



# Saydel High School

5601 NE 7<sup>th</sup> Street

Des Moines, IA 50313

## Registration Guide

2018-2019

[www.saydel.k12.ia.us](http://www.saydel.k12.ia.us)

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## INTRODUCTION

This guide has been prepared to aid you in planning your high school program. The time has come in your life when you must start thinking seriously about your future. The principals, the counselor, your teacher advisor, and your parents will assist you in gaining information, but you are the one who must make the decisions.

At Saydel, a broad program of courses is offered which is designed to meet the needs of students whether they plan to attend college, vocational school or to enter the work world. With proper planning and guidance, you will design a program that will give you the background you need for the path you choose.

### **NCAA ELIGIBILITY REQUIREMENTS**

All students planning to enroll in college as a freshman and wanting to participate in Division I or Division II athletics must be certified by the NCAA Eligibility Center (formerly called the NCAA Clearinghouse). The Eligibility Center was established to ensure consistent application of NCAA initial-eligibility requirements for all prospective student athletes at all member institutions. It is the responsibility of the prospective student athlete to make sure the Eligibility Center has the documents it needs to certify his/her eligibility. New requirements for 2018 graduates are outlined at [www.2point3.org](http://www.2point3.org)

#### **16 Core Courses:**

- 4 years of English
- 3 years of mathematics (Algebra I or higher)
- 2 years of natural/physical science (1 year of lab if offered by high school)
- 1 year of additional English, mathematics or natural/physical science.
- 2 years of social science
- 4 years of additional courses (from any area above or foreign language, comparative religion/philosophy)

To be classified as a qualifier under Division I, you will need to:

- Graduate from high school
- Complete 16 Core Courses, including 10 before your seventh semester
- Seven of the 10 core courses must be in English, math, or science
- Have a minimum GPA of 2.3 in core courses to complete in your first year of college
- Have a combined score on the SAT or ACT score that matches your core-course GPA on the sliding scale found at [www.2point3.org](http://www.2point3.org)

### **NAIA ELIGIBILITY REQUIREMENTS**

The NAIA Eligibility Center is responsible for determining the NAIA eligibility of first-time student athletes. Any student playing NAIA sports for the first time must meet the eligibility requirements. Students must have their eligibility determined by the NAIA Eligibility Center, and all NAIA schools are bound by the center's decisions. High school seniors who wish to participate at an NAIA school need to register at [www.playnaia.org](http://www.playnaia.org)

To be eligible for NAIA, you must meet 2 of the 3 requirements:

- Achieve a minimum overall high school GPA of 2.0 on a 4.0 scale
- Graduate in the top half of your high school class
- ACT score of 18 or higher or SAT score of 940 or higher.

## Preparing for Academic Success at Iowa's Regents Universities

	<b>Minimum Requirements for Admission</b>			<b>Optimum Recommendations for Success</b>
	<b>Iowa State University</b>	<b>The University of Iowa</b>	<b>University of Northern Iowa</b>	
<b>Foreign Language</b>	<p>2 years of a single foreign language for admission to the College of Liberal Arts and Sciences and the College of Engineering.</p> <p>Foreign language courses are not required for admission to the Colleges of Agriculture, Business, Design, or Human Sciences.</p>	<p>2 years of a single foreign language are required for admission. For many degrees, the fourth year of proficiency is required for graduation.</p> <p>Nursing - 4 years in a single language or two years each in two different languages.</p>	<p>Foreign language courses are not required for admission. However, two years of a foreign language in high school with a C- or above in the last course will meet the university graduation requirement.</p>	<p>Four Years of a single foreign language. By taking foreign language during all four years of high school you will go beyond the basic skills and begin to use the language and reinforce you fluency.</p>
<b>English</b>	<p>4 years of English/Language Arts emphasizing writing, speaking, reading, as well as an understanding and appreciation of literature.</p>	<p>4 years, with an emphasis on the analysis and interpretation of literature, composition, and speech.</p>	<p>4 years, including one year of composition; may also include one year of speech, communication, or journalism</p>	<p>Four 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 such as journalism and media literacy will be valuable. Extracurricular activities such as debate, speech contest, newspaper, and yearbook will further develop essential competencies.</p>
<b>Math</b>	<p>3 years, including one year each of algebra, geometry, and advanced algebra.</p>	<p>3 years, including two years of algebra and one year of geometry, for admission to the College of Liberal Arts and Sciences.</p> <p>4 years, including two years of algebra, one year each of geometry higher math (trigonometry, analysis, or calculus), for admission to the College of Engineering.</p>	<p>3 years, including the equivalent of algebra, geometry, and algebra II.</p>	<p>Four Years, 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.</p>
<b>Natural Science</b>	<p>3 years, including one year each from any two of the following: biology, chemistry, or physics.</p>	<p>3 years, including courses in physical science, biology, chemistry, environmental science and physics for admission to the College of Liberal Arts and Sciences.</p> <p>3 years, with at least one year each in chemistry and physics, for admission to the College of Engineering.</p> <p>Nursing - 3 years including one year each of biology, chemistry and physics.</p>	<p>3 years, including courses in general science, biology, chemistry, earth science, or physics; laboratory experience is highly recommended.</p>	<p>Four Years, one in each year of high school. To be really well prepared for college, 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.</p>
<b>Social Studies</b>	<p>2 years for admission to the Colleges of Agriculture and Life Sciences, Business, Design, Human Sciences, and Engineering.</p> <p>3 years for admission to the College of Liberal Arts and Sciences</p>	<p>3 years, with U.S. history and world history recommended for admission to the College of Liberal Arts and Sciences.</p> <p>2 years, with U.S. history and world history recommended for admission to the College of Engineering.</p>	<p>3 years, including courses in anthropology, economics, geography, government, history, psychology, or sociology.</p>	<p>3 years is essential, but four is better. Take at least one year each of US and world history.</p> <p>Additional courses in anthropology, economics, political science, psychology, and sociology provide an important understanding of political, social, and economic institutions.</p>

