

# ***BALLARD HIGH SCHOOL COURSE GUIDE OFFERINGS 2019-2020***



## **Vision Statement**

Ballard empowers all learners.

## **Mission Statement**

The Ballard Community School District will educate the whole child, providing the essential knowledge and skills necessary to be a successful and responsible citizen in the 21st Century.

## **Student Outcomes**

Students will demonstrate proficiency in literacy and communication, mathematics, science and social science and will experience the fine and performing arts through study and/or performance.

Students will be creative thinkers who demonstrate the ability to research and use information and set, prioritize, and act on decisive goals both independently and in a group.

Students will demonstrate respect for themselves and for the diversity of others and will act with respect, be supportive, welcoming, productive and encouraging.

Students will possess life skills that will enable them to be responsible, contributing members of family, community and society. Students will demonstrate proficiency in the 21st Century Skills: financial literacy, health and wellness, employability and work skills.

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**Principal – John Ronca**  
**Director of Students – Chris Deason**  
**9<sup>th</sup> – 12<sup>th</sup> Grade Counselor – Lisa Doland**

Although Ballard Community Schools require certain standards be met before granting a high school diploma, there is a wide difference in the abilities of graduates. Colleges, technical schools, and employers have long been aware of this range of abilities. Therefore, when they consider a graduate for admission or employment, they require additional information about this person. In order to provide this help, the school maintains a permanent record for each student.

The permanent record begins in the ninth grade and continues through high school. The record shows the courses taken, grades earned, all test scores, attendance, cumulative grade point, and rank-in-class. The records are maintained by the school.

The courses a student takes in high school are extremely important factors in being accepted for post-secondary study or work. Thus, it is important that a student gives consideration to potential careers, researches the requirements of these careers, and takes courses that are required or helpful.

Although a grade of "D" in a course gives the same credit toward graduation as an "A", the two grades represent widely different levels of achievement. It is this difference that employers and admission officers weigh.

Students in high school will take several standardized tests to determine their levels of achievement, interest, and ability. Since the results are a part of their record, it is to their advantage to do the best they can.

Attendance records are carefully kept and recorded on a student's permanent record. Employers are very particular about the school attendance of prospective employees. As a rule, a student who misses more than 5% or 9 days of school per year will be considered a poor risk by an employer. If students miss school for something like an operation or other hospitalization, they should make certain that a note is made of this on their records.

### COURSE SELECTIONS

1. Before entering high school, students should choose one of the following plans of study:  
Regular Ballard Diploma, Honors Diploma or Core Diploma.
2. Next, students working with their parents should design a four-year plan of courses to be taken during high school. This should include courses to meet graduation requirements, career-goal requirements, and special interests and needs.
3. Before choosing courses, students and parents should carefully read the course offerings. Questions about the courses should be addressed to the advisors, teachers, or counselors. Classes should be chosen with much thought, since students will be expected to take the classes they select and remain in them for the duration of the course. Ballard High School encourages students to enroll in challenging courses. If students need to change from one academic course to another, they may do so during the first two weeks of each semester. To make a change, a student must talk to the high school counselor and have written permission from a parent or guardian. **Students can drop a course within the first 6 weeks. After 6 weeks a drop becomes an "F" on their report card/transcript. It is highly recommended that students make a decision to drop a course before the 2-week mark due to the fact that, it is easier to get into another class at that point.**
4. The recommended minimum class load for high school students (9-12) is six academic classes per semester plus physical education or engaged in educational activities for six class periods plus physical education.
5. Courses described in this booklet are offered based upon sufficient student demand and teacher availability. This will be determined by the administration.
6. Our Master Schedule is built from student course requests. **Students need to be very accurate when entering their course requests in Infinite Campus.**
7. This course description book is also available on line from our school website [www.ballard.k12.ia.us](http://www.ballard.k12.ia.us) click on Guidance/Registrar tab, then "Course Offerings".

# ALTERNATIVE EDUCATION OPPORTUNITIES

## POST-SECONDARY ENROLLMENT OPTIONS ACT

The post-secondary enrollment options act is intended to promote rigorous academic pursuits and provide a wider variety of options to high school students. Students regularly enrolled in the Ballard Community School District in the 9<sup>th</sup> or 10<sup>th</sup> grade (students who have been identified by the District as gifted and talented) and students in the 11<sup>th</sup> or 12<sup>th</sup> grades are eligible to participate in the post-secondary enrollment plan. Students must be enrolled only part-time in the post-secondary institution and must continue to be enrolled in courses (including physical education unless properly excused from P.E.) at the Ballard High School. If all conditions are met, the District shall pay for each eligible course directly to the post-secondary institution the lesser of the actual and customary costs (excluding transportation) of tuition, textbooks, materials, and fees charged by the post-secondary institution or up to \$250.00. **HOWEVER, IF THE STUDENT FAILS TO COMPLETE AND RECEIVE CREDIT FOR THE COURSE, AND THE STUDENT DOES NOT RECEIVE A HARDSHIP WAIVER FROM HEARTLAND AEA, THE STUDENT IS RESPONSIBLE FOR THE COSTS OF THE COURSE.** If a student is interested in this program, see the counselor this school year so arrangements can be made over the summer.

## SUCCESS CENTER

The Success Center at Ballard High School is a unique credit recovery program\* that allows students to recover credits from failed classes to meet graduation requirements. Most courses are available through PLATO, an instructional program that offers a variety of computer-based tutorials, applications, and mastery testing.

Students enrolled in the Success Center are able to work at their own pace and supervised by a licensed teacher. They are able to practice skills and then use their knowledge on applications and tests.

**\*Credit recovery means that a course will be applied toward graduation credits, however, the “F” received previously will remain on the student’s transcript.**

### **SUCCESS CENTER GRADING:**

Students who take courses through the Success Center will receive a pass/fail grade instead of a letter grade. Because our courses are designed for credit recovery, students will receive the applicable credit toward graduation requirements, but no letter grade to factor in to their GPA. **The “F” received previously will remain on the student’s transcript.**

**(If a student wishes to re-take a course to improve a letter grade, the course MUST be re-taken in the regular classroom the following year.)**

Qualifications for receiving a passing grade for Success Center courses will be clearly stated for each individual course. In most cases, 80% mastery is required on all assignments to complete a course successfully. The PLATO system is built around this standard, and students work on individual tasks until they achieve that level of mastery.

### **QUALIFICATIONS FOR THE SUCCESS CENTER:**

For credit recovery:

1. The student must have previously taken and failed a course in the regular classroom.
2. The student meets with the high school guidance counselor to schedule a Success Center course.

**COURSES:** PLATO (computer based) core subjects English, mathematics, science, and social science.

## EARLY GRADUATION

Students may be permitted to graduate early, provided all graduation requirements are met, including the physical education requirement. Students must complete their final semester at the Ballard High School in order to qualify for early graduation, except that a student may complete his/her final graduation requirements during the summer. Students seeking to graduate early must file an application with the superintendent with written consent of the student, parents or guardians, and the application must be approved by the principal and Board of Directors. The Board will take action on the application by November 1. Students graduating early will be ineligible for participation in instruction and co-curricular activities and class activities, except that they may attend the prom and commencement activities. The diploma will not be awarded until commencement; however, upon request of the student, the District will supply information verifying early graduation to employers, colleges, or other agencies.

**To graduate from Ballard High School, a student must earn a certain required number of credits. A Ballard high school student may achieve the following diploma types:**

- 1. Ballard Diploma**
- 2. Ballard Honors Diploma**
- 3. CORE Diploma.**

## **BALLARD DIPLOMA**

44 Credits are required to graduate with a Ballard Diploma. This includes courses from the following areas:

### **8 SEMESTERS OF ENGLISH REQUIRED**

Freshmen - 2 semesters of Survey of English (English I)

Sophomores - 2 semesters of American Studies & Composition (English II)

Juniors - 2 semesters of World Literature & Composition (English III)

Sophomore, Junior or Senior year – 2 semesters of an elective English

(Courses include: Senior English, \*Individualized Reading, Speech A, \*Theatre A, \*Advanced Theatre, Creative Writing, AP Language/Comp/DMACC 105/106 Comp I & II and DMACC Speech)

### **6 SEMESTERS OF MATH REQUIRED**

A combination of Pre-Algebra, Basic Geometry, Algebra I, Advanced Algebra, Geometry, Trigonometry, Calculus, Statistics, AP Statistics or AP Calculus will be required (Money Sense will count for 1 math credit)

### **8 SEMESTERS OF SOCIAL SCIENCE REQUIRED**

Freshmen – 2 semesters of Global Issues (Starting with Class of 2019)

Sophomores – 2 semesters of U. S. History

Juniors – 2 semesters of Modern World History or DMACC HIS112/HIS113 (taught in the classroom)

Seniors – 1 semester of U. S. Government

Seniors – 1 semester of Economics

### **6 SEMESTERS OF SCIENCE REQUIRED**

Freshmen – 2 semesters of Physical Science

Sophomores – 2 semesters of Biology

Juniors & Seniors–2 semesters of Chem. Comm./Survey of Science, Chemistry, Adv. Chemistry

### **8 SEMESTERS OF PHYSICAL EDUCATION**

These will be earned throughout the four years of high school.

### **1 SEMESTER OF FINANCIAL LITERACY**

Juniors/Seniors- 1 Semester of Money Sense

(May be used as a Math Credit)

### **EACH STUDENT HAS THE OPPORTUNITY TO CHOOSE ELECTIVES EACH YEAR.**

During their freshman, sophomore, junior, and senior years, students may choose electives each semester.

These electives include: English, Foreign Language, Music, Industrial Technology, Voc. Ag.,

Art, Family & Consumer Sciences, Health, Business, Computer Science, Social Science, DMACC Consortium, and advanced courses or elective courses in any required course area. (Need 14 cr.)

\*The above-tagged courses receive Ballard English credits but are not NCAA or RAI approved courses. See page 17 for a full list of approved RAI courses.

# BALLARD HONORS DIPLOMA

Students may attain the status of graduating with an Honors Diploma if they graduate with at least **50 credits**. The extra 6 credits, above and beyond the 44 credits required for a Ballard Diploma would come from students taking certain upper level challenges in decided curricular areas, while **maintaining a G.P.A. of at least 3.33**.

## Requirements:

LANGUAGE ARTS: The following courses would be required.

8 SEMESTERS OF ENGLISH REQUIRED

Freshmen - 2 semesters of Survey of English (English I)

Sophomores - 2 semesters of American Studies & Composition (English II)

Juniors - 2 semesters of World Literature & Composition (English III)

Sophomore, Junior or Senior year – 2 semesters of an elective English

(Courses included are Senior English, \*Individualized Reading, Speech A, \*Theatre A, \*Advanced Theatre, Creative Writing, AP Language/Comp/DMACC 105/106 Comp I & II and DMACC Speech)

MATH: The following courses would be required.

8 credits in Math which must include 2 credits from Advanced Algebra, Trigonometry, (AP)

Calculus,

or (AP) Statistics

SCIENCE:

8 credits in Science including; Physical Science or Adv. Physical Science, Biology or Adv. Biology, Chemistry, or Adv. Chemistry and two credits from one of the following: AP Chemistry, AP Biology, Adv. Scientific Frontiers, Principles of Physics, Anatomy & Physiology, AP Physics 1/DMACC Phy160

SOCIAL SCIENCE:

8 credits in Social Science including; Government, Economics, Global Issues (starting with Class of 2019),

US History, Modern World History or DMACC HIS112/HIS113 (taught in the classroom starting 2016/17)

Electives (Psychology, Sociology, Global Issues II, or Global Issues III)

FOREIGN LANGUAGE:

6 credits in Foreign Language

ELECTIVES:

12 credits in either music or art electives, technical media, industrial tech., family/consumer sciences, health, speech, theatre, Voc. Ag., DMACC Consortium and/or other required courses, i.e. P.E. etc.

FINANCIAL LITERACY :

Juniors/Seniors – 1 Semester of Money Sense (May be used as a Math credit)

\*The above-tagged courses receive Ballard English credits but are not NCAA or RAI approved courses. See page 17 for a full list of approved RAI courses.

## BALLARD CORE DIPLOMA

Students seeking to graduate with a CORE diploma must file an application with the At-Risk team with written consent of the student, parents or guardians, counselor, and principal. Students may not file an application to earn a CORE diploma until the fall semester of their junior year. All high school CORE diploma students maintain a regular school day until the course work is completed (unless an alternate schedule has been set up by the Alternative Education Team). The CORE diploma students may participate with their class in graduation. No matter when course work is completed, they will receive their diploma when their class graduates. Students seeking a CORE diploma must complete 32 credits in the following coursework:

### Language Arts

*8 credits in Language Arts including these required courses:*

- 9<sup>th</sup> Survey of English
- 10<sup>th</sup> American Studies and Composition
- 11<sup>th</sup> World Literature and Composition

Plus:

Sophomore, Junior or Senior year – 2 semesters of an elective English  
(Courses included are: \*Senior English, \*Individualized Reading, Speech A, \*Theatre A, \*Advanced Theatre, \*Publishing, Creative Writing, and \*AP Lang/Comp/DMACC 105&106 Comp I&II)

### Financial Literacy

*1 credit of Financial Literacy*

- Juniors – Money Sense (May be used as a Math credit)
- Seniors – Money Sense (May be used as a Math credit)

### Math

*6 credits in Math*

### Social Science

*8 credits in Social Sciences including these required courses:*

- 9<sup>th</sup> Global Issues (Starting with Class of 2019)
- 10<sup>th</sup> U.S. History
- 11<sup>th</sup> Modern World History or DMACC HIS112/HIS113 (taught in the classroom)
- 1 semester of Government
- 1 semester of Economics

### Science

*6 credits in Science including these required courses:*

- 9<sup>th</sup> Physical Science
- 10<sup>th</sup> Biology

Plus: 2 credits from one of the following: Chem. Comm./Survey of Science, Chemistry, Adv. Chemistry

### Physical Education

*2 credits in Physical Education*

### Electives

Students must have at least 2 elective credits.

## **ACADEMIC ELIGIBILITY FOR EXTRA-CURRICULAR ACTIVITIES**

Extra-curricular activities and athletic programs are open to all students. Students in grades 9-12 must:

The State Board of Education passed an Academic Eligibility Standards for students participating in athletic competitions sponsored by the Iowa High School Boys Athletic Association or the Iowa Girls High School Athletic Union. The Music and Speech Associations quickly created similar policies with slightly different periods of ineligibility that will apply to students participating in activities sponsored by their organizations.

The rule will require all high school students (grades 9-12) to have passing grades in all of their classes (this includes dual credit courses, reduced credit courses, and non-academic courses) at the end of each semester in order to avoid a period of ineligibility. Students who receive an "F" in any course will be ineligible for a period of time (see below) depending on the type activity in which they participate.

- Athletics: If at the end of any grading period a contestant is given a failing grade in any course for which credit is awarded, the contestant is ineligible to dress for and compete in the next occurring interscholastic athletic contests and competitions is for 30 consecutive calendar days.
- Music/Speech: 30 school days immediately following issuance of grades
- Cheer/Dance: 30 school days immediately following issuance of grades

Under this state policy it would be possible for a student who is involved in multiple activities to serve up to three periods of ineligibility in three different extra-curricular activities during the course of 12-month period. Examples can be found on the Iowa Department of Education website, Iowa High School Athletic Association website, or the Iowa Girls High School Athletic Union website.

All students, coaches, sponsors, teachers, and staff members will be informed of the new eligibility rules at the beginning of the school year. We encourage all parents/guardians to review the policy and discuss its implications with their students.

The most important thing to remember is this: we must all remind our student-athletes that they are students first and academics should never take a backseat to athletics or any other extra-curricular activity. Students, who work hard in the classroom, take advantage of support programs offered by the school, and pass their classes will never be affected by this new policy.

PLEASE READ BOARD POLICY CODE NO. 509.

## **REQUIRED CREDITS THAT ARE FAILED MUST BE MADE UP.**

Students who take courses through the Success Center for credit recovery will receive a pass/fail grade instead of a letter grade. Because the courses are designed for credit recovery, students will receive the applicable credit toward the appropriate graduation requirement but no letter grade to factor in to their GPA. The "F" received previously will remain on the student's transcript. **If a student wishes to re-take a course to improve a letter grade, the course MUST be re-taken in the regular classroom the following year.**

## DIVISION I ACADEMIC REQUIREMENTS

College-bound student-athletes will need to meet the following academic requirements to practice, receive athletics scholarships, and/or compete during their first year.

