covered: money management, finances, consumer information, probability, and investments.

Technical Math (10-12)

1 credit

Prerequisite: Algebra I

Technical Mathematics is a semester course that will focus on application problems in career areas. The application problems will focus on whole numbers, fractions, decimals, ratios, proportions, percentages, exponents, roots, measurements, tables, charts, graphs, formulas, equations, geometrical figures, and statistics.



Band (9-12)

2 credits

Prerequisite: None

The Saydel Instrumental Music Program offers a wide variety of musical activities including concert, marching, jazz, and pep band. Other opportunities for honor bands, color guard, marching drumline, and various small instrumental ensembles are available to students enrolled in the instrumental music program. This course does require participation in all concert and marching band activities, many of which are scheduled outside the school day. Students enrolling in this course will be expected to be enrolled in both fall and spring semesters. Due to the interdependent nature of the course, students will not be allowed to drop the course at the semester.

Concert Choir (9-12)

2 credits

Prerequisite: None

The Saydel Vocal Music Program offers a wide variety of musical activities including concert choir, conference choir, college honor choirs, National Anthem singers, and various small ensembles. This course deals with effective tone production, breath support, diction, musical interpretation, and music reading using Solfege. Students will be exposed to a wide variety of music literature and musical styles. This course does require participation in all concert activities, which are scheduled outside of the school day. Students enrolling in this course will be expected to be enrolled in both fall and spring semesters. Due to the interdependent nature of the course, students will not be allowed to drop the course at the semester.

Vocal Fusion Choir (10-12)

1 credit

Prerequisite: Concert Choir. All students are accepted into this course by audition in the spring. Transfer/new students may enroll after an audition.

This choral ensemble will perform high-level music and be actively involved in the All-State process. Though not required, the expectation is that all members will attend a 3-day All-State music camp in early August. Half of the registration costs have historically been given as a scholarship from the Saydel Music Boosters.

Group size will be limited to 16-24 members. This course will continue to enhance effective tone production, breath support and diction as well as basic to advanced musical interpretation. Students will be exposed to a wide variety of music literature and musical styles.

This course does require participation in all concert activities, many of which are scheduled outside the school day.

Music Theory (11-12)

1 credit

Prerequisite: Participation in Choir/Band

This is a college level course covering basic skills required in the first year as a music major. The course requires the student to excel in learning new content, ear training, and sight singing.

Introduction to Finale (11-12)

1 credit

Prerequisite: Participation in Choir/Band

Intro to Finale is a course designed to introduce students to computer-aided music notation using Finale as the primary software. Students must be able to work independently and have a strong understanding of music theory.

Music Technology

1 credit

Prerequisite: None

Students learn how to write and play drum grooves, bass lines, chordal parts, and melodies using technological tools instead of traditional musical instruments. By the end of the course, students will be able to write a piece of music using their Chromebooks that could be heard on the radio, and explore numerous technological tools used in the production of electron music. Students do not have to be a member of band or choir to be in this course!



Physical Science (9)

2 credits

Prerequisite: None

This is a one year required course that explores physical and earth sciences through inquiry, experimentation, and other scientific processes. Major themes include: atomic matter and its interactions (introductory Chemistry); forces, energy, and waves (introductory Physics); and Earth's systems (introductory Earth Science).

Biology (10)

2 credits

Prerequisite: None

This is a one year required course that explores the life sciences through inquiry, experimentation, and other scientific processes. Major themes include cells and genetics, the history of life on earth, and ecology.

Astronomy (10-12)

1 credit

Prerequisite: None

This is a one semester elective course that explores space through inquiry, experimentation, and other scientific processes. Major themes include the solar system and what it contains, stars, and space exploration.

Environmental Science (11-12)

1 credit

Prerequisite: Biology

Environmental Science is the study of interrelationships between human activities and the environment. Environmental Science is an unusual academic discipline in that it requires scientific knowledge about the natural world, as well as an understanding about ways in which humans interact with the natural world. We examine the effects of human actions on the environment, and the means by which policies, regulations, and decisions influence human actions. We also examine human behavioral, cultural, and sociological interactions that affect the environment.

Principles of Biomedical Science (9-12)

2 credits

Prerequisite: None

In this course, students explore concepts of biology and medicine as they take on roles of different medical professionals to solve real-world problems. Over the course of the year,

students are challenged in various scenarios including investigating a crime scene to solve a mystery, diagnosing and proposing treatment to patients in a family medical practice, to tracking down and containing a medical outbreak at a local hospital, stabilizing a patient during an emergency, and collaborating with others to design solutions to local and global medical problems.