## COLLEGE REQUIREMENTS

Students interested in attending a particular college should contact the admissions office of the college for specific field of their interest, such as medicine, engineering, nursing, teaching, etc., in which they are interested to enroll. 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 its equivalent to meet entrance requirements.
2. Applicants must take the ACT or SAT college entrance test. The ACT test is required for the Financial Aid Program in the State of Iowa. It is recommended the ACT test be taken during the junior year. It may also be taken in the 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 will be considered in the admission of freshmen that wish to enroll at the Iowa regent universities. These factors will be used to calculate a Regent Admission Index (RAI) for each applicant, based on the following equation:

$$\text{RAI} = (2 \times \text{ACT composite score}) + (1 \times \text{high school rank expressed as a percentile}) + (20 \times \text{high school grade point average}) + (5 \times \text{number of high school courses completed in the core subject areas})$$

Students with an 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.

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

Transfer credits from satisfactory performance in a junior college will be accepted by four-year college institutions.

## **ACADEMIC PLANNING**

### **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;"><b><u>English - 9 credits</u></b></p> <p>English 9 – 2            English 10 – 2            American Lit – 2            English 12 – 2            Communications - 1</p>	<p style="text-align: center;"><b><u>Social Studies–6 credits</u></b></p> <p>U.S. History 9 – 2            World Hist. 10 – 2            Government 11 – 1            Contemporary Affairs 12 – 1</p>
<p style="text-align: center;"><b><u>Math – 6 credits</u></b></p> <p>Algebra 1 – 2            Geometry – 2            Algebra 2 - 2</p>	<p style="text-align: center;"><b><u>Science – 6 credits</u></b></p> <p>Physical Sci 9 – 2            Biology 10 – 2            Sci. Elec. – 2</p>
<p><b><u>Health – 1 credit</u></b></p> <p><b><u>Physical Ed. – 2 credits</u></b></p> <p><b><u>Life &amp; Leadership - 1 Credit</u></b></p> <p><b><u>Electives – 17 credits</u></b></p>	
<p><b>TOTAL CREDITS – 48 CREDITS</b></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, guardian or parent, 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

*Classes in italics and bold are required classes*

*Students must take 6 academic classes plus P.E. to qualify as a full-time student for eligibility.*

### FRESHMAN YEAR

#### **Semester 1**

1. *English 9*
2. *Algebra\*/Math*
3. *Physical Science*
4. *U.S. History*
5. *P.E./Life & Leadership*
6. Elective
7. Elective
8. Elective

#### **Semester 2**

1. *English 9*
2. *Algebra\*/Math*
3. *Physical Science*
4. *U.S. History*
5. *P.E./Life & Leadership*
6. Elective
7. Elective
8. Elective

### SOPHOMORE YEAR

#### **Semester 1**

1. *English 10*
2. *Geometry\*/Math*
3. *Biology*
4. *World History*
5. *P.E.*
6. *Health (1<sup>st</sup> or 2<sup>nd</sup> semester)*
7. Elective
8. Elective

#### **Semester 2**

1. *English 10*
2. *Geometry\*/Math*
3. *Biology*
4. *World History*
5. *P.E.*
6. Elective
7. Elective
8. Elective

### JUNIOR YEAR

#### **Semester 1**

1. *American Literature*
2. *Algebra 2\*/Math*
3. *Science Required*
4. *P.E.*
5. *Government (1<sup>st</sup> or 2<sup>nd</sup> semester)*
6. Elective
7. Elective
8. Elective

#### **Semester 2**

1. *American Literature*
2. *Algebra 2\*/Math*
3. *Science Required*
4. *P.E.*
5. *Communications (1<sup>st</sup> or 2<sup>nd</sup> semester)*
6. Elective
7. Elective
8. Elective