### Core-Course Requirement

Complete 16 core courses in the following areas:



### Full Qualifier

- Complete 16 core courses.
  - Ten of the 16 core courses must be completed before the seventh semester (senior year) of high school.
  - Seven of the 10 core courses must be in English, math or natural/physical science.
- Earn a core-course GPA of at least 2.300.
- Earn the ACT/SAT score matching your core-course GPA on the Division I sliding scale (see back page).
- Graduate high school.

### Academic Redshirt

- Complete 16 core courses.
- Earn a core-course GPA of at least 2.000.
- Earn the ACT/SAT score matching your core-course GPA on the Division I sliding scale (see back page).
- Graduate high school.

### Full Qualifier:

College-bound student-athletes may practice, compete and receive athletics scholarships during their first year of enrollment at an NCAA Division I school.

### Academic Redshirt:

College-bound student-athletes may receive athletics scholarships during their first year of enrollment and may practice during their first regular academic term, but may NOT compete during their first year of enrollment.

### Nonqualifier:

College-bound student-athletes cannot practice, receive athletics scholarships or compete during their first year of enrollment at an NCAA Division I school.

International Students: Please visit [ncaa.org/international](http://ncaa.org/international) for information and academic requirements specific to international student-athletes.

## Test Scores

When a student registers for the SAT or ACT, he or she can use the NCAA Eligibility Center code of **9999** so his or her scores are sent directly to the NCAA Eligibility Center from the testing agency. Test scores on transcripts will **NOT** be used in his or her academic certification.

A combined SAT score is calculated by adding reading and math subscores. An ACT sum score is calculated by adding English, math, reading and science subscores. A student may take the SAT or ACT an unlimited number of times before he or she enrolls full time in college. If a student takes either test more than once, the best subscores from each test are used for the academic certification process.

If you took the SAT in March 2016 or after, and plan to attend an NCAA Division I college or university in the 2018-19 or 2019-20 academic years, use the following charts to understand the core-course GPA you need to meet NCAA Division I requirements.

For more information on the SAT, click [here](#) to visit the College Board's website.

DIVISION I FULL QUALIFIER SLIDING SCALE			
Core GPA	New SAT*	Old SAT (Prior to 3/2016)	ACT Sum
3.550	400	400	37
3.525	410	410	38
3.500	430	420	39
3.475	440	430	40
3.450	460	440	41
3.425	470	450	41
3.400	490	460	42
3.375	500	470	42
3.350	520	480	43
3.325	530	490	44
3.300	550	500	44
3.275	560	510	45
3.250	580	520	46
3.225	590	530	46
3.200	600	540	47
3.175	620	550	47
3.150	630	560	48
3.125	650	570	49
3.100	660	580	49
3.075	680	590	50
3.050	690	600	50
3.025	710	610	51
3.000	720	620	52
2.975	730	630	52
2.950	740	640	53
2.925	750	650	53
2.900	750	660	54
2.875	760	670	55
2.850	770	680	56
2.825	780	690	56
2.800	790	700	57
2.775	800	710	58

\*Final concordance research between the new SAT and ACT is ongoing.

NCAA is a trademark of the National Collegiate Athletic Association.

DIVISION I FULL QUALIFIER SLIDING SCALE			
Core GPA	New SAT*	Old SAT (Prior to 3/2016)	ACT Sum
2.750	810	720	59
2.725	820	730	60
2.700	830	740	61
2.675	840	750	61
2.650	850	760	62
2.625	860	770	63
2.600	860	780	64
2.575	870	790	65
2.550	880	800	66
2.525	890	810	67
2.500	900	820	68
2.475	910	830	69
2.450	920	840	70
2.425	930	850	70
2.400	940	860	71
2.375	950	870	72
2.350	960	880	73
2.325	970	890	74
2.300	980	900	75
2.299	990	910	76
2.275	990	910	76
2.250	1000	920	77
2.225	1010	930	78
2.200	1020	940	79
2.175	1030	950	80
2.150	1040	960	81
2.125	1050	970	82
2.100	1060	980	83
2.075	1070	990	84
2.050	1080	1000	85
2.025	1090	1010	86
2.000	1100	1020	86

ACADEMIC REDSHIRT

## 2018 DIVISION II NEW ACADEMIC REQUIREMENTS

College-bound student-athletes first enrolling at an NCAA Division II school on or after Aug. 1, 2018, need to meet new academic rules to practice, compete and receive athletics scholarships during their first year.

### Core-Course Requirement

Complete 16 core courses in the following areas:

<b>ENGLISH</b> 3 years	<b>MATH</b> (Algebra I or higher) 2 years	<b>NATURAL/ PHYSICAL SCIENCE</b> (Including one year of lab, if offered) 2 years	<b>ADDITIONAL</b> (English, math, or natural/physical science) 3 years	<b>SOCIAL SCIENCE</b> 2 years	<b>ADDITIONAL COURSES</b> (Any area listed to the left, foreign language or comparative religion/philosophy) 4 years
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#### Full Qualifier

- Complete 16 core courses.
- Earn a core-course GPA of at least 2.200.
- Earn the ACT/SAT score matching your core-course GPA on the Division II full qualifier sliding scale (see back page).
- Graduate high school.

#### Partial Qualifier

- Complete 16 core courses.
- Earn a core-course GPA of at least 2.000.
- Earn the ACT/SAT score matching your core-course GPA on the Division II partial qualifier sliding scale (see back page).
- Graduate high school.

#### Full Qualifier:

College-bound student-athletes may practice, compete and receive athletics scholarships during their first year of enrollment at an NCAA Division II school.

#### Partial Qualifier:

College-bound student-athletes may receive athletics scholarships during their first year of enrollment and may practice during their first regular academic term, but may NOT compete during their first year of enrollment.

#### Nonqualifier:

College-bound student-athletes may not practice, compete or receive athletics scholarships during their first year of enrollment at an NCAA Division II school.

**International Students:** Please visit [ncaa.org/international](http://ncaa.org/international) for information and academic requirements specific to international student-athletes.

## Test Scores

If you took the SAT in March 2016 or after, and plan to attend an NCAA Division II college or university in the 2018-19 or 2019-20 academic years, use the following charts to understand the core-course GPA you need to meet NCAA Division II requirements.

A combined SAT score is calculated by adding reading and math subscores. An ACT sum score is calculated by adding English, math, reading and science subscores. You may take the SAT or ACT an unlimited number of times before you enroll full time in college. If you take either test more than once, the best subscores from each test are used for the academic certification process.

For more information on the SAT, click [here](#) to visit the College Board's website.

DIVISION II FULL QUALIFIER SLIDING SCALE			
USE FOR DIVISION II BEGINNING AUGUST 2018			
Core GPA	New SAT*	Old SAT (Prior to 3/2016)	ACT Sum
3.300 & above	400	400	37
3.275	410	410	38
3.250	430	420	39
3.225	440	430	40
3.200	460	440	41
3.175	470	450	41
3.150	490	460	42
3.125	500	470	42
3.100	520	480	43
3.075	530	490	44
3.050	550	500	44
3.025	560	510	45
3.000	580	520	46
2.975	590	530	46
2.950	600	540	47
2.925	620	550	47
2.900	630	560	48
2.875	650	570	49
2.850	660	580	49
2.825	680	590	50
2.800	690	600	50
2.775	710	610	51
2.750	720	620	52
2.725	730	630	52
2.700	740	640	53
2.675	750	650	53
2.650	750	660	54
2.625	760	670	55
2.600	770	680	56
2.575	780	690	56
2.550	790	700	57
2.525	800	710	58
2.500	810	720	59
2.475	820	730	60
2.450	830	740	61
2.425	840	750	61
2.400	850	760	62
2.375	860	770	63
2.350	860	780	64
2.325	870	790	65
2.300	880	800	66
2.275	890	810	67
2.250	900	820	68
2.225	910	830	69
2.200	920	840 & above	70 & above

DIVISION II PARTIAL QUALIFIER SLIDING SCALE			
USE FOR DIVISION II BEGINNING AUGUST 2018			
Core GPA	New SAT*	Old SAT (Prior to 3/2016)	ACT Sum
3.050 & above	400	400	37
3.025	410	410	38
3.000	430	420	39
2.975	440	430	40
2.950	460	440	41
2.925	470	450	41
2.900	490	460	42
2.875	500	470	42
2.850	520	480	43
2.825	530	490	44
2.800	550	500	44
2.775	560	510	45
2.750	580	520	46
2.725	590	530	46
2.700	600	540	47
2.675	620	550	47
2.650	630	560	48
2.625	650	570	49
2.600	660	580	49
2.575	680	590	50
2.550	690	600	50
2.525	710	610	51
2.500	720	620	52
2.475	730	630	52
2.450	740	640	53
2.425	750	650	53
2.400	750	660	54
2.375	760	670	55
2.350	770	680	56
2.325	780	690	56
2.300	790	700	57
2.275	800	710	58
2.250	810	720	59
2.225	820	730	60
2.200	830	740	61
2.175	840	750	61
2.150	850	760	62
2.125	860	770	63
2.100	860	780	64
2.075	870	790	65
2.050	880	800	66
2.025	890	810	67
2.000	900	820 & above	68 & above

\*Final concordance research between the new SAT and ACT is ongoing.

NCAA is a trademark of the National Collegiate Athletic Association.

## COMMUNITY COLLEGES

Community Colleges have open admission policies. Some programs have waiting lists. Apply early to be admitted into your chosen program. Community Colleges expect a comprehensive high school curriculum to ensure student success.

## IOWA REGENT UNIVERSITY REQUIREMENTS

### High School Course Requirements

In addition to meeting the Regent Admission Index requirement, students must complete the minimum number of high school courses specified below for the institution to which they're applying.

Subject Area	Iowa State University	University of Iowa	University of Northern Iowa
English/Language Arts	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; may also include one year of speech, communication, or journalism.
Math	3 years, including 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 higher math (trigonometry, analysis, or calculus), for admission to the College of Engineering.	3 years, including the equivalent of algebra, geometry, and advanced algebra.
Natural Science	3 years, including one year each from any two of the following: biology, chemistry, and physics.	3 years, including courses in physical science, biology, chemistry, environmental science and physics for admission to the College of Liberal Arts and Sciences. 3 years, with at least one year each in chemistry and physics, for admission to the College of Engineering. Nursing - 3 years including one year each of biology, chemistry and physics.	3 years, including courses in general science, biology, chemistry, earth science, or physics; laboratory experience highly recommended.
Social Science	2 years for admission to the Colleges of Agriculture, Business, Design, Human Sciences, and Engineering. Three 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.
Foreign Language	2 years of a single foreign language for admission to the College of Liberal Arts and Sciences and the College of Engineering. Foreign language courses are not required for admission to the Colleges of Agriculture, Business, Design, or Human Sciences.	2 years of a single foreign language are required for admission. For many degrees, the fourth year of proficiency is required for graduation. Nursing - 3 years in a single language or two years each in two different languages.	Foreign language courses are not required for admission. However, two years of a foreign language in high school with a C- or above in the last term will meet the university graduation requirement.
Other Courses	Specific elective courses are not required for admission to Iowa State University.	Specific elective courses are not required for admission.	Two years of additional courses from the required subject areas, foreign languages, or fine arts.

## **ADMISSION REQUIREMENTS EFFECTIVE FALL 2009**

### **Admission to: Iowa State University, University of Northern Iowa, and University of Iowa**

Admission of freshmen who wish to enroll at any of the Iowa Regent universities beginning Fall 2009 and beyond will be held to the new Regents Admission Index (RAI). The RAI score is based upon the factors listed.

The new index places greater emphasis on your high school course selections. The more core courses you take, the higher your RAI. Plan your high school courses carefully and consult with Ms. Doland regarding your selections. Check this web site for assistance in calculating your RAI <http://www2.state.ia.us/regents/rai/>

The RAI calculation includes the following factors:

#### **Regent Admission Index (RAI)**

- (2 x ACT composite score)
- + (1 x percentile high school rank)
- + (20 x high school GPA)
- + (5 x number of high school core courses)

#### **Regent Admission Index Score**

- Iowa residents **must present a score of 245 or above.**
- Residents of other states **must present a score of 255 or above.**

*Note: For purpose of calculating the RAI, SAT scores will be converted to ACT composite equivalents, 99% is the top value for high school rank, 4.00 is the top value for GPA, and the number of high school core courses completed is expressed in terms of years or fractions of years (e.g., one semester equals 0.5 year). Applicants who do not possess all required factors will be evaluated on an individual basis by the Regent universities to which they apply.*

Freshman applicants from Iowa high schools who achieve at least a 245 RAI score and who meet the minimum number of high school courses required by the Regent universities will qualify for automatic admission to any of the three Regent universities. Freshman applicants who achieve less than a 245 RAI score may also be admitted to a specific Regent university; however, each Regent university will review these applications on an individual basis and the admission decision will be specific to each institution.

The Regent universities recognize that the traditional measures of academic performance do not adequately describe some students' potential for success. Therefore, the Regent universities strongly encourage all interested students to apply for admission. Applicants who feel their academic record is not an accurate reflection of their potential for success are encouraged to provide supplemental information explaining their circumstances in addition the application, academic transcripts, and test scores.

### **BALLARD CORE COURSES**

#### **ENGLISH:**

American Literature  
Creative Writing  
Survey of English  
Adv. Survey of English  
World Literature  
American Literature  
DMACC Speech  
Senior English  
English 105/106

#### **SCIENCE:**

Physical Science  
Advanced Physical Science  
Biology  
Advanced Biology  
Chemistry  
Advanced Chemistry  
Principles of Physics  
Advanced Scientific Frontiers  
Anatomy & Physiology  
AP Chemistry

#### **MATH:**

Algebra I  
Geometry  
Advanced Algebra  
Trigonometry  
Calculus  
AP Calculus  
Statistics  
AP Stats

#### **FOREIGN LANGUAGE:**

Spanish I  
Spanish II  
Spanish III  
Spanish IV

#### **SOCIAL SCIENCE:**

Global Issues  
US History  
World History  
US Government  
Economics  
Psychology  
Sociology

# COURSES TAUGHT AT BALLARD HIGH SCHOOL

\*E- restricted enrollment, R – Required, RE – Required Elective, E – Elective

	9	10	11	12	Cr/YR
<b>APPLIED ACADEMICS</b>					
1400 A&B Academy	E	E	E	E	2
6089 Computer Graphics		E	E	E	1
6090 Web Page Design		E	E	E	1
8051 A&B Service/Helping		E	E	E	1=150 hrs.
1059 A&B Publishing Yearbook		E	E	E	2
8270 A&B Production Media	E	E	E	E	2
8071 *ELP	E	E	E	E	1
8272 Animation	E	E	E	E	1
8273 ADV. Animation	E	E	E	E	1

	9	10	11	12	Cr/YR
<b>ART</b>					
5070 A&B ART I	E	E	E	E	2
5071 A&B ART II		E	E	E	2
5072 A&B Ceramics I	E	E	E	E	2
5078 A&B Ceramics II		E	E	E	2
5074 A&B Independent Study			E	E	2
5080 A&B Photography I	E	E	E	E	2
5086 A&B ART III			E	E	2

	9	10	11	12	Cr/YR
<b>FAMILY &amp; CONSUMER SCIENCES</b>					
7051 Foods	E	E	E	E	1
7052 Culinary	E	E	E	E	1
7064 Culinary Enterprise		E	E	E	1
7057 Child Dev. 1		E	E	E	1
7058 Child Dev. 2		E	E	E	1
7062 Housing & Fashion Design	E	E	E	E	1

	9	10	11	12	Cr/YR
<b>FINANCIAL LITERACY</b>					
2040 Money Sense			RE	RE	1

	9	10	11	12	Cr/YR
<b>FOREIGN LANGUAGE</b>					
5051 A&B Spanish I	E	E	E	E	2
5052 A&B Spanish II		E	E	E	2
5053 A&B Spanish III			E	E	2
5054 A&B Spanish IV				E	1
5054 C (DMACC) Intermediate Spanish I (Classroom)				E	1