Human Body Systems (10-12)

2 credits

Prerequisite: Preferably Principles of Biomedical Science, but not required.

In Human Body Systems, students will engage in the study of processes, structures, and interactions of the human body. Concepts covered include; communication, transport of different substances, metabolic processes, defense, and protection, and identity. The overall goal of this class is to get students to know how body systems work to maintain homeostasis and stay healthy. The systems are studied as different parts, studying how they work together to keep the body working properly. Students will design experiments, investigate the structures and functions of the body systems, use data software to monitor body functions such as muscle movement, reflexes and voluntary actions, and respiration. Students will be working through real-world cases and play the roles of professionals to solve these mysteries.

Physics (11-12)

2 credits

Prerequisite: Physical Science, Geometry

Pre or Corequisite: Algebra II

This is a one-year elective course (that is strongly recommended if going to college) that explores the physical sciences through inquiry, experimentation, and other scientific processes. Major themes include forces, energy, and waves.

Chemistry (11-12)

2 credits

Prerequisite: Physical Science & Biology

Pre or Corequisite: Algebra 2

This is a one-year course open to juniors and seniors. Students will study the fundamental theories and principles of chemistry. It will focus on the major themes of the periodic table, chemical bonding, chemical reactions, and the mole. Laboratory participation is an important and required component of the class.

AP Biology (11-12)

2 **weighted** credits

Prerequisite: Chemistry

Offered only in odd numbered academic years (example: 2021-2022), AP Biology is a college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes (energy and communication), genetics, information transfer, ecology, and interactions. Students will be encouraged to take the AP Exam during the spring semester in order to receive college credit.

AP Chemistry (11-12)

2 **weighted** credits

Prerequisite: Chemistry and Algebra II

Offered only in even numbered academic years (example: 2020-2021), AP Chemistry is a college-level chemistry course. Students will learn about concepts including intermolecular forces, properties, thermodynamics, acids and bases, and equilibrium. Students will do hands-on lab investigations and calculations to solve problems while practicing fundamental science skills. Students will take the AP exam during the spring to earn college credit.

Scientific Research and Design (9-12)

1 credit

Prerequisite: Physical Science (or equivalent) and Biology

The intention of this course is to offer an independent study of science. The students will be performing authentic research, supporting the ideas of scientific inquiry and engineering practices.

Post-Secondary Career Academy (11-12)

Each of these academies is offered on DMACC's Ankeny Campus, unless otherwise noted. These classes provide area high school students with excellent educational opportunities. The guidance counselor handles registration in these courses. Specific courses may be subject to change.

- **Health Occupations**: This year-long program provides students the opportunity to explore careers in health care and work toward CNA training.

***If you are interested in an alternative track, a contract is available and requires approval.**



SOCIAL STUDIES



World Cultures (9-12)

1 credit

Prerequisite: None

This course is an analysis of the existing and emerging geographic patterns in the world. The course emphasizes the interrelationships of each particular culture with the environment, resources, and social systems. Students will consider how cultures work, how they adapt, and change through time and how they are expressed.

Sociology (9-12)

1 credit

Prerequisite: None

This is an introductory course open to all students. Students will examine behavioral patterns of human beings from different sociological perspectives. Topics include: culture, roles and status, deviance and social problems. This is a discussion-oriented class requiring student participation.

Psychology (9-12)

1 credit

Prerequisite: None

This is an introductory course open to all students. Students will examine human behavior through psychological theories and perspectives. Topics include: history and approaches to psychology, research methods, abnormal psychology, and the workings of the mind and body.

U.S. History (9)

2 credits

Prerequisite: None

This course is a survey of our nation's history. The course examines the major turning points in American history chronologically, beginning with events leading up to the Civil War.

World History (10)

2 credits

Prerequisite: U.S. History

This course provides an overview of the history of the world from the year 1500 to the present. The course will consist of learning the multiple causes and effects of historical events through the process of inquiry. Students will gain an understanding of how history has created the world that we live in today.

U. S. Government (11-12)

1 credit

Prerequisite: U.S. History, World History

This required course for all 11th grade students covers the history and organization of the United States government. Students will examine the United States Constitution, including the branches of government and Bill of Rights. Students will study the organization of the legislative branch, the powers of the executive branch, and the function of the judicial branch. Students will also review the powers of the local and state government.

AP U.S. History (10-12)

2 **weighted** credits

Prerequisite: World History

AP U.S. History is designed to be the equivalent of a two-semester introductory college or university U.S. History course. In AP U.S. History, students investigate significant events, individuals, developments, and processes in nine historical periods from approximately 1491 to the present. Students will take the AP exam during the spring semester to earn college credit.