### SENIOR YEAR

#### **Semester 1**

1. *English Required*
2. *Contemporary Affairs (1<sup>st</sup> or 2<sup>nd</sup> semester)*
3. *P.E.*
4. Elective
5. Elective
6. Elective
7. Elective
8. Elective

#### **Semester 2**

1. *English Required*
2. *P.E.*
3. Elective
4. Elective
5. Elective
6. Elective
7. Elective
8. 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 year-long 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
  - o Project Lead the Way – Principles of Engineering
  - o Project Lead the Way – Computer Science
  - o Final three (3) courses leading to the completion of a certification in a completed certification program (certificate must be completed to receive weighted credit)

### *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	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>
<b>Art</b>	Introduction to Art	1 Sem.	X	X	X	X
	3-D Studio Art*	1 Sem.		X	X	X
	Drawing & Painting 1*	1 Sem.		X	X	X
	Drawing & Painting 2*	1 Sem.		X	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	X
<b>Business</b>	Life & Leadership	1 Yr.	X			
	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)	1 Yr.				X
<b>Computer Science</b>	Introduction to Computer Science	1 Sem.	X	X	X	X
	Computer Science Essentials	1 Yr.		X	X	X
	Computer Science Principles	1 Yr.			X	X
<b>Engineering</b>	Introduction to Engineering Design*	1 Yr.	X	X	X	X
	Principles of Engineering*	1 Yr.		X	X	X
<b>English Language Arts</b>	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 Sem.			X	X
	English 12	1 Yr.				X

	Communications	1 Sem.			X	X
	AP Language & Composition (3 DMACC credits)	1 Yr.			X	X
	AP Literature & Composition (3 DMACC credits)	1 Yr.				X
	Heroes, Myths, and Legends*	1 Sem.			X	X
	Choose Your Own Adventure: Reading Exploration	1 Sem.	X	X	X	X
	Publications 1	1 Sem.	X	X	X	X
	Newspaper & Yearbook *	1 Yr.		X	X	X
	Fundamentals of Reading	1 Yr.	X			
	Strategic Reading	1 Yr.		X	X	X
<b>Family/ Consumer Science</b>	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
	Human Growth & Development*	1 Sem.		X	X	X
	Internship*	1 Sem.			X	X
<b>Health/ Physical Education</b>	Introduction to Health	1 Sem.		X	X	X
	Healthy Lifestyle Management*	1 Sem.		X	X	X
	Individual & Personal Fitness	Each Sem. Alt. days	X	X	X	X
	Team Games and Fitness	Each Sem. Alt. days	X	X	X	X
	Weightlifting	Each Sem. Alt. days	X	X	X	X
<b>Industrial Technology</b>	Power Technology	1 Sem.	X	X	X	X
	Electricity	1 Sem.	X	X	X	X
	Skilled Trades 1	1 Sem.	X	X	X	X
	Skilled Trades 2*	1 Sem.	X	X	X	X

	Metals and Welding	1 Sem.	X	X	X	X
	Pre-apprenticeship*	1 Yr.				X
<b>Math</b>	Power Algebra	1 Yr.	X	X	X	X
	Power Math	1 Yr.	X	X	X	X
	Algebra 1	1 Yr.	X	X	X	X
	Geometry*	1 Yr.	X	X	X	X
	Algebra 2 *	1 Yr.	X	X	X	X
	Precalculus with Trigonometry*	1 Yr.			X	X
	Calculus*	1 Sem.			X	X
	Consumer Math*	1 Sem.			X	X
	Technical Math*	1 Sem.			X	X
<b>Music</b>	Band	1 Yr.	X	X	X	X
	Jazz Band	1 Yr./ Alt. days	X	X	X	X
	Concert Choir	1 Yr.	X	X	X	X
	Vocal Fusion	1 Yr./ Alt. days		X	X	X
	Music Theory	1 Sem.			X	X
	Introduction to Finale	1 Sem.			X	X
<b>Science</b>	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
	Scientific Research and Design	1 Sem.	X	X	X	X
<b>Social Studies</b>	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 Government and Politics*	1 Sem.			X	X
	Contemporary Affairs*	1 Sem.				X
<b>World Language</b>	Spanish 1	1 Yr.	X	X	X	X
	Spanish 2*	1 Yr.		X	X	X

	Spanish 3*	1 Yr.			X	X
	AP Spanish*	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**

**English as a Second Language (ESL), 9-12**

**Extended Learning Program (ELP), 9-12**

**Credit Recovery, 9-12**

**Special Education, 9-12**

## ART

### **Introduction to Art** (9-12)

1 credit/semester

*Prerequisite: None*

This is an introductory class that introduces students into the various mediums.

Paradigm thinking and creative problem solving is an integral dimension of this class. Students will study 2-D, 3-D, Mixed Media and Design Concepts.