	9	10	11	12	Cr/YR
<b>INDUSTRIAL TECHNOLOGY</b>					
7084 Industrial Technology	E	E	E	E	1
7090 Product Development		E	E	E	1
7094 Construction Basics	E	E	E	E	1
7095 Project Design/ Construction		E	E	E	1
7096 Carpentry Enterprise			E	E	1
7097 Architectural Studies	E	E	E	E	1
7098 Engineering Studies		E	E	E	1
7091 Industrial Technology Independent Study				E	1
7092 A&B Construction Technology			E	E	2

	9	10	11	12	Cr/YR
<b>LANGUAGE ARTS</b>					
1040 A&B Advanced Survey of English	E				2
1041 A&B Survey of English	R				2
1043 A&B American Studies & Composition		R			2
1044 A&B Advanced American Studies and Comp		E			2
1042 A&B World Literature & Composition			R		2
1045 A&B Senior English				E	2
{ENG105 AP Language and Comp/DMACC				E	2}
{ENG106 105/106 AP Lang. Comp I and II				E	
1053 Creative Writing		E	E	E	1
1056 Theater A		E	E	E	1
1057 Individualized Reading		E	E	E	2
1060 Advanced Theatre			E	E	1
LIT101 DMACC AP LIT/COMP/Intro to Lit				E	1/1 <sup>st</sup> sem
LIT185 DMACC AP LIT/COMP/Cont. Lit				E	1/2 <sup>nd</sup> sem
SPC 101 DMACC Speech-Fund of Oral Comm		E	E	E	1

## **MATHEMATICS**

2041 A&B Pre-Algebra	E	E	E	E	2
2043 A&B Basic Geometry		E	E	E	2
2046 A&B Algebra I	E	E	E	E	2
2047 A&B Geometry	E	E	E	E	2
2058 A&B Calculus				E	2
2060 AP – Calculus (Classroom)				E	2
2061 AP – Statistics (Classroom)	E	E	E	E	2
2070 A&B Statistics				E	2
2048 A&B Advanced Algebra	E	E	E	E	2
2054 A&B Trigonometry				E	2

## **MUSIC EDUCATION**

	9	10	11	12	Cr/YR
9050 A&B Music Theory			E	E	2
9055 A Academic Band 1st Sem. Only	E	E	E	E	1
9055 B Academic Band (2 <sup>nd</sup> Sem. Only)		E	E	E	1
9059 B Academic Band (2 <sup>nd</sup> Sem. Only)	E				1
9068 A&B Academic Treble Choir	E				2
9065 A&B Academic Concert Choir	E	E	E	E	2

## **PHYSICAL EDUCATION**

7061 A&B Health	E	E	E	E	2
9281 A&B Physical Ed. (every other day)	RE	RE	RE	RE	.25/sem
9282 A&B Weightlifting (everyday)	RE	RE	RE	RE	.5/sem
9085 A&B Early Bird P.E.	E	E	E	E	.25/sem
9289 A&B Academic Weightlifting (every day)	E	E	E	E	1/sem.

## **SCIENCE**

3041 A&B Physical Science	R				2
3042 A&B Biology		R			2
3043 A&B AP Biology (Classroom)			E	E	2
3044 A&B Adv. Physical Science	E				2
3045 A&B Adv. Biology		E			2
3046 A&B Adv. Chemistry		E	E	E	2
3051 A&B Anatomy/Physiology			E	E	2
3052 A&B Chemistry		E	E	E	2
3056 A&B Principles of Physics		E	E	E	2
3060 A&B Advanced Scientific Frontiers			E	E	2
3062 A&B Chem Comm/Survey of Science			E	E	2
3063 A&B AP Chemistry			E	E	2
3055 A AP PHYSICS 1/DMACC PHY 160			E	E	2

## **SOCIAL SCIENCE**

4060A&B Global Issues	R				2
4042A&B U.S. History		R			2
40041A&B Modern World History			R		2
4043 U.S. Government				R	1
4051 Economics				R	1
4058 Psychology			E	E	1
4059 Sociology			E	E	1
4061 Global Issues II		E	E	E	1
4062 Global Issues III		E	E	E	1
HIS 112 Western Civ.- Ancient to Early Modern			E	E	1
HIS 113 Western Civ.- Early Modern/Present			E	E	1

## **\*SPECIAL EDUCATION (\*Only by special recommendation)**

1751 A&B Resource A	E	E	E	E	2
1752 A&B Resource B	E	E	E	E	1

## **AGRICULTURAL EDUCATION**

7661A Intro to Agriscience (1 <sup>st</sup> Sem.)	E	E	E	E	1
7661B Ag, Food, & Nat. Res.(ANFR)	E	E	E	E	1
7660 Animal Science		E	E	E	1
7662 Horticulture		E	E	E	1
7668 Agricultural Business		E	E	E	1
7670 Natural Resources		E	E	E	1
7671 Agricultural Leadership			E	E	1
7672 Agricultural Communications		E	E	E	1
7673 Agriculture Enterprise			E	E	1
AGA 114 DMACC Prin of Crop Production			E	E	1
AGS 114 DMACC Advanced Animal Science			E	E	1

## CONSORTIUM CLASSES AND ON-LINE COURSES

9   10   11   12   Cr/YR

### **STORY COUNTY CONSORTIUM CLASSES (Student receives college credit)**

7215 A&B	Business Administration(Ankeny)	E	E	4
7220 A&B	Culinary Arts 1 <sup>st</sup> Year	E	E	4
7221 A&B	Culinary Arts 2 <sup>nd</sup> Year		E	4
7230 A&B	Criminal Justice	E	E	4
7265 A&B	Visual Communications (Web Page Design)	E	E	4
7270 A&B	Building Trades-Finish Carpentry 1 <sup>st</sup> Year	E	E	4
7275 A&B	Building Trades-Finish Carpentry 2 <sup>nd</sup> Year	E	E	4
7280	Certified Nursing Asst (1 Semester)	E	E	2
7281 A&B	Health Occupations (C.N.A. Full Year)	E	E	4
7290 A&B	Auto Technology 1 <sup>st</sup> Year	E	E	4
7291 A&B	Auto Technology 2 <sup>nd</sup> Year		E	4
7295 A&B	Machine Operations/Tool & Die (Ankeny Campus)	E	E	4
7296 A&B	Teacher Academy	E	E	4
7297 A&B	Auto Collision 1 <sup>st</sup> Year	E	E	4
7299 A&B	Auto Collision 2 <sup>nd</sup> Year		E	4
7298 A&B	Diesel/Caterpillar Technology(Ankeny)	E	E	4
8090 A&B	Welding (at Nevada High School)	E	E	4

### **DMACC ON-LINE CAREER ACADEMY COURSES (Student receives college credit)**

ACC 111	Intro to Accounting	E	E	1
FIN 121	Personal Finance	E	E	1
BUS 148	Small Business Management	E	E	1
BUS 102	Introduction to Business	E	E	1
CRJ 100	Intro to Criminal Justice	E	E	1
CRJ 111	Police and Society	E	E	1
ECE 103	Intro to Early Childhood Ed	E	E	1
PEC 110	Coaching Ethics	E	E	.5
PEH 110	Personal Wellness	E	E	.5
PEH 190	Sports Nutrition	E	E	1
HSC 120	Medical Terminology I	E	E	1
HSC 121	Medical Terminology II	E	E	1
ENG 105	Composition I	E	E	1
ENG 106	Composition II	E	E	1
LIT 101	Introduction to Literature	E	E	1
HUM 116	Encounters in Humanities	E	E	1
DRA 101	Intro to Theatre	E	E	1
PHI 101	Introduction to Philosophy	E	E	1
MAT 110	**Math for Liberal Arts	E	E	1
MAT 141	**Finite Math	E	E	1
MAT 157	**Statistics	E	E	1
ECN 120	Principals of Macroeconomics	E	E	1
ECN 130	Principles of Microeconomics	E	E	1
ENV 103	Sustainable Living	E	E	.5
GEO 111	Intro to Geography	E	E	1
HIS 150	US History to 1877	E	E	1
HIS 153	US History 1877 to Present	E	E	1
POL 111	American National Government	E	E	1
PSY 111	Introduction to Psychology	E	E	1
PSY 121	Developmental Psychology	E	E	1
SOC 110	Introduction to Sociology	E	E	1
SOC 115	Social Problems	E	E	1
SDV 115	Study Strategies	E	E	.5
7205 A&B	Med Office/Clinic Support Assist.	E	E	2
	Program includes			
	ADM 105 Keyboarding			
	MAP 106 Medical Office Essentials			
	BCA 212 Intro to Computer Business Application			
	ADM 221 Career Development Skills			

## **2019-2020 COURSE REGISTRATION**

Again this year, students will register on-line through Infinite Campus their course requests for next year's class schedule. Students will use their log-in name and a password. Students will be able to read a course description on-line in Campus of each course listed in the hard copy of this year's Course Description Guide. Working with their advisor during advisor period, students will log-in to Campus, select their courses, and print off a summary sheet of their selections which will be signed by their parent or guardian and turned in to the guidance office.

## **COURSE OFFERINGS**

Courses described in this Course Offerings Section are offered based upon sufficient student demand and teacher availability determined by administration.

This section of the Course Description Guide contains a departmental listing of all courses of instruction for the coming 2019-2020 school year.

For each subject offered, the course number and title are listed, followed by the grade levels to which the course is available, for example, 9-10, 9-12, 11-12, etc. The length of the course – One Semester or Full Year – and credit for the course appear next. Some courses may not be elected until a recommended course has been taken previously.

**REGARDING PREREQUISITES:** The successful completion of recommended course sequences should be followed. In these cases, the course numbers of the recommended courses are indicated.

The course titles for the most part are sufficiently descriptive. Most courses are provided with a brief description.

## **GRADING SYSTEM**

Grades 9-12 will use a 4-point grading system. Pluses and minuses will be retained for quarter and semester grades. The following grading system will be used for non AP classes only:

A	= 4.00	C	= 2.00
A-	= 3.67	C-	= 1.67
B+	= 3.33	D+	= 1.33
B	= 3.00	D	= 1.00
B-	= 2.67	D-	= .67
C+	= 2.33	F	= .00
		*I	= Incomplete

A 5-point grading system is used in calculating an AP weighted course. Pluses and minuses will be retained for quarter and semester grades.

AP Honors (Weighted) Grading System used for AP classes only:

A	= 5.00	C	= 3.00
A-	= 4.67	C-	= 2.67
B+	= 4.33	D+	= 2.33
B	= 4.00	D	= 2.00
B-	= 3.67	D-	= 1.67
C+	= 3.33	F	= .00
		*I	= Incomplete

**AP (Weighted) grades** are number or letter grades that are assigned a numerical advantage when calculating a grade point average, or GPA. Weighted-grade systems give students a numerical advantage for grades earned in higher-level courses or more challenging learning experiences, such as Advanced Placement courses. In many cases, the terms *weighted points* may be used in reference to the additional weight given to weighted grades. In the case of students who have completed AP courses considered to be more challenging than regular courses, the general purpose of a weighted grade is to give these students a numerical advantage when determining relative academic performance and related honors such as honor roll or class rank.

An A in an AP course may be awarded a 5.0, for example, while an A in a regular course offering is awarded a 4.0. Lower grades in weighted courses would also receive the same one-point advantage—a grade of C, for example, would be assigned a 3.0, while a C in a regular course would be assigned a 2.0. While the example above represents a common formulation, grading systems and GPA scales may vary significantly from one school or school district to the next.

In addition, some colleges and universities may ask high schools to provide both weighted and unweighted GPAs on student transcripts so that admissions offices can evaluate the differential effect of weighted grades—i.e., how certain course selections and weighted grades affected the GPA calculation.

**Two GPA's will be listed on student transcripts – weighted and unweighted. The 5-point grading scale will be used to calculate cum GPA/Class Rank.**

**\* INCOMPLETE** - is given when a student, for reasons of absence or other reasons acceptable to the teacher and principal, has been unable to complete assigned work. The deadline on an “incomplete” is two weeks after the end of the grading period. All incomplete work at the end of the second semester will be recorded as a zero and figured in with the final grade.

**At the end of each semester, an Honor Roll is made up of all students in grades 9-12 who have a semester GPA of 3.33 or higher. (Rule exception: any student with a “D” will not be on the honor roll.)**

## AP COURSES AVAILABLE

The following Advanced Placement courses may be taken on-line on the World Wide Web.

1063 AP ENGLISH LANGUAGE AND COMPOSITION – year long course

1064 AP ENGLISH LITERATURE AND COMPOSITION – year long course

**If interested in any of the following web based courses please see Ms. Doland**

4045 AP GOVERNMENT – semester course

4046 AP US HISTORY – year long course

4055 AP PSYCHOLOGY – semester course

4056 AP MACROECONOMICS – semester course

4057 AP MICROECONOMICS – semester course

**AP Classes taught at Ballard in a classroom setting:**

2060 AP CALCULUS (This course is taught in the classroom at Ballard.)  
12 Full Year 2 Credits **RECOMMENDED:** successful completion of course 2054  
See page 33 for full description.

2061 AP STATISTICS (This course is taught in the classroom at Ballard.)  
12 Full Year 2 Credits **RECOMMENDED:** successful completion of course 2054  
See page 34 for full description.

3043 AP BIOLOGY (This course is taught in the classroom at Ballard.)  
11-12 Full Year 2 Credits  
**RECOMMENDED:** Successful completion of course 3042, recommendation of current science instructor, either completion of or simultaneous enrollment in chemistry, cumulative 3.00 GPA  
See page 39 for full description.

3063 AP CHEMISTRY (This course is taught in the classroom at Ballard.)  
11-12 Full Year 2 Credits **RECOMMENDED:** successful completion of course 3052  
See page 41 for full description.

3055A AP Physics 1 / PHY 160 (DMACC) General Physics 160  
11-12 Full Year 2 Credits / 5 DMACC Credits  
**RECOMMENDED:** Completion Advanced Algebra & Geometry; a Physical Science course; a Biology course and a Chemistry course. **No prior physics classes are necessary to enroll in this course.**  
See page 45 for full description.

ENG105

ENG106 AP LANG/COMP/DMACC 105&106 COMP I&II (This course is taught in the classroom at Ballard.)  
11-12 Full Year 2 Credits **RECOMMENDED:** successful completion of 1044A&B or 1042A&B  
See page 33 for full description

LIT 101 AP Language/Composition/DMACC Literature 101: Introduction to Literature

12 First Semester 1 Credit/3 DMACC Credits

See page 33 for full description.

LIT 185 AP Language/Composition/DMACC Literature 185: Contemporary Literature

12 Second Semester 1 Credit/DMACC Credits

See page 33 for full description

# **APPLIED ACADEMICS DEPARTMENT**

**1400A**

**1400B** **ACADEMY**

9-12 Full Year 2 Credits

COURSE DESCRIPTION: Academy provides a structured, scheduled academic environment providing the opportunity to complete assignments, prepare for tests/quizzes, make up missing work, and access social and academic support. Students are assigned a class period and required to adhere to behavioral and academic expectations to earn this elective credit.

- **NOTE: Incoming Freshmen will be scheduled into this class upon the recommendation of the 8th grade teachers, MS Counselor, and MS Administration.**
- **10th through 12th graders must be recommended and approved by the Academy teacher, HS Counselor, and HS Administration**

**1059A**

**1059B** **YEARBOOK PUBLISHING**

10-12 Full Year 2 Credits

COURSE DESCRIPTION: This is a FULL YEAR course, and students are not allowed to take this course for only one semester. Members of this class will learn the basics of layout, interviewing, copy writing, editing, and photography. Class members will be responsible for creating and publishing the school yearbook, and will be expected to photograph evening and weekend school events and to meet all deadlines to receive course credit. Limited to 15 students.

**AREAS OF STUDY:**

1. layout/design
2. writing/editing/ publishing
3. interviewing
4. photography
5. computer operations

**6089**

**COMPUTER GRAPHICS**

10-12 One Semester 1 Credit

COURSE DESCRIPTION: This course is an introduction to various aspects of computer design. Students will utilize several graphics and design programs. They will learn how to save graphics in multiple formats for various uses.

**6090**

**WEB PAGE DESIGN**

10-12 One Semester 1 Credit **RECOMMENDED:** computer graphics course #6089

COURSE DESCRIPTION: This course is an introduction to the theory and application of web page design. Students will produce several different types of web pages. This hands-on course will cover purpose, design concepts and creation of web pages. Students will study the do's and don'ts of web page design by analyzing a variety of web pages and creating multiple web sites.