AP U.S. Government and Politics (11-12)

2 **weighted** credits

Prerequisite: U.S. History, World History

AP United States Government and Politics introduces students to key political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the United States. The course examines politically significant concepts and themes, through which students learn to apply disciplinary reasoning, assess the causes and consequences of political events, and interpret data to develop evidence-based arguments. Students will take the AP exam during the spring semester to earn college credit.

Contemporary Affairs (12)

1 credit

Prerequisite: U.S. History, World History

Students will examine multiple financial literacy topics including budgeting, credit, debt, insurance, investing and taxes. Students will be equipped with practical financial skills to use after graduation.



WORLD LANGUAGE



Spanish 1 (9-12)

2 credits

Prerequisite: None

Spanish 1 will teach the basic skills necessary for future modern language study. Students will be assessed according to the world language proficiency scale as they learn to read, write, speak, and listen in the target language. Students will be expected to perform at a novice-mid level by the end of the year.

Spanish 2 (10-12)

2 credits

Prerequisite: Spanish 1 or approval of instructor. Novice-mid proficiency is recommended.

Spanish 2 is a course that will build upon the basic skills learned in Spanish 1. Students will continue being assessed using the world language proficiency scale in the areas of reading, writing, speaking, and listening. Students will be expected to perform at an intermediate-low level by the end of the year.

Spanish 3 (11-12)

2 credits

Prerequisite: Spanish 2 or approval of instructor. Novice-high proficiency is recommended.

Spanish 3 is a pre-AP course, which will help prepare students to more fully develop their proficiency in Spanish. This course is designed to provide students with opportunities to work toward an intermediate-low/-mid level of proficiency in reading and listening, as well as expand their production in speaking and writing skills. Students will continue being assessed using the world language proficiency scale.

To be added during the 2024-2025 School Year.

Spanish 4 (11-12)

2 **weighted** credits/year

Prerequisite: Spanish 3 or with approval of the instructor

The-Spanish 4 Language Course is a six-unit course designed to improve student proficiency to the Intermediate to Pre-Advanced range across the three modes of communication. The course will use the Foreign Language Standards as put forth by ACTFL. The AP Spanish Language Course is designed to inspire critical thinking as students deepen their understanding of the target cultures, incorporate interdisciplinary topics (connections), make comparisons between the native language and the target language and among cultures, and use the target language (communication) in real-life settings (communities). Particular emphasis will be placed upon:

- Increasing comprehension of conversations, oral presentations, authentic written materials, lectures, internet resources and stories.
- Improving verbal expression through discussion, debate, inquiry and verbal descriptions
- Customizing self-expression through a variety of writing styles, a variety of writing levels, and for a variety of audience levels.

Heritage Spanish 1

1 credit

Prerequisite: Spanish language exposure outside of school.

Heritage Spanish 1 is a course designed to meet the needs of students with exposure to the Spanish language in their homes and communities. This course will allow students to develop language skills in ways different from students who are learning Spanish as a new language. Students will focus on the culture of Spanish speaking countries in order to build cultural competency. Students will speak, read, listen and write in Spanish at an advanced level.

Heritage Spanish 2

1 credit

Prerequisite: Heritage Spanish 1

Heritage Spanish 2 is a course designed to meet the needs of students with exposure to the Spanish language in their homes and communities. This course will allow students to continue to develop language skills in ways different from students who are learning Spanish as a new language. Students will focus on global themes that will provide opportunities to make comparisons and connections on topics including environmental issues, effects technology and science have on one's self and society, personal and public identities, global challenges, family and community, beauty and aesthetics, and contemporary life. Students will speak, read, listen and write in Spanish at an advanced level. By the end of the course students in Heritage Spanish 2 should be able to communicate at the Advanced Level per the ACTFL Proficiency Guidelines.



ADDITIONAL COURSE OFFERINGS



iJAG (Iowa Jobs for America's Graduates) (9-10)

2 credits

Prerequisite: None

Iowa Jobs for America's Graduates, or iJAG, is an interactive, hands-on, project-based class intended to help students develop a desire to graduate, explore career paths, and develop skills that will allow them to pursue their dreams. This full-year class combines in-class activities, work-based learning, guest speakers, field trips, community projects, and more to help students develop the tools necessary to succeed. Students will develop a healthy understanding and appreciation of the work they are doing in school as they understand how it applies to their lives and dreams after they graduate. iJAG is not just a class, but rather a program that will support participating students with academic help, career support, life skill development, and personal growth for their entire high school career.

iJAG (Iowa Jobs for America's Graduates) (11-12)