### **3-D Studio Arts** (10-12)

1 credit/semester

*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** (10-12)

1 credit/semester

*Prerequisite: Introduction to Art*

We begin with an introduction to line followed by value and then into color theory. Students will demonstrate the ability to draw, shade, mix colors, and experiment with various techniques. Reference to artists throughout history and their influence on art will also be included.

### **Drawing & Painting 2** (10-12)

1 credit/semester

*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/semester

3 DMACC credits

*Prerequisite: Introduction to Art*

Students will focus on beginning graphics techniques in the latest professional graphics software (Photoshop). 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/semester

3 DMACC credits

*Prerequisite: Introduction to Art, Graphic Design 1*

Students will focus on beginning graphics techniques in the latest professional graphics software (Illustrator). 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/year

*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.



## **BUSINESS EDUCATION**

### **Life and Leadership (9)**

1 credit/year required

*Prerequisite: None*

This course will be project-based and will include four main focuses: developing academic skills, exploring and planning for college and career, considering personal finance for post-secondary success, and service learning. All units will be taught through the lens of how freshmen can become leaders in their school and community.

### **Principles of Business (9-12)**

1 credit/semester

*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/semester

*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/semester

*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/semester

*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/semester

*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/semester

*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 1** (10-12)

2 credits/year

*Prerequisite: None*

Accounting is a year-long 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**

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

2 DMACC credits

*Prerequisite: 12<sup>th</sup> 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**

3 **weighted** credits/year

3 DMACC credits

*Prerequisite: 12<sup>th</sup> 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. After choosing to enroll in the internship, students will need to complete the appropriate paperwork by February 28 to finish the enrollment process.

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 Administration:** This program provides a foundation of business-related courses to students that will prepare them for entrance in multiple business-related postsecondary opportunities.

## COMPUTER SCIENCE

### Introduction to Computer Science (9-12)

1 credit/semester

*Prerequisite:* None

Designed to be the first computer science course for students who have never programmed before, ICS is great for the beginner and semi-skilled programmer. Students work in teams to create simple apps for mobile devices using MIT App Inventor®. Students explore the impact of computing in society and the application of computing across career paths and build skills and awareness in digital citizenship and cybersecurity. Students model, simulate, and analyze data about themselves and their interests. They also transfer the understanding of programming gained in App Inventor to learn introductory elements of text-based programming in Python® to create strategy games.

### Computer Science Essentials

2 credits/year

*Prerequisite:* Introduction to Computer Science

With emphasis on computational thinking and collaboration, this year-long course provides an excellent entry point for students to begin or continue the PLTW Computer Science experience. Students will be exposed to computational thinking concepts, fundamentals, and tools, allowing them to gain understanding and build confidence.

Students will use visual, block-based programming and seamlessly transition to text-based programming with languages such as Python to create apps and develop websites, and learn how to make computers work together to put their design into practice. They'll apply computational thinking practices and collaborate just as

computing professionals do create products and address problems important to them.

### Computer Science Principles

2 credits/year

*Prerequisite:* Computer Science Essentials  
Students will use Python as a primary tool and incorporate multiple platforms and languages for computation. This course will further computational thinking, generate excitement about career paths and introduce professional tools that foster creativity and collaboration. Computer Science Principles helps students develop programming expertise and explore the workings of the Internet. Projects include app development, visualization of data, cybersecurity and simulation. This course is aligned with AP Computer Science Principles.

## **ENGINEERING**

### **Introduction to Engineering Design (9-12)**

2 **weighted** credits/year

3 DMACC credits

*Pre or Co-requisite: 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 to as a means for solving complex problems. Students should have an interest in science, technology, engineering or math (STEM). Visit [www.pltw.org](http://www.pltw.org) for further information.

### **Principles of Engineering (10-12)**

2 **weighted** credits/year

3 DMACC credits

*Prerequisite: Introduction to Engineering Design*

*Co-requisite Course: Geometry of 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/year

*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/year

*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/year

*Prerequisite: English 9*

In tenth grade, students study literature from around the world. There are four regions we will be focusing on (Russian literature; Asian literature; African and Middle Eastern literature; and Latin American literature). Each unit allows for close study of literary works, as well as consideration of historical and cultural context. The units focus not only on geographical regions, but also on themes and literary forms that pertain to

them. Thus students come to grasp the relationship between local concerns and universal questions. Throughout the year, students take part in discussions, write essays, develop vocabulary skills, and deliver speeches.

### **Honors English 10** (10)

2 credits/year

*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/year

*Prerequisite: English 10*

Spanning the centuries from early Native American oral tradition through 20<sup>th</sup> century American writers, American Literature & Composition focuses on a variety of genres while incorporating critical thinking, reading, writing, and speaking skills. Students will hone their writing abilities through several essays including: comparison/contrast, persuasive, literary analysis, and reflective. The course also includes vocabulary, grammar, informal writing, and research skills. Each semester, students are required to read one self-selected novel.