**8051A**

**SERVICE/HELPING**

**8051B**

9-12 Full Year 1 Credit = 150 hours of service (up to 2 credits)

COURSE DESCRIPTION: Students may choose or be assigned to a meaningful service project. Students will learn the value of helping others through their service. Students may complete the service project during after-school hours or they may schedule their service project during a regular class period. 9<sup>th</sup>-11<sup>th</sup> grade students may take the course opposite their P. E. days if they are completing their service project during the school day. Seniors may take that course for one full class period as long as the student has satisfied their P.E. credit. Service projects may include: assisting teachers, mentoring, tutoring, volunteering in the community or elementary buildings, or helping office personnel. Prior approval on service projects must be acquired prior to each semester. Throughout the semester, each student will be required to record and turn in their volunteer hours for that semester. A minimum of 300 hours are needed to receive the silver cord for service at graduation.

**AREAS OF STUDY:**

1. self-awareness
2. communications skills
3. assets and deficits
4. team building
5. the value of service

**8270A PRODUCTION MEDIA**

**8270B** 09-12 Full Year 2 Credits

**PREREQ:** Teacher approval for 2<sup>nd</sup> year.

**COURSE DESCRIPTION:** This class is responsible for organizing, filming, recording, editing, and producing video and audio presentations. Students will also work with computer applications to design graphics, announcements, and storyboards. Students must be able to goal set in order to meet deadlines. **Each quarter, students are required to serve the community by filming events outside of school hours.** Students will need to leave campus during school hours for some project assignments **NOTE:** This class may be taken more than one year for additional elective credits.

**AREAS OF STUDY:**

1. video filming and editing
2. audio recording and editing
3. interviewing
4. overall composition
5. oral and visual presentation
6. writing and research

**8071A EXTENDED LEARNING PROGRAM (ELP)**

**8071B** 9-12 Full Year

**COURSE DESCRIPTION:** Students will have the opportunity to experience academic competition. Students may apply to the instructor to be a part of the Extended Learning Program (ELP). Students will propose their own plan of study if they wish to pursue an academic credit.

**AREAS OF STUDY:**

1. enrichment opportunities
2. Advanced Placement (See Mrs. Lem for a list of A. P. courses)
3. A. P. testing

**8272 ANIMATION**

9-12 ONE SEMESTER 1 CREDIT

**Course Description:** This animation course emphasizes script writing and editing, Storyboarding, Animatics, Voice Acting and Recording, and Technology skills. Unleash your creativity. (This course is based entirely in animation. If you are interested in other types of film as well, see the production media course description.)

**8273 ADVANCED ANIMATION**

9-12 ONE SEMESTER 1 CREDIT

**Prerequisite:** Animation 8272

**Course Description:** Continuation of the 1st semester of Animation with the addition of multiple characters, screens, and advanced editing.

## ART DEPARTMENT

### 5070A ART I

5070B 9-12 Full Year 2 Credits

**COURSE DESCRIPTION:** Want to learn how to think, work, and function like a real artist? Then this class is for you! Increase your art knowledge and skills through skill-building activities, and then develop your creativity and problem-solving skills designing independent projects with your own ideas. This is a yearlong class divided into two semesters. Students can expect to work with a combination of both 2D and 3D materials, including all drawing materials, ink, printing, acrylic and watercolor paints, paper mache, cardboard, collage, and clay. Emphasis will be put on collectively maintaining the studio space as well as creating a digital portfolio.

Materials List: 9x12 spiral bound sketchbook with hard or plastic cover. No gummed edge sketch books, please.

### 5071A ART II

5071B 10-12 Full Year 2 Credits

**Prerequisite:** 5070 A&B

**COURSE DESCRIPTION:** This class is an intermediate art course, to follow ART I. It is a yearlong class divided into two semesters. Increase your independent art making abilities through the studio habits of mind. Students can expect to work with a combination of both 2D and 3D materials, including all drawing materials, ink, printing, acrylic and watercolor paints, paper mache, cardboard, collage, and clay, with a focus on their favorite art materials. Emphasis will be put on collectively maintaining the studio space, creating a digital portfolio, and participating in critiques.

Materials List: 9x12 spiral bound sketchbook with hard or plastic cover. No gummed edge sketch books, please.

### 5072A CERAMICS I

5072B 9-12 Full Year 2 Credits

**COURSE DESCRIPTION:** Students will expand knowledge of ceramics by splitting their time hand building and throwing on the potter's wheel. This is a yearlong class divided into two semesters. Techniques and ideas scaffold, making it necessary to begin first semester. Much practice will be spent on centering and throwing cylinders, bowls, and vase forms.. Off the wheel, we will explore molds, slab, coil, pinch construction, and free sculpting. Students will learn to wedge and condition clay as well as firing and glazing methods. Emphasis will be put on collectively maintaining the studio space, creating a digital portfolio, and videos that document our progress. Class will include a raku firing, which includes a field trip to CASA in Ames.

Materials: Apron or large button down shirt, old towel, 1 qt bucket

### 5078A CERAMICS II

5078B 10-12 Full Year 2 Credits

**Prerequisite:** 5072 A&B

**COURSE DESCRIPTION:** Potters will continue to expand their knowledge and skills in clay. Focus will be on advanced wheel techniques, thrown and altered forms, and sculpture, as well as improving on finishing (glazing) techniques. Potters will expand their glaze knowledge by mixing, testing, and maintaining studio glazes. Class will include a raku firing, which includes a field trip to CASA in Ames.

Materials: Same as Ceramics I

### 5080A PHOTOGRAPHY I

5080B 9-12 Full Year 2 Credits

**COURSE DESCRIPTION:** Want to know how to get those Instagram-worthy shots of your real life? Students will learn the basics of composition and shooting techniques, as well as digital SLR camera use. We will explore experimenting with composition through the rule of thirds, framing, and elements/principles of design. Students will also learn how to shoot in manual mode by adjusting the aperture, shutter speed, and ISO. Adobe Photoshop will be the primary program for editing. Emphasis will be put on creating a productive classroom environment, digital portfolio, and participating in critiques.

Materials: DSLR Camera is highly recommended. But not required: See instructor for questions.

### 5074A INDEPENDENT STUDY (ART 2-D, 3-D or PHOTOGRAPHY)

5074B 11-12 1 semester 1 Credit

**PREREQUISITES:** (2D) - ART I, II, III, (3D)-Ceramics I, II, **Photography** - Photography I

Interested students will need approval from instructor prior to scheduling this course. Students will need to declare an area of study (2D, Ceramics, Photography), create a timeline including projects and outcomes for the semester. Students may choose one or two semesters. Please keep in mind projects need to be challenging and bolster your body of work. It is an expectation that students enter All-State, NCECA, or the Scholastic Art Competition.

Emphasis will be put on collectively maintaining the studio space, creating a digital portfolio and contest participation. Students are responsible for paying for contest entry fees, approx. \$25, and providing materials above and beyond regular art supply.

### 5086A ART III

5086B 11-12 Full Year 2 Credits

**Prerequisite :** 5070 A&B and 5071

**COURSE DESCRIPTION:** This class is for students who have already taken ART I and II, would like to learn more techniques and art movements. It is a yearlong class divided into two semesters. Students will focus on refining studio skills, creating work, developing a portfolio, as well as exploring careers in the arts. Emphasis will be put on collectively maintaining the studio space, creating a digital portfolio, and participating in critiques.

Materials List: 9x12 spiral bound sketchbook with hard or plastic cover. No gummed edge sketch books, please. Any special art supplies that you want that are not provided in the studio.



## **FINANCIAL LITERACY**

2040 MONEY SENSE (Juniors/Seniors may use as Math credit through 2021)  
11-12 (Required)      One Semester      1 Credit

**COURSE DESCRIPTION:** This financial literacy class will cover many topics associated with the use and misuse of money. One of the goals of this class is to inform students of some of the financial pitfalls and springboards that are out there in the “real world”. Students will be required to discuss many topics with their parents/guardians but are not required to bring this information back to class for discussion. Students will be expected to write numerous short papers as well as a research paper and presentation. **Seniors will be given priority scheduling in this class.**

Topics covered include, but are not limited to:

Areas of Study:

1. Budgeting
2. Checking/debit accounts
3. Credit
4. Financial fraud and identity theft
5. Credit card usage
6. taxes
7. saving strategies
8. loans/applications
9. large purchases
10. many different types of investing

# **FOREIGN LANGUAGE DEPARTMENT**

## **5051B Spanish I**

**5051A** 9-12 Full Year 2 Credits

**COURSE DESCRIPTION:** Students will learn basic vocabulary and conversational Spanish. Students will learn grammar and sentence structure in a natural, comprehensible way. Students will develop writing, speaking, listening and reading skills through daily activities and group work.

**AREAS OF STUDY:**

- |  |                    |                       |
|--|--------------------|-----------------------|
| 1. Adjectives  | 4. Pronunciation   | 6. Rules of Grammar   |
| 2. High-Frequency Vocabulary                         | 5. Reflexive Verbs | 7. Basic Conversation |
| 3. Regular and Irregular Verbs of the Present Tense. |                    | 8. Culture            |

## **5052A Spanish II**

**5052B** 10-12 Full Year 2 Credits **PREREQUISITE:** Successful completion of 5051A&B

**COURSE DESCRIPTION:** Students will review basic conversational grammar and vocabulary from their first year and begin a formal study of grammar, mainly verb forms in the present and past tenses. There is an emphasis on vocabulary and use of grammar in a variety of contexts. Students will participate in a variety of activities that develop skills in speaking, listening, reading and writing and cultural understanding.

**AREAS OF STUDY:**

- |                                 |                                |            |
|---------------------------------|--------------------------------|------------|
| 1. Review of Basic Conversation | 4. Regular and Irregular Verbs | 7. Culture |
| 2. High-Frequency Vocabulary    | of the Present and Past Tenses |            |
| Indirect Object Pronouns        | 5. Reflexive Verbs             |            |
| 3. Rules of Grammar             | 6. Adjectives                  |            |

## **5053A Spanish III**

**5053B** 11-12 Full Year 2 Credits **PREREQUISITE:** Successful completion of 5052A&B

**COURSE DESCRIPTION:** Students will review grammar from the previous Spanish levels. They will continue to increase their vocabulary, but more emphasis is placed on conversation and reading. Wide varieties of tenses are learned and students are required to utilize their knowledge from previous years and apply them to their own communication. Students will participate in a variety of activities that develop skills in speaking, listening, reading and writing.

**AREAS OF STUDY:**

- |                                    |                                       |
|------------------------------------|---------------------------------------|
| 1. Review of Previous Verb Tenses. | 5. Future and Conditional Verb Tenses |
| 2. High-Frequency Vocabulary       | 6. Rules of Grammar                   |
| 3. Commands                        | 7. Basic Conversation                 |
| 4. Pronunciation                   | 8. Culture                            |

## **5054A SPANISH IV**

**5054B** 12 Full Year 2 Credits **PREREQUISITE:** Successful completion of 5053A&B

**COURSE DESCRIPTION:** Students review grammar and verb forms from Spanish I - III. Students continue to study the compound verb formations. Students will explore writing, speaking, listening and reading through cultural-based thematic units in order to advance language skills.

**AREAS OF STUDY:**

- |                                   |                        |
|-----------------------------------|------------------------|
| 1. Review of all major verb forms | 4. History and Culture |
| 2. Compound verb forms            | 5. Spanish Literature  |
| 3. Advanced rules of grammar      |                        |

## **5054C SPANISH IV S2**

**FLS241** (DMACC) Intermediate Spanish I\*\*  
12 2<sup>nd</sup> sem only 1 Credits

**PREREQUISITE:** Successful completion of 5053 A&B

**COURSE DESCRIPTION:** Spanish IV offers a balanced program of conversation, composition, grammar, and culture. Literature and cultural studies are used as the foundation of the course to advance students' language skills. Students continue to develop their skills in communication. Spanish IV units focus on the history and culture of Spanish-speaking countries.

**AREAS OF STUDY**

- |                        |                                |
|------------------------|--------------------------------|
| 1. Present Subjunctive | 5. Imperfect Subjunctive       |
| 2. Present Perfect     | 6. Advanced Grammar Constructs |
| 3. Pluperfect          | 7. Literature                  |
| 4. Future Perfect      | 8. History and Culture         |

**\*\*This Spanish course is a dual credit course with DMACC second semester. Students will earn 1 Ballard credit for successful completion of the first semester. Students will receive 1 Ballard credit and 4 DMACC credits upon successful completion of the second semester. Ms. Doland will have DMACC paperwork to fill out at a later date.**

# INDUSTRIAL TECHNOLOGY DEPARTMENT

## 7084 INDUSTRIAL TECHNOLOGY

9-12 Fall Semester 1 Credit

**COURSE DESCRIPTION:** In this basic woods course, students will be introduced to the machines and tools used to create wood products. They will learn machine processes and safety. Students will study a wide range of topics and focus on the integration of technology. Students will learn the safety precautions and procedures of the lab classroom and will gain critical thinking and problem solving skills while developing five projects. Limit 20 students per section.

**AREAS OF STUDY:**

- |                |                     |                         |
|----------------|---------------------|-------------------------|
| 1. Measurement | 3. Power Tools      | 5. Materials processing |
| 2. Hand tools  | 4. Project planning | 6. Design process       |

## 7094 CONSTRUCTION BASICS

9-12 Spring Semester 1 Credit Recommended: Industrial Tech

**COURSE DESCRIPTION:** In this basic construction course, students will be introduced to the tools and processes of the construction industry. They will learn basic construction skills that will benefit them as a home owner or allow them to pursue a construction career. Students will learn how to use basic tools to complete simple construction projects. There will be a focus on construction careers and work place best practices. Students will gain problem solving and critical thinking skills that will focus on the utilization of course concepts. The focus of the course will be on safe practices. Limit 20 students per section.

**AREAS OF STUDY:**

- |                       |               |                     |
|-----------------------|---------------|---------------------|
| 1. Construction tools | 3. Framing    | 5. Plumbing         |
| 2. Concrete           | 4. Electrical | 6. Career awareness |

## 7095 PROJECT DESIGN AND CONSTRUCTION

10-12 Fall Semester 1 Credit **Prerequisite:** Industrial Tech

**COURSE DESCRIPTION:** In this woods-based course students will use CAD (computer-aided drafting) software to design projects. They will then create those projects in the lab. This CAD and Woods integrated class is designed to introduce students to the design and build world. Students will learn CAD principles and utilize safe work practices. Students will design and build personal projects in order gain confidence when using the software and the equipment. Students will gain problem solving and critical thinking skills that will focus on the utilization of course concepts. Limit 20 students per section.

**AREAS OF STUDY:**

- |                       |               |                         |
|-----------------------|---------------|-------------------------|
| 1. Design             | 3. Tool usage | 5. Product development  |
| 2. Project assemblies | 4. Joinery    | 6. Finishing techniques |

## 7090 PRODUCT DEVELOPMENT

10-12 Spring Semester 1 Credit **Prerequisite:** Project Design and Construction

**COURSE DESCRIPTION:** In this woods-based class, students will learn industry management practices within a simulated product development environment. Students will participate in activities related to development functions such as financing, designing, marketing, selling and producing a product. Students will gain problem solving and critical thinking skills while performing a variety of industrial processes. The focus of the course will be on the design, build, and sale of a unique product(s.) Limit 20 students per section.

**AREAS OF STUDY:**

- |               |             |                |
|---------------|-------------|----------------|
| 1. Processing | 3. Design   | 5. Production  |
| 2. Marketing  | 4. Assembly | 6. Development |

## 7096A CARPENTRY ENTERPRISE

7096B 11-12 1 semester 1 Credit **Prerequisite:** Product Development **and** Instructor Approval

This class can be taken 1<sup>st</sup>, 2<sup>nd</sup> or both semesters.

**COURSE DESCRIPTION:** In this advanced woods class, students will produce contracted projects. There will be three main functions of this course. Function one is that students will propose personal projects that they design, budget, and construct. The second function is that students will operate a class business where they build and sell unique products. The final function is that they will complete requested work from the community. This course is designed to further student's knowledge of woodworking, project planning, and work place best practices. Students may have the opportunity to work with other materials, such as metals, plastics and glass. Students will gain advanced problem solving and critical thinking skills that focus on utilization of course concepts. Limit 15 students per section.