2 credits

Prerequisite: None

iJAG (Iowa Jobs for America's Graduates) is a career exploration and preparation program that provides a hands-on approach in exploring personal strengths and challenges, as well as job attainment skills (cover letter, resume, job application, interviewing, etc.) and workplace survival skills (interpersonal relations, team work, etc.). Students will work to build strengths in academic areas, time management, and communication. The individual and team project work will also help students come to an understanding of personality and temperament and the relationship between personal actions and consequences that follow. Students will make connections to their career interests, abilities, and aptitudes by determining their education and career goals through development of an Individual Career Development Plan. This full-year, credited course involves individual assignments, team activities/projects, academic remediation support, service-learning opportunities, guest speakers, field trips, state iJAG events and career exploration through job shadowing and/or an internship. Students will also participate in the iJAG Career Association in various activities focused on career and leadership development, service learning, and civic/social awareness.

EXTENDED LEARNING PROGRAM

Academic Decathlon (9-12)

Class can be taken more than once

1 credit/semester

Prerequisite: None

Each year, the Academic Decathlon selects a new theme for teams all over the country to explore. The theme shapes an entire course of studies-and brings it all together. The more years students participate in Academic Decathlon, the more themes they will master. The Academic Decathlon curriculum team develops themes with special attention to **national content standards**.

Life Beyond High School: College Edition (11-12)

1 credit/semester

Prerequisite: None

Are you planning to go to college but aren't sure where to start? This class is for you. This course allows 11th and 12th grade students to explore individual strengths and strategies for solidifying personal responsibility, develop college readiness/academic success strategies, and identify career readiness/vocational goals as they identify a college program or major.

Advanced Placement (AP) Classes

Students at SHS have the opportunity to take online AP classes through the Iowa AP Academy administered by the Belin-Blank Center at the University of Iowa. All course fees will be paid by the State of Iowa, however, if students fail an AP course or withdraw after 14 days of inactivity, they will be assessed a fee of \$350. Students can earn SHS credit and may receive college credit upon successful completion of the AP College Board Exam. To enroll, a student must complete all pre-requisite requirements, demonstrate above average reading comprehension on standardized tests, meet with an online mentor at SHS, and complete an interview. Parents will also be contacted.

Students who are successful with online classes are students who are prepared to meet the demands of academically challenging and rigorous coursework. Successful students will not give up easily when faced with difficult work and have the time to commit 12-15 hours/week per course. These websites are available for more information and course offerings:

www.iowaapacademy.org

Courses Offered

- One Semester Courses:
 - AP Psychology
 - AP Macroeconomics
 - AP Microeconomics
- Year-Long Courses:
 - AP Statistics

Please see the ELP teacher if interested.

Central Campus Options

Saydel High School and the Des Moines School District have entered into an agreement to allow Saydel students to attend classes at Des Moines Central Campus. Most of the courses are vocational/technical. Some foreign languages and a few accelerated courses are also available. Students may only take courses that are not offered at the High School. Students who apply and are accepted for these courses attend Central Campus for three periods. Information is available in the Guidance Office.

College Courses & Shared Programs While in High School

The Post-Secondary Enrollment Options Act was enacted in 1987 to promote rigorous academic pursuits and to provide a wider variety of options to high school students (Chapter 261C, Iowa Code).

Students who are in the 11th or 12th grade are eligible to participate. 9th or 10th grade students who have been identified as talented and gifted are eligible to participate also. Students must be proficient in reading, math, and science. The school district may pay up to \$250 of the cost of a course taken. However, students may be required to purchase equipment or supplies that become the property of the student. The school district does not pay for the costs of summer school classes. However, summer school classes are eligible for credit.

DMACC Career Academy Offerings

- Auto Collision
- Automotive Technology
- Business
- Computer-Aided Design Technology
- Computer Programming
- Criminal Justice
- Culinary Arts
- Cyber Security
- Diesel Technology
- Emergency Medical Technician
- Fashion
- Health Occupations
- Machine Operations/Tool & Die
- Visual Communications (Graphic Design/Web)

DRIVER'S EDUCATION

Driver's Education

6-8-week course

Prerequisite: Driver's Permit

Saydel partners with Street Smarts to provide driver's education. Please follow this link for more information <https://streetsmartsdriversed.com/>

LAB ASSISTANT (9-12)

Students may receive a maximum of 1 credit in four years, or a maximum of 1/4 credit per year (.25) for assisting in the counseling area, library, office, or classroom. Student lab assistants must have a cumulative G.P.A. of 2.00 or above and have teacher's consent. A student may be a lab assistant for one of his/her six classes. A student who becomes a lab assistant must be in his/her assigned area every day during the assigned class period to have it count as a class and to receive credit.