### **Creative Expression** (11-12)

1 writing credit/semester

*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/year

*Prerequisite: American Literature*

This course will focus on European literature from the Middle Ages to the present: from excerpts of Burton Raffel's translation of *Beowulf* and "The Story of Grendel" to twentieth-century works such as Orwell's *1984*. By the end of the twelfth grade, students have become familiar with some of the major works and ideas of European literature, have grasped an understanding of the evolution of language, have honed their skills in literary analysis, and have learned to write an argumentative and argumentative narrative essay. Their exposure of British literature will not only open their minds to different sources of writing but it will also require them to reflect on what they know to make connections with the works, use historical context to improve comprehension, and apply their background knowledge to draw conclusions about texts.

### **Communications** (11-12)

1 credit/semester

*Prerequisite: None*

During this semester-long course, students will sharpen their written, oral, and auditory communication skills for diverse, real-life

situations. They will not only work on communication through presentation but they will also develop written communication skills through various short, in-class writing activities and a personal narrative. Many opportunities will be provided for students to apply their communication skills and knowledge of communication processes through group collaboration, written work, oral presentations, and media creation.

### **AP Language and Composition** (11)

2 weighted credits/year

*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/year

*Prerequisite: AP Language and Composition*

This course will be taught much like a college-level introductory composition and literature course. It will help you develop your skills in expository writing and in textual interpretation, analysis, and evaluation. This course will allow you to improve your close reading skills and to

write essays involving the interpretation, analysis and evaluation of varied literary texts. You will also practice the test-taking skills necessary to perform well on the AP Literature and Composition exam. You will have frequent opportunities to write and rewrite formal essays of interpretation, analysis, and evaluation and to write in-class responses to poems, prose passages and to general prompts that require analysis of elements such as characterization, setting, plot, metaphorical language, and thematic development.

### **Heroes, Myths, and Legends** (11-12)

1 credit/semester

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

Heroes, Myths, and Legends is a one-semester course which addresses the major heroes, myths and legends which have shaped the fundamental stories of humankind and still impact our lives today. Students will be exposed to a large range of myths including the gods and goddesses, will read and reflect on their Personal Legend and the archetype of the hero's journey through reading Paulo Coelho's *The Alchemist*, and will do a comparative analysis on the way modern renditions and films remake or adjust stories of heroes, myths, and legends based on their intended audience.

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

1 credit/semester

*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?!

### **Publications 1** (9-12)

1 credit/semester

*Prerequisite: none*

This course is designed to introduce students to journalism. This course is a prerequisite to join the Newspaper & Yearbook class and is intended to introduce students to journalism. The course will focus on the following topics: laws and ethics of journalism, journalistic writing and editing processes, design (including typography, layout), computer applications (Microsoft Publisher, Photoshop, and Yearbook Avenue), photography, and advertising. After completing this class, the goal is to be ready to become a competent member of the yearbook and Newspaper class. Students may qualify to be a guest writer for the school newspaper if articles are of high quality and if needed by the school newspaper. Good attendance and the ability to meet deadlines are essential. Computer experience is beneficial. This class serves as writing credits.

### **Newspaper/Yearbook** (10-12)

2 credits/year

*Prerequisite: Publications 1 & Teacher Approval*

This elective class is designed for those students who have demonstrated a strong interest and ability in journalism writing and



want to practice journalism skills. Students will write for the school newspaper, *The Saydelphic* and the school yearbook, The Eagle. Students will be selected according to their writing ability, performance in previous English classes, and attendance history. Ability to work as part of a team, meet deadlines, and excellent attendance are essential. This class is much like a job situation and students will be expected to spend outside class time to complete assignments. Students should be prepared to make a year-long commitment.

### **Fundamentals of Reading/Writing** (9)

2 credits/year

*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 year long course.

### **Strategic Reading** (10-12)

2 credits/year

*Prerequisite: Successful completion of Fundamentals of Reading & Writing in 9<sup>th</sup> grade; Students in grades 10-12<sup>th</sup> CBM scores are lower than 140 words per minute & or 40% comprehension*

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 AND CONSUMER SCIENCE**

### **Housing and Interior Design** (9-12)

1 credit/semester

*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/semester

*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 1** (10-12)

2 credits/year

*Prerequisite: Introduction to Food and Nutrition*

The ProStart program introduces students to restaurant and foodservice concepts not found in the traditional Foods courses. In addition to the fun of food preparation, topics like customer relations, cost accounting, food cost controls, and marketing are covered. Whether a student's plans to go on to college or head

straight for a career, the business skills that the ProStart program develops will serve them well in the years ahead and opens students eyes to the vast and varied career options available to them in this exciting industry. National ProStart certificates of Achievement are awarded to students who successfully complete 400 hours work experience requirements and examinations given at the end of each year. This certificate tells both future employers and college admission officers of a young person's commitment to a restaurant and foodservice career and often is translated into scholarships and articulation agreements. There is also an annual state competition for ProStart teams. The state winners travel to the national competition to vie for awards and scholarships.