**AREAS OF STUDY:**

- |                        |                        |                         |
|------------------------|------------------------|-------------------------|
| 1. Joinery             | 3. Woods Manufacturing | 5. Finishing techniques |
| 2. Business operations | 4. Design              | 6. Product development  |

7097 ARCHITECTURAL STUDIES

9-12 Fall Semester 1 Credit

**COURSE DESCRIPTION:** In this architecture based course, students will take on the role of an architectural designer. Students will learn architectural CAD processes by working with AutoDesk Revit Software. They will learn about the design process and common methods used in the architectural field. There will be a focus on architectural careers and work place best practices. Students will complete projects designed to build confidence using the software. Students will develop problem solving, research, and critical thinking skills. Limit 30 students per section.

AREAS OF STUDY:

- |                                  |                          |                          |
|----------------------------------|--------------------------|--------------------------|
| 1. Residential design techniques | 3. Designing floor plans | 5. Presentation drawings |
| 2. Structural systems            | 4. Detailing methods     | 6. Career awareness      |

7098 ENGINEERING STUDIES

10-12 Spring Semester 1 credit

**Prerequisite:** Construction Basics **and** Instructor Approval

**COURSE DESCRIPTION:** In this engineering based course, students will take on the role of an engineer and be exposed to various types of engineering. Students will learn engineering CAD processes by working with AutoDesk Inventor Software. They will dig into the engineering design process and common methods used in engineering fields. There will a variety of hands-on and design-based projects. There will be a focus on engineering careers and work place best practices. They will work individually and in teams to create solutions to real-world problems. Students will develop problem solving, research, and critical thinking skills. Limit 30 students per section.

AREAS OF STUDY:

- |                                  |                     |
|----------------------------------|---------------------|
| 1. engineering design techniques | 4. drawing details  |
| 2. engineering service areas     | 5. concept drawings |
| 3. part creation                 | 6. career awareness |

7091 INDUSTRIAL TECHNOLOGY INDEPENDENT STUDY

12 Either Semester 1 Credit

**Prerequisite:** Completion of at least six (6) Ind. Tech courses, application **and** instructor approval

In this independent study course, students will the opportunity to further their study of industrial technology. Students will contract with the teacher to develop independent projects that utilize skills gained throughout their previous industrial technology studies. Students will propose projects to the instructor and meet established deadlines. Students will gain problem solving and critical thinking skills. The focus of the course will be on advanced skills and processes.

POSSIBLE AREAS OF STUDY:

- |           |              |
|-----------|--------------|
| 1. Woods  | 4. Finishing |
| 2. Metals | 5. Cabinetry |
| 3. Design | 6. Joinery   |

7092A CONSTRUCTION TECHNOLOGY

7092B 11-12 Full Year 2 Credits Prerequisite: Construction Basics **and** Instructor Approval

**COURSE DESCRIPTION:** In this construction application course, students will have the opportunity to learn more advanced construction principles. Students will apply skills learned in previous courses in order to research, design, plan and construct a project. Students will work together on a class project and on various requested projects. Students will further their knowledge of construction principles. There will be a focus on construction careers and work place best practices. Emphasis will be put on safe and appropriate tool usage and work behaviors. Limit 15 students.

AREAS OF STUDY:

- |                           |                                |
|---------------------------|--------------------------------|
| 1. Jobsite safety         | 4. Building codes              |
| 2. Construction design    | 5. Construction best practices |
| 3. Construction materials | 6. Career awareness            |

# **LANGUAGE ARTS DEPARTMENT**

1041A

1041B SURVEY OF ENGLISH

9 Full Year 2 Credits

COURSE DESCRIPTION: This course is designed to fulfill the requirement of freshman-level English. It will include the areas of reading, writing, speaking, and listening. (Required for Honors Diploma.)

AREAS OF STUDY:

- |  |                                |
|--|--------------------------------|
| 1. General literature  | 4. Grammar/usage/mechanics     |
| 2. Writing process and styles                                  | 5. Informal and formal writing |
| 3. Speaking, listening, and non-verbal<br>Communication skills | 6. Research skills             |
|  | 7. Vocabulary                  |

1040A

1040B ADVANCED SURVEY OF ENGLISH (9<sup>TH</sup> GRADE HONORS ENGLISH)

9 Full Year 2 Credits

COURSE DESCRIPTION: This course is designed to fulfill the requirement of freshman-level English, working at a more in-depth, rigorous, independent, and advanced pace than the regular Survey of English course. For optimum success, it is highly recommended that students have maintained at least an "A" average in both semesters of 8th grade English and/or have their current English teacher's recommendation. It will include the areas of reading, writing, speaking, and listening.

AREAS OF STUDY:

- |  |                                |
|--|--------------------------------|
| 1. General literature  | 5. Informal and formal writing |
| 2. Writing process and styles                                  | 6. Research skills             |
| 3. Speaking, listening, and non-verbal<br>communication skills | 7. Vocabulary                  |
| 4. Grammar/usage/mechanics                                     |                                |

1043A

1043B AMERICAN STUDIES AND COMPOSITION

10 Full Year 2 Credits

COURSE DESCRIPTION: This course is designed to fulfill the requirements of sophomore-level English. It will include areas of writing, reading, speaking, and listening. (Required for Honors Diploma.)

AREAS OF STUDY:

- |                                     |                                  |
|-------------------------------------|----------------------------------|
| 1. American literature              | 4. Character analysis            |
| 2. Reasoning and persuasive writing | 5. Vocabulary                    |
| 3. Speaking and listening           | 6. Grammar, usage, and mechanics |

1044A

1044B ADVANCED AMERICAN STUDIES AND COMPOSITION (10<sup>TH</sup> GRADE HONORS)

10 Full Year 2 credits

COURSE DESCRIPTION: This course is designed to dive deeply into literary and rhetorical analysis of America's literary heritage. Students will be working at a more in-depth, rigorous, independent, and advanced pace than the regular American Studies course. For optimum success, it is highly recommended that students have maintained at least an "A" average in both semesters of 9th grade English and/or have their current English teacher's recommendation.

AREAS OF STUDY:

- |                        |                                  |
|------------------------|----------------------------------|
| 1. American literature | 4. Writing                       |
| 2. Literary analysis   | 5. Speaking and listening        |
| 3. Rhetorical analysis | 6. Grammar, usage, and mechanics |

1042A  
1042B WORLD LITERATURE AND COMPOSITION  
11 Full Year 2 Credits

**COURSE DESCRIPTION:** This course is designed to fulfill the requirements of junior-level English. It will include the areas of writing, reading, speaking, and listening, and it will be presented in a reading and writing workshop format. (Required for Honors Diploma.)

**AREAS OF STUDY:**

1. World Literature (one whole-class novel per quarter)
2. Writing process and styles:
3. Speaking, listening, and non-verbal communication skills
4. Grammar/usage/mechanics
5. Informal and formal writing
6. Research skills
7. Vocabulary
8. Independent reading

1045A  
1045B SENIOR ENGLISH  
12 Full Year 2 Credits

**COURSE DESCRIPTION:** This course prepares students to enter college or their careers. Students will confront complex non-fiction texts and classic and contemporary literature, asking questions about how these works impact life in the twenty-first century. Students will respond to these texts by forming and articulating ideas through writing and speaking. Additionally, students will focus on the writing and speaking skills necessary for participating in college, the labor force, and our democracy.

**AREAS OF STUDY:**

1. Classic and contemporary literature
2. Formal and informal writing
3. Grammar/usage/mechanics
4. Critical reading
5. Research skills
6. Speaking skills

1053 CREATIVE WRITING  
10-12 One Semester 1 Credit

**COURSE DESCRIPTION:** This course is designed for students who have mastered basic writing skills and are interested in a writing workshop atmosphere to enhance creative thought. Students will explore various forms of writing with the purpose of understanding technique and style in their own writing processes. LIMIT OF 20 STUDENTS.

1056 \*THEATRE A  
10-12 One Semester 1 Credit

**COURSE DESCRIPTION:** This course is an introduction to theatre history, theatre design, technical elements of theatre and basic principles of acting. Students will memorize weekly quotes/monologues to be delivered for the class. Other major areas of instruction include voice and articulation, pantomime, stage movement, improvisation, role analysis, character development, scene study, performance techniques, rehearsal skills and self-evaluation. Outside of school, involvement in productions is expected.

1057 INDIVIDUALIZED READING  
10-12 One Semester 1 Credit

**COURSE DESCRIPTION:** This course will cover a variety of literary genres, which may include historical fiction, adventure, science fiction, biographies, or poetry. Students will be assessed over their understanding of literary elements within the texts.

1060 \*\*ADVANCED THEATRE  
11-12 One Semester 1 Credit

**\*\*Students must have a "C" or higher in Theatre A or instructor approval.**  
**COURSE DESCRIPTION:** This course is to be chosen if the student has previously taken Theatre A. Students will spend much more time developing their acting skills through scene development, group performance/interaction, and role analysis. They may be expected to participate in extra-curricular speech and/or drama as a part of their class grade.

LIT 101 AP Literature and Composition/DMACC Literature 101: Introduction to Literature

12 First Semester 1 Credit/3 DMACC Credits

COURSE DESCRIPTION: This rigorous, college-level literature course offers an introduction to the study of poetry, fiction, and drama, emphasizing analytical writing, interpretation, and basic critical approaches. Students will read a range of authors that span cultural and ethnic groups across history.

AREAS OF STUDY

- |           |                      |
|-----------|----------------------|
| 1. Poetry | 5. Literary Analysis |
| 2. Plays  | 6. Critical Theory   |
| 3. Novels |                      |

LIT 185 AP Literature and Composition/DMACC Literature 185: Contemporary Literature

12 Second Semester 1 Credit/3 DMACC Credits

COURSE DESCRIPTION: Introduction to the study and appreciation of significant contemporary writers and literary movements since 1945. The relationship of current literature to society and basic critical approaches are emphasized.

AREAS OF STUDY:

- |                               |                                 |
|-------------------------------|---------------------------------|
| 1. Short Stories              | 4. The Fiction of War Book Club |
| 2. Ernest Hemingway Book Club | 5. Literary Theory              |
| 3. 1984                       |                                 |

ENG 105

ENG 106 AP Language/Composition/DMACC 105 & 106: Composition I & II

11-12 Full Year 2 Credits **Prerequisite: 1044A&B or 1042A&B**

COURSE DESCRIPTION: This rigorous, college-level composition course requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods.

AREAS OF STUDY:

- |                            |                    |
|----------------------------|--------------------|
| 1. Writing process         | 5. Rhetoric        |
| 2. Critical reading        | 6. Research skills |
| 3. Grammar/usage/mechanics | 7. Image analysis  |

SPC 101 DMACC – FUNDAMENTALS OF ORAL COMMUNICATION

(Taught in the Ballard classroom during the school year.)

11-12 One Semester 1 HS Credit / 3 DMACC Credits

DMACC Speech

This course covers many aspects of human communication.

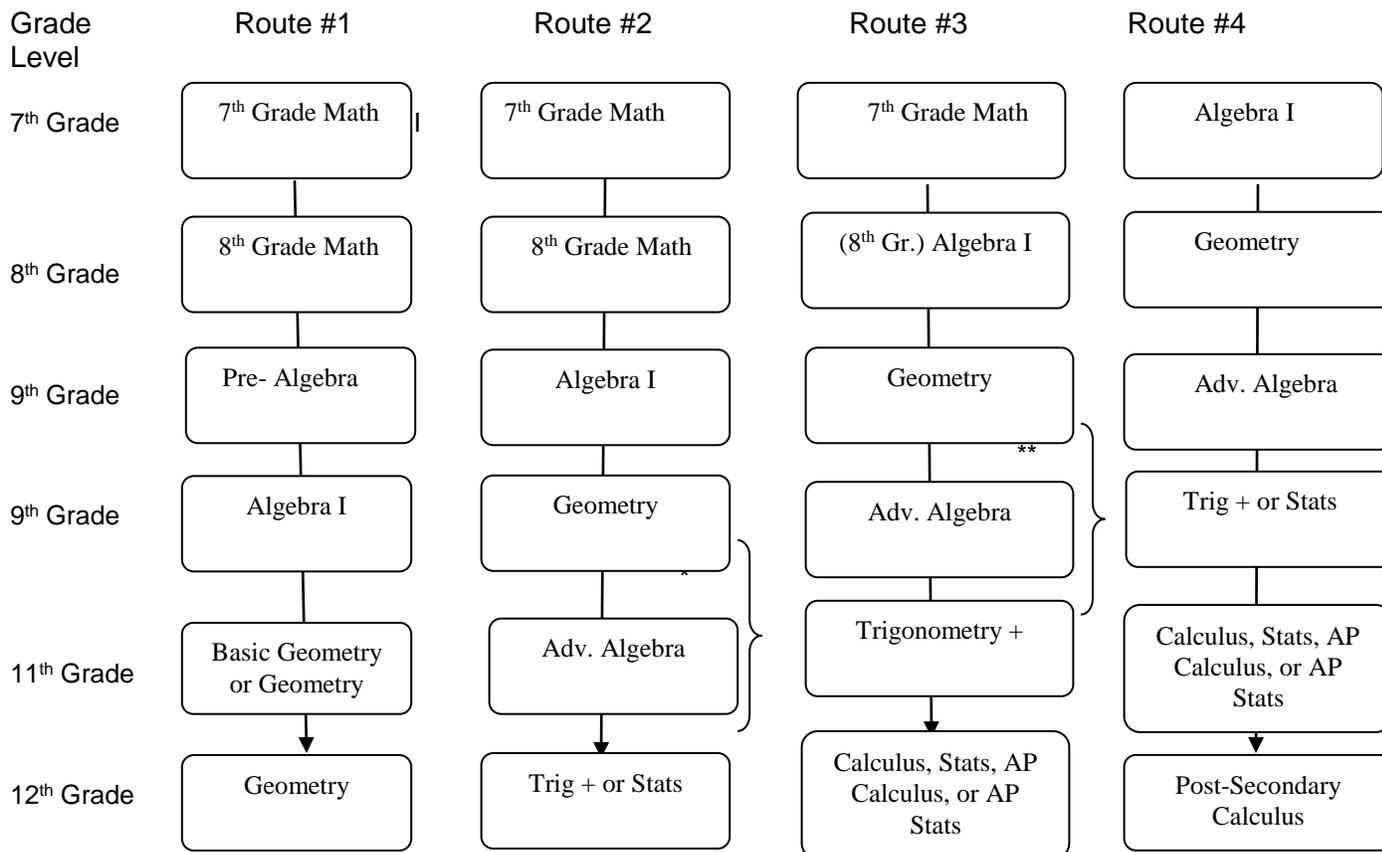
**Course Competencies:**

- Explain the transactional nature of the communication process
- Explain how perceptions influence human communication
- Describe relationships between verbal and nonverbal messages in communication
- Demonstrate appropriate language in a variety of contexts
- Demonstrate ways cultural diversity affects interpersonal communication and public speaking Demonstrate active listening skills
- Analyze speeches from a listener's point of view
- Analyze how communication functions in relationships
- Identify characteristics and functions of small groups
- Participate in problem-solving and/or decision-making groups
- Identify communication behaviors characteristic of roles in groups
- Develop a topic according to purpose and audience
- Organize information and ideas appropriately
- Develop main ideas specifically and coherently
- Deliver informative and persuasive speeches in an extemporaneous style

\*The above-tagged courses receive Ballard English credits but are not NCAA or RAI approved courses. See page 15 for a full list of approved RAI courses

# MATHEMATICS DEPARTMENT

MATH FLOW CHART



**\*\*\*For students to be successful, the math department strongly advises that students follow the recommendations of the math teacher and the assessments given when choosing their course(s) for the following year.**

For students wanting to double up by taking geometry and advanced algebra, it is highly recommended, that for optimum success, they should have at least a “B” average in both semesters of algebra I and your current math teacher’s recommendation. \*\*\*

Students who choose route #4 are committed to taking Post-Secondary Calculus their senior year at ISU or DMACC. To do this, a student will miss 2 class periods of the regular school day. Be aware that this often presents a difficult choice that results in a student needing to drop electives that are important to them (band, choir, art, etc.) in order to fit in the core courses required for graduation. Transportation to DMACC or ISU is the responsibility of the student as well. The math department *strongly advises* that students not forego math their senior year prior to entering college.

2041A PRE-ALGEBRA

2041B 9-10 Full Year 2 Credits

COURSE DESCRIPTION: Pre-Algebra is a one year course that reviews basic mathematical concepts necessary to the algebra classroom. It then introduces basic concepts covered in algebra. This course is the first of three courses for students planning on attending a two-year tech college or lower after high school. It can also be used as a head start for those students who would like to take algebra, but need review of basic concepts first.

AREAS OF STUDY:

- |                               |   |
|-------------------------------|---|
| 1. Connections to algebra     | 4. Graphing linear equations and functions  |
| 2. Properties of real numbers | 5. Writing linear equations                 |
| 3. Solving linear equations   | 6. Solving and graphing linear inequalities |

2043A BASIC GEOMETRY

2043B 11-12 Full Year 2 Credits

COURSE DESCRIPTION: Basic geometry will provide students with knowledge of topics from geometry. This course is the third year of math for those students planning on attending a two-year tech college or lower after high school. Prerequisite for this course is algebra I. This course will not satisfy the requirements for most four year colleges.

AREAS OF STUDY:

- |                                     |                            |
|-------------------------------------|----------------------------|
| 1. Basics of geometry               | 5. Quadrilaterals          |
| 2. Segments and angles              | 6. Polygons and area       |
| 3. Parallel and perpendicular lines | 7. Surface area and volume |
| 4. Angle measures of triangles      | 8. Circles                 |

2046A ALGEBRA I

2046B 8-10 Full Year Credits

COURSE DESCRIPTION: This course is the beginning of the required 3-year sequence; algebra I, geometry, and algebra II that is also required by most colleges. A good use of adding, subtracting, multiplying and dividing of positive and negative numbers is important as well as the self-discipline to do daily assignments. A scientific calculator is required.

AREAS OF STUDY:

- |  |                                 |
|--|---------------------------------|
| 1. Functions                           | 5. Rational equations           |
| 2. Linear equations and inequalities   | 6. Radicals                     |
| 3. Graphing equations and inequalities | 7. Quadratics (if time permits) |
| 4. Factoring                           |                                 |

2047A GEOMETRY\*

2047B 9-11 Full Year 2 Credits

**RECOMMENDED:** course 2046

COURSE DESCRIPTION: This course is the second level of high school math for those students planning to attend a four-year college. A scientific calculator is required.

AREAS OF STUDY:

- |                                     |                                       |
|-------------------------------------|---------------------------------------|
| 1. Tools of geometry                | 7. Proportions & similarity           |
| 2. Reasoning and proof              | 8. Right triangles & trigonometry     |
| 3. Perpendicular and parallel lines | 9. Transformations & symmetry         |
| 4. Congruent triangles              | 10. Circles                           |
| 5. Relationships in triangles       | 11. Area of polygons and circles      |
| 6. Quadrilaterals                   | 12. Extending surface area and volume |
|                                     | 13. Probability & measurement         |

2048B ADVANCED ALGEBRA \*

2048A 9-12 Full Year 2 Credits

**RECOMMENDED:** course 2047

COURSE DESCRIPTION: This course builds on algebra I with more advanced levels on each topic. Therefore, success from that course is important. A graphing calculator is required. (Prefer TI-83 Plus, 84 or N-Spire, no Casio or TI-89)

AREAS OF STUDY:

- |                        |   |
|------------------------|---|
| 1. Linear functions    | 4. Polynomial functions                 |
| 2. Matrices            | 5. Exponential and logarithmic function |
| 3. Quadratic functions | 6. Rational functions                   |

**\* Students who plan to take advanced math courses such as Trigonometry and Calculus may need to double up in math. If a student needs to double up, they should plan to do it with geometry and advanced algebra. See the flow chart for additional information regarding “doubling up” in math. Must have written approval signed by a math teacher.**

2054B TRIGONOMETRY

2054A 11-12 Full Year 2 Credits **RECOMMENDED:** courses 2047 & 2048

COURSE DESCRIPTION: This course studies trigonometry 1st semester and pre-calculus topics during the 2nd semester. Students are encouraged to find the "why" of the material as well as the "how".

AREAS OF STUDY:

1. Angle measurements
2. Trig. ratios and applications
3. Trig. identities
4. Polar coordinates & complex numbers
5. Higher order equations
6. Series and sequences
7. Conic sections

2058B CALCULUS

2058A 12 Full Year 2 Credits **RECOMMENDED:** course 2054

COURSE DESCRIPTION: This course is equivalent to a first semester college Calculus course. Students who do well may try to test out of 1<sup>st</sup> semester calculus I in college.

AREAS OF STUDY:

1. Review of trig. and alg. topics
2. Limits of functions
3. Derivatives and applications
4. Implicit differentiation
5. Continuity
6. Related rates
7. Definite integral

2060A AP CALCULUS (This course is taught in the classroom at Ballard.)

2060B 12 Full Year 2 Credits **RECOMMENDED:** course 2054

COURSE DESCRIPTION: This course will cover the same topics as calculus, but will move at a quicker pace. Students who take this course will have the opportunity (but not required) to take the AP test. If a student achieves the necessary score on the AP test, they will earn college credit for Calculus I. Students who choose to take this course need to realize that because of time constraints they will be required to work more than usual outside of the class period on daily work and AP practice exams.

AREAS OF STUDY:

1. Review of Trig. And Alg. Topics
2. Limits of functions
3. Derivatives and applications
4. Implicit differentiation
5. Continuity
6. Related rates
7. Definite integral

2070A STATISTICS

2070B 12 Full Year 2 Credits **RECOMMENDED:** course 2048 A&B

COURSE DESCRIPTION: Statistics is a one-year course intended for students pursuing a four-year degree in business, humanities, science or other research-oriented fields of study. There will be numerous chances to connect the curriculum to real-life scenarios, including a final cumulative course project. Students should have a strong background in advanced algebra (2048 A&B) as well as a good work ethic and strong organizational skills.

AREAS OF STUDY:

1. Descriptive statistics
2. Probability
3. Discrete probability distributions
4. Normal probability distributions
5. Confidence intervals
6. Hypothesis testing with one and two samples
7. Correlation and regression
8. Chi-square tests and F-distribution
9. Nonparametric tests

2061A AP STATISTICS (This course is taught in the classroom at Ballard.)

2061B 9-12 Full Year 2 Credits **RECOMMENDED:** course 2048

The purpose of this course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes:

1. Exploring Data
2. Modeling Distributions of Data
3. Describing Relationships
4. Designing Studies
5. Probability
6. Testing a Claim
7. Sampling Distributions
8. Estimating with Confidence
9. Testing a Claim
10. Comparing Two Populations or Groups
11. Inference for Distributions of Categorical Data
12. Regression

Students should have a very strong background in Algebra, a good work ethic, the discipline to work outside of class and an appetite for crunching numbers and analyzing their results. Students who successfully complete the course and score well on the AP examination may receive credit and/or advance placement for a one-semester introductory college statistics course.

# MUSIC DEPARTMENT

9050A

9050B MUSIC THEORY

11-12 Full Year 2 Credits **RECOMMENDED:** Strong music background  
COURSE DESCRIPTION: Study of the elements that comprise the basics of how music is constructed and created. Students will be required to complete workbooks that step through the basic elements of music composition. This course is available only to juniors and seniors and must be approved by the instructor and the guidance counselor before enrollment.

AREAS OF STUDY:

1. Listening
2. History
3. theory
4. related arts

9055A ACADEMIC BAND

9055B 10-12 **2<sup>nd</sup> Semester Only** 1 Credit

**RECOMMENDED:** Junior High Band

9059B ACADEMIC BAND

9<sup>TH</sup> **2<sup>nd</sup> Semester Only** 1 Credit

Class meets every day.

COURSE DESCRIPTION: This course will provide a full credit for each semester of band and will affect student's cumulative GPA. Students will be graded based upon their attendance and performance in band including but not limited to, football games, pep rallies, concerts, and contests/festivals. Students will also be graded based upon their attendance in 2 monthly lessons during the concert band season and their general performance in our daily band rehearsals. These three major categories (Rehearsal Performance, Public Performance, and Lessons) make up three equal parts of the student grade. Lessons with Ballard teachers may be bypassed if parents/student have arranged private instructions on their instrument outside of the school.

It is important to note that attendance is compulsory at all band rehearsals unless specific arrangements have been made with the primary band teacher. Marching Band rehearsals will run every morning during the marching season (generally from start of school to October) starting at 7am and running through first period.

A brief final will be given at the end of every semester.

9065A

9065B ACADEMIC CONCERT CHOIR

9-12 Full Year 1 Credit each semester

Class meets every day.

COURSE DESCRIPTION: Open to all students who enjoy singing in grades 9-12. The Concert Choir learns musical literacy and performs music of many different styles throughout the school year. In addition, students have performance opportunities in various other honor choirs including the RRC Honor Festival, Collegiate Honor Choirs, and the Iowa All-State Choir. The Vocal Music Department also offers extracurricular opportunities in Jazz and Show Choirs. Voice lessons are an important part of the vocal department; students are required to complete 1 voice lesson per academic quarter. (4 total) Expectations of quality music performed at the highest degree of proficiency demands each student works to the best of his/her ability to achieve success.

**All performances are required, graded events.**

Students are expected to:

1. Be on time and prepared for each rehearsal/class period.
2. Show an exemplary attitude at all times
3. Demonstrate correct physical singing – posture, breathing, holding the music
4. Develop sight-reading abilities with sheet music
5. Develop an understanding and familiarity of music terms
6. Attend all daily rehearsals and performances
7. Perform music from memory
8. Conduct themselves according to the discipline policies of the BHS Handbook

AREAS OF STUDY:

1. Music fundamentals
2. Individual Vocal Technique through lessons
3. Vowels, Consonants, basic breathing, and tone placement
4. Blend and balance
5. Ear Training & Sight-Singing
6. Musical styles
7. Tone and diction
8. Performance practices and standards

9068A

9068B ACADEMIC TREBLE CHOIR

9

Full Year

1 Credit each semester

Class meets every day.

**COURSE DESCRIPTION:** Treble Choir is open to all 9<sup>th</sup> grade singers with treble voices. The Treble Choir learns musical literacy and performs music of many different styles throughout the school year. In addition, students have performance opportunities in various other honor choirs including the RRC Honor Festival, Collegiate Honor Choirs, and the Iowa All-State Choir. The Vocal Music Department also offers extracurricular opportunities in Jazz and Show Choirs. Voice lessons are an important part of vocal development; students are required to complete 1 voice lesson per academic quarter. (4 total) Expectations of quality music performed at the highest degree of proficiency demand each student works to the best of his/her ability to achieve success.

**All performances are required, graded events.**

Students are expected to:

1. Be on time and prepared for each rehearsal/class period.
2. Show an exemplary attitude at all times
3. Demonstrate correct physical singing – posture, breathing, holding the music
4. Develop sight-reading abilities with sheet music
5. Develop an understanding and familiarity of music terms
6. Attend all daily rehearsals and performances
7. Perform music from memory
8. Conduct themselves according to the discipline policies of the BHS Handbook

**AREAS OF STUDY:**

1. Music fundamentals
2. Individual Vocal Technique through lessons
3. Vowels, Consonants, basic breathing, and tone placement
4. Blend and balance
5. Ear Training & Sight-Singing
6. Musical styles
7. Tone and diction
8. Performance practices and standards

# PHYSICAL EDUCATION DEPARTMENT

Physical education is required for all students, grades 9-12. Students will be involved in a variety of activities from weight training and fitness to team sport and individual sport activities. Overall fitness is the focus of our physical education experience. Students will have the opportunity to choose by semester which level of activity in which they would like to participate. Students may choose from the following semester classes by either "mixing or matching" courses or elect to remain in one course for both semesters.

## 9085A

### 9085B EARLY BIRD P.E.

9-12 Semester .25 Credit

## 9281A

### 9281B PHYSICAL EDUCATION (meets every other day on rotation days 1, 3, 5 and 2, 4, 6)

9-12 Semester .25 Credit

COURSE DESCRIPTION: This P. E. class meets every other day on rotation days 1, 3, 5 or 2, 4, 6. The students will be involved in lifetime activities, team sports (badminton, volleyball, basketball, softball, etc.), and cardiovascular activities (fitness, testing, weightlifting unit).

## 9282A

### 9282B WEIGHTLIFTING (meets every day)

9-12 Semester .50 Credit

COURSE DESCRIPTION: This class meets every day. This class will have up to four days of weightlifting. Also includes high-level fitness, toning, quickness, stamina and increasing cardio vascular levels for students.

## 9289A

### 9289B ACADEMIC WEIGHTLIFTING (meets every day)

9-12 Semester 1 Credit

COURSE DESCRIPTION: This class will meet every day. This class will have up to four days of weightlifting. Also includes high-level fitness, toning, quickness, stamina and increasing cardio vascular levels for students. The students will be given written tests each semester on muscles, nutrition and other fitness topics.

## 7061

### HEALTH A – 1<sup>st</sup> Semester

### HEALTH B – 2<sup>nd</sup> Semester

9-12 One Semester each 1 credit each

COURSE DESCRIPTION: This is a comprehensive health class for 9-12. This class is two semesters but **may be taken either semester or both.**

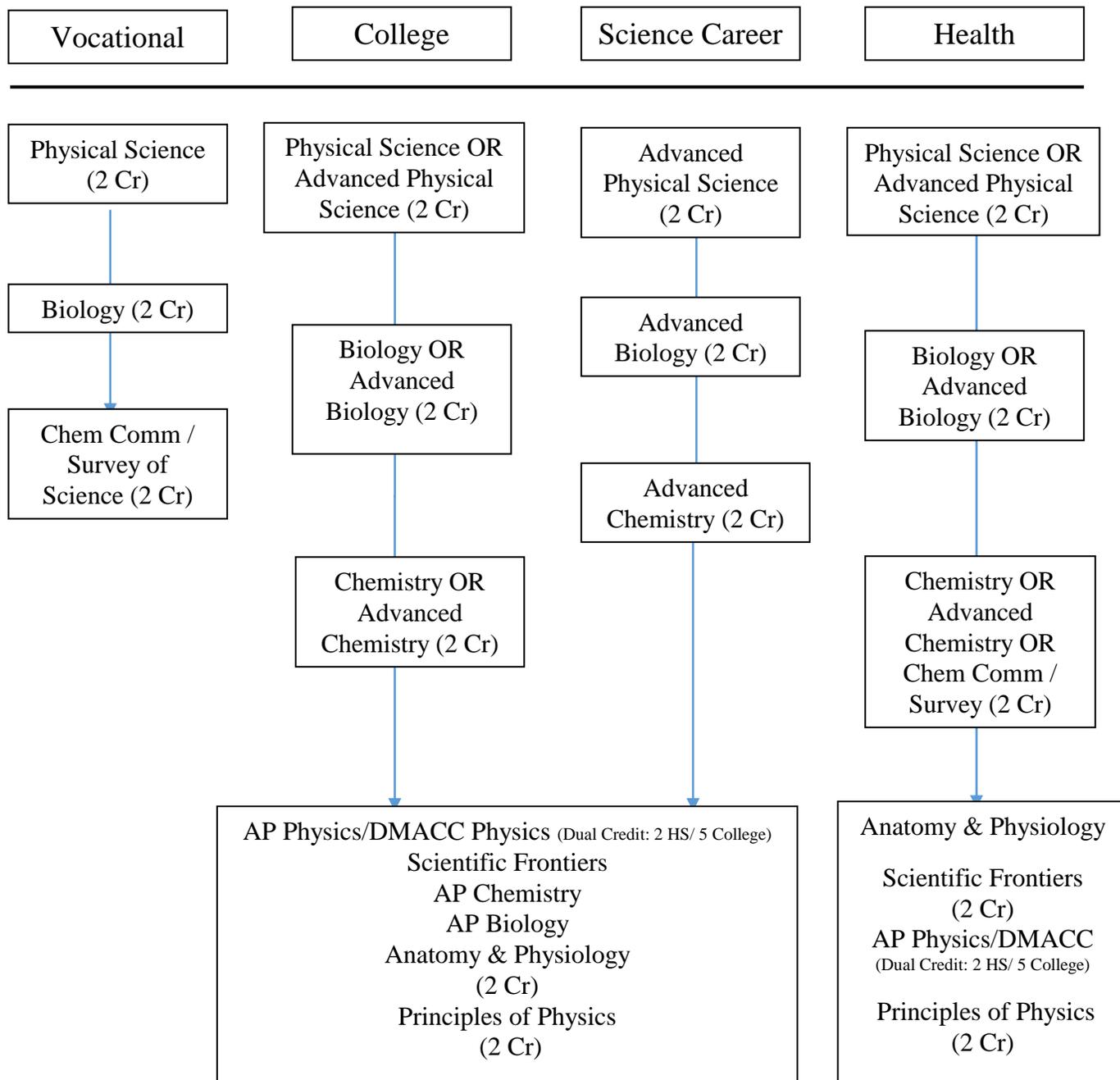
#### AREAS OF STUDY:

- |                              |  |
|------------------------------|--|
| 1. Health skills             | 1. Personal Health & Physical Activity |
| 2. Mental & Emotional Health | 2. Alcohol, tobacco & other drugs      |
| 3. Family & Social Health    | 3. Communicable & Chronic Disease      |
| 4. Growth & Development      | 4. Consumer & Community Health         |
| 5. Nutrition                 | 5. Environmental Health                |
|                              | 6. Injury Prevention & Personal Safety |

# SCIENCE DEPARTMENT

## Recommended Science Flowchart

Starting with the Class of 2019: 3 years required to include (Physical Science, Biology, and a Chemistry class of choice.)