### **Pro Start 2** (11-12)

2 credits/year

*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: explore the history of the foodservice and lodging industry as well as the tourism and retail industry, demonstrate preparation of potatoes and grain products, desserts and baked goods, meat, poultry, seafood, stocks, soups, and sauces, develop techniques to demonstrate the art of food service, explore marketing and the menu of an establishment, develop purchasing and inventory control methods, use standard accounting practices, and demonstrate a variety of ways in effective customer communications

### **Human Growth and Development** (10-12)

1 credit/semester

*Prerequisite: Introduction to Health*

This course is a study of human development through the life span; 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/semester

*Prerequisite: Pro Start 2*

Students will be placed at training sites in the area such as the Marriott, Hy-Vee, Chips, 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. Student 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. Registration in these courses is handled by the guidance counselor. 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.

## HEALTH

### **Introduction to Health** (10-12)

1 credit/semester

*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** (10-12)

1 credit/semester

*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 21<sup>st</sup> Century health literacy skills to help with complex decisions he or she has to make.

## PHYSICAL EDUCATION

### **Individual and Personal Fitness:**

.25 credit/semester (meets every other day)

*Prerequisite: None*

Individual and personal fitness provides each student with the base knowledge required for maintaining fitness throughout his/her lifetime. Students will receive ample opportunities to improve their overall health and fitness levels while being given the opportunities to involve themselves in activities. This course will provide students the opportunity to learn a variety of noncompetitive exercise methods and activities that will maintain and/or improve their fitness levels. Emphasis is placed on regular, safe exercises in an individual or small group setting, to promote a healthy lifestyle.

### **Team Games/Fitness:**

.25 credit/semester (meets every other day)

*Prerequisite: None*

Team Games/Fitness provides each student with eh base knowledge required for maintaining fitness throughout his/her lifetime. Students will receive ample opportunities to improve their overall health and fitness levels while being given the opportunities to involve themselves in activities. Emphasis will be placed on learning and enhancing technique and skills in selected activities in a group or team setting.

### **Weightlifting**

.25 credit/semester (meets every other day)

*Prerequisite: None*

Total body fitness and weight training provides each student with the base knowledge required for maintaining fitness throughout his/her lifetime. This class is for students that desire to improve their self-confidence and athletic performance. Activities focus on several methods of achieving and maintain a healthy level of muscular strength and fitness. Emphasis will be on improving muscular strength, endurance, flexibility, agility, coordination, and balance.

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 due 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.

## **INDUSTRIAL TECHNOLOGY**

### **Power Technology** (9-12)

1 credit/semester

*Prerequisite: None*

This course will provide an opportunity to learn about power technology. Students will explore 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 lawn mower, weed eater, or snow blower as time permits.

### **Electricity** (9-12)

1 credit/semester

*Prerequisite: None*

Electricity is a course that allows students to experience the career of an electrician. Students will start by learning about basic electricity theory. Then they will learn how to safely work with all aspects of residential wiring including junction boxes, raceways, conduit, and residential application. Students will connect circuits in real-life activities with actual components.

### **Skilled Trades 1** (9-12)

1 credit/semester

*Prerequisite: None*

Do you want to be able to build a house? This course is meant to introduce students to a variety of skilled trades. Students taking this course will be able to read blueprints and safely use tools and equipment as they explore carpentry, basic electrical, and introductory plumbing.

### **Skilled Trades 2** (9-12)

1 credit/semester

*Prerequisite: Skilled Trades 1*

Do you want to be able to build and repair the internal workings of a house? This course is meant to expand student's

construction skills started in Skills Trade 1. Students taking this course will develop the following skills: reading blueprints, safely using tools, building layout, laying concrete, framing an entire structure, building a roof, applying interior finishes, and performing additional plumbing work.

### **Metals and Welding** (10-12)

1 credit/semester

*Prerequisites: None*

This class will explore the use of sheet metal and welding as a skilled trade. Each area will include an introduction to the trade, tools of the trade, and the entry-level skills needed by workers entering fields such as welding, sheet metal fabrication, HVAC, auto body repair, manufacturing, and general construction. Students will develop skill in lab-based learning experiences.

### **Pre-apprenticeship** (12)

2 credits/year

*Prerequisites: Skilled Trades 1, Skilled Trades 2, Electricity*

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 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 counselors. 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**: 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

### **Power Algebra** (9)

2 credits/year

*Prerequisites: none*

The main objective of Power Algebra is to accelerate students to grade level proficiency. In addition, the course will scaffold students for success in Algebra 1 by increasing their computational fluency, while cultivating strong mathematical practices, such as, perseverance in problem solving and attention to precision. Students will be placed in this course to receive accelerated and intensive instruction around identified areas for improvement in math skills, concepts, practices, and understandings.