**3041A PHYSICAL SCIENCE****3041B** 9 Full Year 2 Credits

**COURSE DESCRIPTION:** Physical science is a course designed to teach basic chemistry, physics, and earth science concepts and how they apply to the world around us. It is also designed to give the students a solid; more conceptually based foundation in the nature of science and prepare them for future science courses.

**AREAS OF STUDY:**

- |  |  |
|--|--|
| 1. Measurement, lab equipment, experimental design | 7. Stars                                     |
| 2. Earth's Changing Surface                        | 8. Waves                                     |
| 3. Earth's Surface                                 | 9. Motion-distance, velocity, acceleration   |
| 4. Earth's Interior                                | 10. Introduction to forces and Newton's laws |
| 5. Carbon Cycle                                    | 11. Work, power, and mechanics               |
| 6. Water   | 12. Energy                                   |

**3042A BIOLOGY****3042B** 10 Full Year 2 Credits

**COURSE DESCRIPTION:** Students will learn and apply basic principles of biology. Throughout the course students will develop their ability to practice scientific inquiry – asking questions, hypothesizing, designing experiments, analyzing data, reaching evidence-based conclusions, and communicating results.

**AREAS OF STUDY:**

- |                      |                          |
|----------------------|--------------------------|
| 1. Nature of Science | 4. Cells                 |
| 2. Evolution         | 5. Genetics and Heredity |
| 3. Ecology           |                          |

**3043 AP BIOLOGY (Taught in the classroom at Ballard.)**

11-12 Full Year 2 Credits

**REQUIRED:** Successful completion of a Biology and Chemistry Course and a cumulative 3.00 GPA

**COURSE DESCRIPTION:** AP Biology is a two-semester course designed to be the equivalent of a college-level introductory biology course. It is purposely rigorous and requires good study habits, self-discipline, and time commitment. This course is designed to prepare the student for the AP Biology Exam given in May. Students should plan to spend 1-2 hours outside of class for each hour spent in class. The students may also need to complete some lab work outside of class time.

**AREAS OF STUDY**

- |                 |                      |                                  |
|-----------------|----------------------|----------------------------------|
| 1. Biochemistry | 4. Heredity          | 7. Diversity of Life             |
| 2. Cells        | 5. Molecular Biology | 8. Plant Structure               |
| 3. Energetics   | 6. Evolution         | 9. Animal structure and function |

**3044A ADVANCED PHYSICAL SCIENCE****3044B** 9 Full Year 2 Credits

**COURSE DESCRIPTION:** Advanced physical science is a rigorous course designed to teach basic chemistry, physics, and earth science concepts. This course is to be taught at a more accelerated pace and to provide a deeper understanding, allowing students to utilize inquiry skills and learn more comprehensively about the core standards. This course gives students a solid foundation in science to prepare them for future science courses. A strong math background is recommended.

**AREAS OF STUDY:**

- |  |  |
|--|--|
| 1. Measurement, lab equipment, experimental design | 7. Stars                                     |
| 2. Earth's Changing Surface                        | 8. Waves                                     |
| 3. Earth's Interior                                | 9. Motion-distance, velocity, acceleration   |
| 4. Earth's History                                 | 10. Introduction to forces and Newton's laws |
| 5. Carbon Cycle                                    | 11. Work, power and mechanics                |
| 6. Water   | 12. Energy                                   |

**3045B ADVANCED BIOLOGY****3045A** 10 Full Year 2 credits

**COURSE DESCRIPTION:** Honors Biology is a course for students that are considering AP science courses or a future career in science or the health professions. The course content will be similar to Biology (3042) with a greater emphasis on individual understanding and development of lab skills needed in the sciences. The pacing of the class will be faster, with a greater emphasis on student reading, analysis of data, and application of concepts.

**AREAS OF STUDY:**

- |                      |                          |
|----------------------|--------------------------|
| 1. Nature of Science | 4. Cells                 |
| 2. Evolution         | 5. Genetics and Heredity |
| 3. Ecology           |                          |

**3046A ADVANCED CHEMISTRY****3046B** 10-12 Full Year 2 Credits**RECOMMENDED:** Geometry 2047; Biology 3042 or Adv. Biology. Strongly recommended enrollment in Advanced Algebra or higher-level math.**COURSE DESCRIPTION:** Honors Chemistry is a rigorous comprehensive high school chemistry course. This course covers the same material and topics as general chemistry then examines many of them more thoroughly. The class will move quickly to allow more time for advanced topics and labs.

The emphasis of this course is on the application and deep understanding of the areas of study. Students should focus their studies on grasping the big picture rather than on small details. The core of this course is a college preparatory course and its rigors will reflect a movement towards college level work. At the end of the year, students will leave with a foundation in chemical principles and concepts. A goal of this course is to prepare students for AP Chemistry.

Due to this course's heavy math component, students are expected to excel in algebra and mathematic problem solving. Algebra I, Geometry and Algebra II are recommended as prerequisites. Students should have a working knowledge of percent, ratio, proportions, graphing, solving for unknowns in an algebraic equation, the ability to solve word problems, and analyze both graphical and written information.

**AREAS OF STUDY:**

- |                                   |                         |                       |
|-----------------------------------|-------------------------|-----------------------|
| 1. Symbols and SI (metric) system | 7. Stoichiometry        | 13. Thermochemistry   |
| 2. Matter                         | 8. Gases                | 14. Organic chemistry |
| 3. Atomic structure               | 9. Solutions            | 15. Equilibrium       |
| 4. Bonding                        | 10. Oxidation-reduction | 16. Nuclear chemistry |
| 5. Formulas                       | 11. Acid-base theory    | 17. Organic chemistry |
| 6. Equations                      | 12. pH                  |                       |

**3051A ANATOMY & PHYSIOLOGY****3051B** 11-12 Full Year 2 Credits**RECOMMENDED:** successful completion of a Biology Course**COURSE DESCRIPTION:** Anatomy & Physiology is a rigorous exploration of the structures and functions of the human body. Students will investigate the human body from molecular structure up to system organization and interaction through dissection and lab activities. This is an excellent class for students pursuing health, science, or veterinary related fields.**AREAS OF STUDY:**

- |  |                            |
|--|----------------------------|
| 1. Cellular organization                       | 9. Blood/Heart/Circulation |
| 2. Tissues                                     | 10. Lymphatic system       |
| 3. Integumentary system                        | 11. Respiratory system     |
| 4. Skeletal system                             | 12. Digestive system       |
| 5. Muscular system: includes animal dissection | 13. Metabolism             |
| 6. Nervous system                              | 14. Urinary system         |
| 7. Sensory Functions                           | 15. Reproductive system    |
| 8. Endocrine system                            |                            |

**3052A CHEMISTRY****3052B** 10-12 Full Year 2 Credits**RECOMMENDED:** Geometry 2047; Biology 3042 or Adv. Biology. Strongly recommended enrollment in Advanced Algebra or a higher-level math.**COURSE DESCRIPTION:** This course is intended to expand a student's knowledge of chemical concepts. Mathematical problem solving (algebra), lecture, discussions, textbook study, and lab experiments will be used to survey the chemical world. This course provides students with an understanding of chemical principles and skills that are needed for college rigor and college chemistry. This course does not go into the depth nor the pace of Honors Chemistry. Students are still able to take AP Chemistry after successful completion of this course.**AREAS OF STUDY:**

- |                                   |                       |                       |
|-----------------------------------|-----------------------|-----------------------|
| 1. Symbols and SI (metric) system | 6. Chemical equations | 11. Acid base Theory  |
| 2. Matter                         | 7. Stoichiometry      | 12. pH                |
| 3. Atomic structure               | 8. Gases              | 13. Thermochemistry   |
| 4. Bonding                        | 9. Solutions          | 14. Nuclear Chemistry |
| 5. Formulas                       |                       |                       |

**3056A PRINCIPLES OF PHYSICS**

**3056B** 10-12 Full Year 2 Credits

**RECOMMENDED:** a Physical Science course; completion or concurrent enrollment in a Biology course and/or a Chemistry course. A strong math background is recommended.

**COURSE DESCRIPTION:** This yearlong course examines the essential interrelationships of matter and energy. Through laboratory investigations and problem solving activities utilizing critical thinking and mathematical analysis of data, students gain a deep understanding of the principles of physics.

**Areas of Study:**

1. Mechanics: Velocity, Acceleration, Forces, Momentum
2. Energy: Work, States of Matter, Thermal Energy
3. Waves and Light: Vibrations, Sound, Light, Reflection, Refraction
4. Electricity & Magnetism: Static Electricity, Electric Fields, Series and Parallel Circuits
5. Sub Atomic Physics: Quantum Theory, The atom

**3055A AP Physics 1 / PHY 160 (DMACC) General Physics 160\*\***

11-12 Full Year 2 Credits / 5 DMACC Credits

**RECOMMENDED:** Completion Advanced Algebra & Geometry; a Physical Science course; a Biology course and a Chemistry course. **No prior physics classes are necessary to enroll in this course.**

**COURSE DESCRIPTION:** Physics is a study of physical phenomena within our physical world. Course is designed with a strong emphasis on problem solving, mathematical computation and lab experience. The AP Physics 1 course is designed to enable you to develop the ability to reason about physical phenomena using important science process skills such as explaining causal relationships, applying and justifying the use of mathematical routines, designing experiments, analyzing data and making connections across multiple topics within the course.

**\*\*This physics course is a dual credit course with DMACC. Second semester this course receives dual credit with DMACC. Students will earn 1 Ballard science credit and they will earn 5 DMACC credits. Ms. Doland will have paperwork to fill out at a later date for all students enrolled in this course for the second semester of the 2018-2019 school year**

**Big Idea 1: Objects and systems have properties such as mass and charge. Systems may have internal structure.**

This big idea collects the properties of matter into one area so that they can be employed in other big ideas. The universe contains fundamental particles with no internal structure such as electrons, and systems built from fundamental particles, such as protons and neutrons.

**Big Idea 2: Fields existing in space can be used to explain interactions.**

All of the fundamental forces, including the gravitational force and the electric and magnetic forces, are exerted “at a distance”; the two objects involved in the interaction do not “physically touch” each other.

**Big Idea 3: The interactions of an object with other objects can be described by forces.**

An object either has no internal structure or can be analyzed without reference to its internal structure. An interaction between two objects causes changes in the translational and/or rotational motion of each object.

**Big Idea 4: Interactions between systems can result in changes in those systems.**

A system is a collection of objects, and the interactions of such systems are an important aspect of understanding the physical world.

**Big Idea 5: Changes that occur as a result of interactions are constrained by conservation laws.**

Conservation laws constrain the possible behaviors of the objects in a system of any size, or the outcome of an interaction or a process.

**Big Idea 6: Waves can transfer energy and momentum from one location to another without the permanent transfer of mass and serve as a mathematical model for the description of other phenomena.**

Classically, waves are a “disturbance” that propagates through space.

3060A ADVANCED SCIENTIFIC FRONTIERS

3060B 11-12 Full Year 2 Credits

**RECOMMENDED:** Biology 3042, Honors Biology

**COURSE DESCRIPTION:** Advanced scientific frontiers is an application of genetics, biotechnology, energy/transportation, and environmental science through cross-curricular areas involving biology, chemistry, and physics. This yearlong course is intended to expand the student's knowledge of current and futuristic technologies in the sciences and how they impact the world around us. Advanced scientific frontiers is highly recommended for college-bound students and it can be rated a pre-college course. Students must be able to use math (see above) to compute mathematical problems.

\*AREAS OF STUDY:

- |                         |                           |
|-------------------------|---------------------------|
| 1. Genetics             | 6. Bio-ethics             |
| 2. DNA technology       | 7. Energy/transportation  |
| 3. DNA transformation   | 8. Environmental sciences |
| 4. DNA isolation        |                           |
| 5. Recombinant DNA tech |                           |
- \*areas are subject to change

3062B CHEM COMM / SURVEY OF SCIENCE

3062A 11-12 Full Year 2 Credits

**\*\*RECOMMENDED:** Successful completion of Physical Science 3041 and Biology 3042

**COURSE DESCRIPTION:** One semester will be spent introducing the theories and concepts of modern chemistry. Students will explore the fundamental principles of chemistry, which characterize the properties of matter and how it reacts. The topics will be presented to increase awareness and understanding of the role of chemistry in everyday life and environmental issues.

One semester will be spent studying various other science related topics.

This course is not designed to prepare students for college rigor or college chemistry.

**AREAS OF STUDY:**

- |                                   |              |
|-----------------------------------|--------------|
| 1. Periodic Properties            | 5. Energy    |
| 2. Chemical Reactions             | 6. Astronomy |
| 3. Reaction Rates and Equilibrium | 7. Health    |
| 4. Nuclear Chemistry              |              |

3063A

3063B AP CHEMISTRY (Taught in the classroom at Ballard)

11-12 Full Year 2 Credits

**\*\*REQUIRED:** Successful completion of Honors Chemistry or Chemistry and Advanced Algebra strongly recommended enrollment in trig or higher math.

**COURSE DESCRIPTION:** AP Chemistry is designed to be the equivalent of a first-year college chemistry course. A college text is used and a variety of college-level experiments will be done in the laboratory. Topics such as the structure of matter, kinetic theory of gases, chemical equilibria, chemical kinetics and thermodynamics are presented in considerable depth. The course should contribute to the development of the student's ability to think clearly and to express ideas orally and in writing, with clarity and logic, when dealing with chemical problems. This will prepare the student to take the AP Chemistry exam given in the spring.

The student will be able to explain and apply the following concepts:

1. The chemical elements are the building blocks of matter, which can be understood in terms of the arrangements of atoms.
2. Chemical and physical properties of materials can be explained by the structure and the arrangement of atoms, ions, or molecules and the forces between them.
3. Changes in matter involve the rearrangement and/or reorganization of atoms and/or the transfer of electrons.
4. Rates of chemical reactions are determined by details of the molecular collisions.
5. The laws of thermodynamics describe the essential role of energy and explain and predict the direction of changes in matter.
6. Bonds or attractions that can be formed can be broken. These two processes are in constant competition, sensitive to initial conditions and external forces or changes.

## **SOCIAL SCIENCES DEPARTMENT**

### **4060A GLOBAL ISSUES**

**4060B** 9 Full Year 2 Credits

**COURSE DESCRIPTION:** This is a two-semester required course for all freshmen. The course will examine a variety of current issues that affect the world, through the lens of geography. Instruction will be organized into central themes and taught thematically. Some of the themes will be human rights, global conflicts and their consequences, human/environment interactions, gender issues, economic opportunities, political freedom and equality. Students will be asked to conduct research on a variety of topics over the course of the year. Skills as well as content will be emphasized.

### **4042A U. S. HISTORY**

**4042B** 10 Full Year 2 Credits

**COURSE DESCRIPTION:** U.S. History is a two-semester course required for all sophomores. The course will be organized chronologically and around case studies. The case studies will examine political, economic, and social developments around the United States. Units will include multiple perspectives on historical events. Units will also include an emphasis on how these events have affected current issues and the students.