### **Power Math** (10-12)

2 credits/year

*Prerequisites: none*

The main objective of Power Math is to accelerate students to grade level proficiency. In addition, the course will scaffold students for success in Geometry and Algebra 2 by increasing their computational fluency, while cultivating strong mathematical practices, such as, perseverance in problem solving and attention to precision. Students will be placed in this course to receive accelerated and intensive instruction around identified areas for improvement in math skills, concepts, practices, and understandings.

### **Algebra 1** (9-12)

2 credits/year

*Prerequisite: Ability to perform the fundamental operations with whole numbers, fractions, and decimals; Pass both semesters of 8<sup>th</sup> Grade Mathematics with a C average.*

This course involves solving equations and inequalities, using properties of exponents, simplifying and factoring polynomials, and

data analysis and statistics using tables and graphs.

### **Geometry** (9-12)

2 credits/year

*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/year

*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 **weighted** credits/year

*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, vectors, polar coordinates, and we will finish with a discussion of conic sections.

**Calculus** (11-12)

2 **weighted** credits/year

*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.

Calculus is a college/high school dual credit course. Students successfully completing two semesters of the Calculus class will earn five college credits from DMACC, which are transferable to most two or four year colleges. College credits for the course will be awarded at the completion of the spring semester.

**Consumer Math** (11-12)

1 credit/semester

*Prerequisite: Two full years of high school mathematics*

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** (11-12)

1 credit/semester

*Prerequisite: Three full years of high school mathematics*

This semester course will focus on application problems in career areas of, but limited to, automotive trades, carpentry, constructions, electrical trades, electronics, health care, industrial technology, landscaping, machine trades, manufacturing, and masonry. The application problems will focus on whole numbers, fractions, decimals, ratios, proportions, percents, exponents, roots, measurements, tables, charts, graphs, formulas, equations, geometrical figures, and statistics.



## MUSIC EDUCATION

### **Band (9-12)**

2 credits/year

*Prerequisite: Satisfactory completion of the 8<sup>th</sup> grade band course for incoming 9<sup>th</sup> grade students, and/or instructor approval. 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> grade students must have completed the prior semester of credit for band.*

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 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.

### **Jazz 1 (9-12)**

1 credit/year (meets every other day)

*Prerequisite: Band. All students must be accepted into this course by audition, demonstrating adequate playing proficiency on a traditional jazz instrument, as well as instructor approval.*

Students in this course will learn about the elements of jazz style, history, and technique through music listening, study, and performance. Improvisation theory will also be a strong focus in this music course. This course does require participation in all concert activities, many of which are scheduled outside the school day.

### **Jazz 2 (9-12)**

1 credit/year (meets every other day)

*Prerequisite: Band. Any student performing on a traditional jazz instrument will be accepted. Students will be able to participate in both Jazz 1 & 2, but they will not be allowed to perform on the same instrument.*

Students in this course will learn the basics of jazz style, history, and performance. Many students choose to play a secondary instrument in this course, which is strongly encouraged. This course does require participation in all concert activities, many of which are scheduled outside the school day.

### **Concert Choir (9-12)**

2 credits/year

*Prerequisite: None*

The Saydel Choral 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, many of which are scheduled outside the school day. Students enrolling in this course will be expected to be enrolled 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/year (meets every other day)

*Prerequisite: Concert Choir. All students are accepted into this course by an audition in the spring. Transfer/new students may enroll after an audition, and by approval of the choir director.*

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/semester

*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/semester

*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.

## SCIENCE

### **Physical Science** (9)

2 credits/year

*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/year

*Prerequisite: Physical Science*

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/semester

*Prerequisite: Physical Science*

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/semester

*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

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.

### **Human Body Systems** (10-12)

2 credits/year

*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/year

*Prerequisite: Physical Science, Geometry Pre or Co-requisite: 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/year

*Prerequisite: physical science & Biology*

*Pre or Co-requisite: 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/year

*Prerequisite: Chemistry*

The course design will focus on the Four Big Ideas of Biology. The Advanced Placement course requirements will be infused within each unit. Students will be encouraged to take the AP exam during the spring semester in order to receive college credit.

**Principles of Biomedical Science** (9-12)

2 credits/year

*Prerequisite: None*

In the introductory course of the PLTW Biomedical Science program, students explore concepts of biology and medicine to determine factors that led to the death of a fictional person. While investigating the case, students examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes while allowing them to design their own experiments to solve problems.

**Scientific Research and Design** (9-12)

1 credit/semester

*Prerequisite: None*

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. Registration in these courses is handled by the guidance counselors. Specific courses may be subject to change.

**Health Occupations:** This yearlong 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/semester

*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 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/semester

*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/semester

*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, the human life span, workings of the mind and body, personality, and abnormal psychology.

### **U.S. History (9)**

2 credits/year

*Prerequisite: None*

This course is required for all 9<sup>th</sup> grade students and 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/year

*Prerequisite: U.S. History*

This course is required for all 10<sup>th</sup> grade students. The course provides a chronologically, thematic overview of modern world history beginning with the Columbian Exchange and concluding with contemporary events.

### **U. S. Government (11)**

1 credit/semester

*Prerequisite: US History, World History*

This required course for all 11<sup>th</sup> grade students deals with 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 complete lessons in criminal law.

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

1 **weighted** credit/semester

*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 causes and consequences of political events, and interpret data to develop evidence-based arguments.

**Contemporary Affairs** (12)

1 credit/semester

*Prerequisite: U.S. History, World History*

Students will develop a greater understanding of the world in which they live through discovery, summary, and analysis of current issues. Class discussions will focus on world, national, state, and local topics. Students will learn to view media in a logical fashion and develop their critical thinking skills. Students will also learn personal finance skills, including banking, budgeting, debt, insurance, and investment.

## WORLD LANGUAGE

### **Spanish 1** (9-12)

2 credits/year

*Prerequisite: None*

Spanish 1 is an academically challenging course that will teach the basic skills necessary for future foreign 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. Active participation and good attendance are essential to student success in this course.

### **Spanish 2** (9-12)

2 credits/year

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

Spanish 2 is an academically challenging 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 a novice-high level by the end of the year. Active participation and good attendance are essential to student success in this course.

### **Spanish 3** (10-12)

2 credits/year

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

Spanish III 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.

### **AP Spanish** (11-12)

2 **weighted** credits/year

*Prerequisite: Spanish 3 with a grade of C or better or with approval of the instructor*

The AP Spanish 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 student 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.

## ADDITIONAL COURSE OFFERINGS

### **iJAG (Iowa Jobs for America's Graduates)**

2 credits/year

*Prerequisite: 11-12 Grade*

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 work place "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.

### **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 AAPA course or withdrawal 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. The student may elect to include online AP courses in his/her g.p.a. The student must report this decision to the guidance office (or AP mentor) prior to the start of the next semester enrolled.

Students who are successful with online classes are students who are prepared to meet the demands of academically challenging and rigorous coursework. They must have a class period assigned to work on the subject and have access to a computer with unlimited Internet time at home. 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](http://www.iowaapacademy.org)

[www.apexlearning.com](http://www.apexlearning.com)

[www.iowalearningonline.org](http://www.iowalearningonline.org)

Students may also take AP Course Online through Iowa Online AP Academy (IOAPA). See more information at the following link:

<http://www2.education.uiowa.edu/belinblank/Students/ioapa/Program.aspx>



## **Courses Offered**

One Semester Courses:

AP Psychology, AP Macroeconomics and AP Microeconomics

Year-Long Courses:

AP Calculus AB, AP Chemistry, AP Computer Science A, AP Computer Science Principles, AP English Language and Composition, AP Statistics, AP US History

It is important for schools, students, and parents to make a commitment when a student is enrolled in an online course. Prior to making the commitment, students are encouraged

- Schedule the IOAPA class as a dedicated period in the student's daily course load.
- Review suggested prerequisites listed in the course catalog and use pre-tests for AP Calculus AB, AP Chemistry, AP Physics B, and AP Statistics.
- Consider student level of comfort with online work and particular learning style.
- Refer to the Apex [technical requirements](#) and [system check-up](#).
- Consider student schedule limitations (each AP course requires class time and 10-15 hours of additional work weekly). The most frequent reason for dropping a course is over commitment!

Please see the guidance counselor 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 language 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 11<sup>th</sup> or 12<sup>th</sup> grade are eligible to participate. Also, 9<sup>th</sup> or 10<sup>th</sup> grade students who have been identified as gifted and talented are eligible to participate. 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.

**Students who fail the course or fail to receive credit in the course paid by the school district must reimburse the school district for all costs directly related to the course.** Prior to enrolling in a course, students must have a parent/guardian sign a form indicating they are responsible for the costs of the course should the student fail the course or fail to receive credit for the course.

## **DMACC Online Career Academy Offerings**

Accounting  
Business Administration  
Business Entrepreneurship  
Criminal Justice  
Early Childhood Education  
Fitness & Sports Management  
Health Occupations  
Liberal Arts – English  
Liberal Arts – Humanities  
Liberal Arts – Math  
Liberal Arts – Sciences  
Liberal Arts – Social and Behavioral Sciences  
Student Development

## **DRIVER'S EDUCATION**

### **Drivers' Education**

.5 credit/6-8 week course

*Prerequisite: Driver's Permit*

This course is open to students over 14 years of age who have a drivers' permit when class begins. Times scheduled each summer may vary. Each student must complete 30 hours of classroom instruction and 6 hours of driving. (Class sessions will be held as determined by Street Smarts)

## **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 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 everyday during the assigned class period to have it count as a class and to receive credit.