### **40041A MODERN WORLD HISTORY**

**40041B** 11 Full Year 2 Credits

**COURSE DESCRIPTION:** This is a two-semester course required for all juniors. The course will be organized chronologically and thematically around several case studies. The course content will focus on the development of the modern world and people's reactions to those changes. The case studies will examine political, economic, and social developments around the world and the ways in which global connections have influenced and been influenced by various peoples and nations. Case studies will also emphasize skill development, especially historical thinking skills.

### **4043 U. S. GOVERNMENT**

12 One Semester 1 Credit

**COURSE DESCRIPTION:** This course is a one-semester required course for all seniors. The coursework will provide instruction about citizenship (including voting procedures and processes), the U.S. Constitution, and the three branches of state and national government in the United States.

### **4051 ECONOMICS**

12 One Semester 1 Credit

**COURSE DESCRIPTION:** Economics is a one-semester required course for all seniors. Economics is the study of how the needs and wants of individuals and societies are met. The coursework will include instruction about basic economic concepts, microeconomic concepts, macroeconomic concepts, and financial literacy. The course will include a case study of Wal-Mart as a global economic factor.

### **4058 PSYCHOLOGY**

11-12 One Semester 1 Credit

**COURSE DESCRIPTION:** This course is a one-semester elective course for juniors and seniors. Psychology will focus on the individual and the individual's emotional, intellectual, physical, social, and behavioral development. This course covers core concepts in psychology beginning with an understanding of the historical development of psychology and the physiological basis for behavior. Students will demonstrate the use of the scientific method in research.

### **4059 SOCIOLOGY**

11-12 One Semester 1 Credit

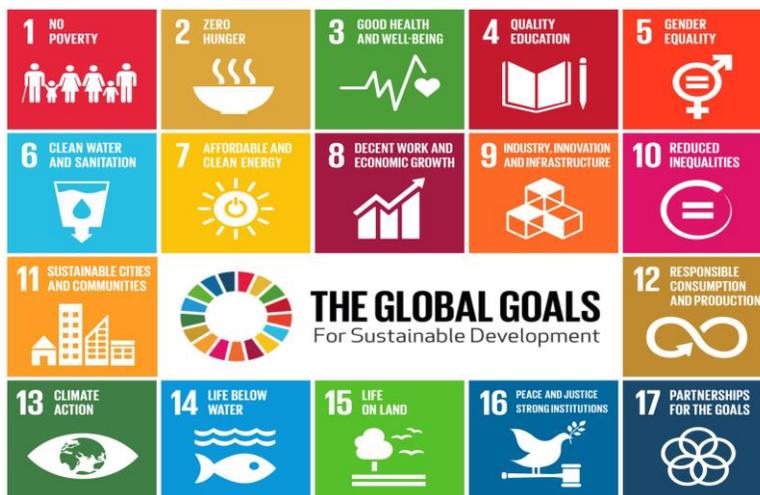
**COURSE DESCRIPTION:** This course is a one-semester elective course for juniors and seniors. Sociology will focus on the development of group identities, behavior, and decision-making. This course covers core concepts in sociology beginning with the historical development of the sociological perspective. An emphasis will be placed on how culture, socialization, and groups influence behaviors and decision-making. Students will demonstrate the use of sociological research methods.

**4061**    **GLOBAL ISSUES II**  
 10-12                      One Semester                      1 Credit

**COURSE DESCRIPTION:** This course will be an investigation of the U. N.'s Sustainable Development Goals. Each student will complete an overview investigation of the 17 goals and then conduct more in-depth research of 2 or 3 of the goals. Students will be asked to consider the economics, politics, geography, and history of the issues and the people involved. Students will also monitor current events related to these goals. Students will present the results of their learning in a public forum of their choice.

**4062**    **GLOBAL ISSUES III**  
 10-12                      One Semester                      1 Credit                      **PREREQUISITE:** Global Issues II / instructor approval

**COURSE DESCRIPTION:** This course will be an in-depth investigation of one of the 17 Sustainable Development Goals. Students will also develop and implement an action plan to help achieve that goal at the local level. Students will need to identify and cultivate local resources, which can assist in their research and action plan. Students will need to be self-motivated and able to work independently on their research and action plan. Students will create a schedule of assignments and due dates at the beginning of the semester that will guide their work throughout the semester. The final for this course will be a report on the student's research and outcome of his/her action plan. This report will need to be presented to a public audience.



**\*HIS 112**                      **WESTERN CIVILIZATIONS – ANCIENT TO EARLY MODERN** (Taught in the classroom)  
 11                      1<sup>st</sup> Sem                      1 HS Credit                      **4 DMACC Credits**

**COURSE DESCRIPTION:** The student surveys the great civilizations from Greece and Rome through the rise of Christianity, to Europe in the Middle Ages, the Renaissance and Reformation, the modern state, the new science and the secular outlook, parliamentary government in England and political absolutism in France and Eastern Europe.

**\*HIS 113**                      **WESTERN CIVILIZATIONS – EARLY MODERN TO PRESENT** (Taught in the classroom)  
 11                      2<sup>nd</sup> Sem                      1 HS Credit                      **4 DMACC Credits**

**COURSE DESCRIPTION:** Survey of political, economic, social and intellectual developments from the 18<sup>th</sup> century to the present. Enlightenment, revolutions and reactions, national unifications, national rivalries, world wars and post-war developments.

**\*NOTE: This course is taught in the classroom only. Students with scheduling conflicts will need to meet with Ms. Doland.**

# **SPECIAL EDUCATION DEPARTMENT**

**PREREQUISITE FOR THE FOLLOWING SPECIAL EDUCATION COURSES IS:** Special Education Recommendations.

1751A **RESOURCE A STUDY SKILLS**

1751B 9-12 Full Year 2 Credits

COURSE DESCRIPTION: Resource A classes meet five times a week. The focus of this course is to build organizational skills and independent study skills.

AREAS OF STUDY:

1. Based on individual IEPs.

1752A **RESOURCE B STUDY SKILLS**

1752B 9-12 Full Year 1 Credit

COURSE DESCRIPTION: Resource B classes meet three times a week. The focus of this course is to build organizational skills and independent study skills.

AREAS OF STUDY:

1. Based on individual IEPs.

# **AGRICULTURAL EDUCATION**

## **7661A INTRODUCTION TO AGRISCIENCE**

9-12 Fall Semester 1 Credit

**COURSE DESCRIPTION:** Introduction to agriscience introduces students to the whole agricultural education program. The first unit will be on the agricultural education model with students learning about classroom and FFA opportunities and develop a Supervised Agricultural Experience program (SAE). Other units include communication in agriculture and agricultural sciences investigation. This course is hands-on and student participation is required. Students will conduct individual activities as well as work with their peers in team settings. FFA and SAE are intra-curricular parts of this course.

## **7661B AGRICULTURE, FOOD, AND NATURAL RESOURCES (AFNR)**

9-12 Spring Semester 1 Credit

**COURSE DESCRIPTION:** Agriculture, Food and Natural Resources (AFNR) will continue to build on skills learned in Introduction to Agriscience while focusing on the natural resources, plant and animal, and power, structural and technical systems pathways of agriculture. This course is hands-on and student participation is required. Students will conduct individual activities as well as work with their peers in team settings. FFA and SAE are intra-curricular parts of this course.

## **7660 ANIMAL SCIENCE**

10-12 Fall Semester 1 Credit Offered as Ag Elective or Science Credit

**COURSE DESCRIPTION:** Students will learn about the value and utilization of animals in our lives. This course is an introductory animal science course covering both livestock and companion animals. Animal nutrition, growth, health, behavior, reproduction, and genetics will be covered. Students will be introduced to management practices as well as their effect on the environment. FFA and SAE are intra-curricular parts of this course.

## **7662 HORTICULTURE**

10-12 Spring Semester 1 Credit

**COURSE DESCRIPTION:** This course will focus on landscaping, floriculture, and vegetable and flower production. Other units of instruction will include plant propagation and growth, soils and growing media, plant protection, and integrated pest management. FFA and SAE are intra-curricular parts of the class.

## **7668 AGRICULTURAL BUSINESS**

10-12 Fall Semester 1 Credit

**COURSE DESCRIPTION:** Students will learn the fundamentals of agricultural business management. Principles of agricultural decision-making, record keeping, financial statements, budgeting, cash flows, marketing and advertising, business organization, and agricultural sales will be units covered. FFA and SAE are intra-curricular parts of this course.

## **7670 NATURAL RESOURCES**

10-12 Spring Semester 1 Credit

**COURSE DESCRIPTION:** Students will examine the importance of natural resources in our lives and how to manage them for our benefit. Education units will include opportunities in natural resources, soil formation and physical properties, land use, conservation and management, soil fertility, wildlife management, air and water quality management, and weather and climate. FFA and SAE are intra-curricular parts of this course.

## **7672 AGRICULTURAL COMMUNICATIONS**

10-12 Spring Semester 1 Credit

**COURSE DESCRIPTION:** Students will learn about public relations, journalism and communications in agriculture. Through the integration of writing, editing and layout associated with producing agricultural publications, students will learn techniques used in journalism and public relations. Graphical design computer applications will be introduced to students and utilized throughout the development of a variety of media publications. FFA and SAE are intra-curricular parts of this course

## **7671 AGRICULTURAL LEADERSHIP**

11-12 Fall Semester 1 Credit

**COURSE DESCRIPTION:** Students will learn about communication and leadership in agriculture. Public speaking and communications, agricultural issues and current events, coordination of leadership activities, and agricultural careers and career advancement will be covered. FFA and SAE are intra-curricular parts of this course.

AGA 114 DMACC – PRINCIPLES OF CROP PRODUCTION

11-12 Fall Semester 1 HS Credit / 3 DMACC Credits Offered as AG Elective or Science Credit

**COURSE DESCRIPTION:** An introductory course in the general principles of crop production and management. Major areas of study are food production, crop classification, plant growth factors, seed production and variety selection. FFA and SAE are intra-curricular parts of this course. Students taking concurrent enrollment course must take the course for college credit. Drop date without consequences will be determined by DMACC. College credit (3 cr.) will be given from DMACC upon successful completion of this course.

AGS 114 DMACC - ADVANCED ANIMAL SCIENCE

11-12 Spring Semester 1 HS Credit / 3 DMACC Credits Offered as Ag Elective or Science Credit

**COURSE DESCRIPTION:** This course explores issues impacting the United States and the international animal industry. The main emphasis of the course is on the animal industry in the global market, animal production management, anatomy and physiology, and marketing of farm animals. The animals of focus include beef and dairy cattle, companion animals, horses, poultry, sheep, swine, and their products. FFA and SAE are intracurricular parts of this course. Students taking concurrent enrollment course must take the course for college credit. Drop date without consequences will be determined by DMACC. College credit (2 cr.) will be given from DMACC upon successful completion of this course.

7673 AGRICULTURE ENTERPRISE

11-12 1 semester 1 credit Prerequisites: Instructor

Approval

This class can be taken 1<sup>st</sup>, 2<sup>nd</sup> or both semesters.

This capstone course will have students completing projects that are designed either by the individual, instructor or outside entity. Collaboration will be a major part of this course as it reflects on and applies knowledge learned throughout a student's experience in the agricultural education program. FFA and SAE are intra-curricular parts of this course.

## **CAREER AND TECHNICAL EDUCATION (CTE)**

### Career and Technical Education (CTE)

The CTE program at Ballard offers four different career areas of emphasis:

Industrial Technology  
Family and Consumer Sciences  
Business  
Agriculture

The following pages have a program of study for each area. On each program of study, there are suggested Ballard classes for students to enroll in that would benefit that specific career area. In addition, there are DMACC classes listed that would lead to a 2-year degree, 4-year degree or a certificate.

An advisory committee made up of CTE teachers, students, parents, administration and local business people of Ballard Community School District oversees the CTE programs.

## **DMACC CAREER ACADEMY**

### Education Opportunities for the 2019-2020 School Year

Listed are consortium class offerings for next school year. Student acceptance is based on application to the guidance counselor or principal. Students must be in good academic standing in order to enroll in DMACC Career Academy classes. All consortium classes with the exception of Diesel, Tool and Die, Welding, and Business Administration meet at the DMACC Career Academy Hunziker Center in Ames. All classes are yearlong classes. These classes provide area high school students with excellent educational opportunities. Ms. Doland and Mr. Ronca handle registration in these courses. *All listed times and courses are subject to change.*

<b>7215</b>	<b><u>BUSINESS ADMINISTRATION</u></b>	11-12	Full Year	
	<b>DMACC Credits = 18 Credits</b>	BUS102	Intro to Business	(3 cr.) (1 <sup>st</sup> Sem.)
		ADM221	Career Development Skills	(2 cr.) (1 <sup>st</sup> Sem.)
		MKT110	Principles of Marketing	(3 cr.) (1 <sup>st</sup> Sem.)
		MKT160	Principles of Retailing	(3 cr.) (2 <sup>nd</sup> Sem.)
		MGT145	Human Relations in Business	(3 cr.) (2 <sup>nd</sup> Sem.)

High School Credits = 4 Credits (2 per semester)

Class meeting times: Monday-Friday – 12:45-2:45 p.m. on **Ankeny campus of DMACC**

**COURSE DESCRIPTION:** This program is designed to provide a foundation of business related courses that will prepare students for entrance in multiple business-related post-secondary opportunities. Transportation is available for this course.

<b>7220</b>	<b><u>CULINARY ARTS 1<sup>st</sup> Year</u></b>	11-12	Full Year	
	<b>Year 1: DMACC Credits = 14 Credits =</b>	HCM 143	Food Preparation I	(3 cr.) (1 <sup>st</sup> Sem.)
		HCM 144	Food Preparation I Lab	(3 cr.) (1 <sup>st</sup> Sem.)
		HCM 152	Food Prep II	(2 cr.) (2 <sup>nd</sup> Sem.)
		HCM 153	Food Prep II Lab	(2 cr.) (2 <sup>nd</sup> Sem.)
		HCM 100	Sanitation and Safety	(2 cr.) (2 <sup>nd</sup> Sem.)
		HCM 231	Nutrition	(2 cr.) (2 <sup>nd</sup> Sem.)

High School Credits = 4 (2 per semester)

Class meeting times: M – F 7:30 - 9:30 a.m. or 12:50 – 2:50 p.m.

**COURSE DESCRIPTION:** Through hands-on experience, students are introduced to the scientific principles used in food preparation, the hospitality industry and fundamentals of dining and sanitation.

<b>7221</b>	<b><u>CULINARY ARTS 2<sup>nd</sup> YEAR</u></b>	11-12	Full Year	
	<b>Year 2: DMACC Credits = 11 Credits =</b>	HCM 110	Baking	(2 cr.) (1 <sup>st</sup> Sem.)
		HCM 270	Grade Manger	(2 cr.) (1 <sup>st</sup> Sem.)
		HCM 320	Intro to Hospitality	(2 cr.) (2 <sup>nd</sup> Sem.)
		HCM 124	Adv. Baking	(2 cr.) (2 <sup>nd</sup> Sem.)
		HCM 510	Work Experience 225 Hours	(3 cr.) (2 <sup>nd</sup> Sem.)

High School Credits = 4 (2 per semester)

Class meeting times: M/T/W/Th: 10:00 – 11:50 a.m. (times and classes are subject to change)

\* Courses require extended lab time in the evening.

<b>7230</b>	<b><u>CRIMINAL JUSTICE</u></b>	11-12	Full Year	
<b>DMACC Credits = 16 credits</b>		CRJ 100 Intro to Criminal Justice		(3 cr.) (1 <sup>st</sup> Sem.)
High School Credits – 4 credits		CRJ 141 Criminal Investigation I		(3 cr.) (1 <sup>st</sup> Sem.)
		CRJ 196 Crime Scene Investigation I		(2 cr.) (1 <sup>st</sup> Sem.)
		CRJ 109 Theories of Interviewing		(3 cr.) (2 <sup>nd</sup> Sem.)
		CRJ 237 Criminal & Constitutional Law		(3 cr.) (2 <sup>nd</sup> Sem.)
		CRJ 197 Crime Scene Investigation II		(3 cr.) (2 <sup>nd</sup> Sem.)

Class meeting times: M-F: 7:30 – 9:30 a.m. or M-F: 12:50 – 2:50 p.m.

COURSE DESCRIPTION: The criminal justice program introduces students to criminal law and crime scene investigation and prepares students for entry into the criminal justice field.

<b>7265</b>	<b><u>VISUAL COMMUNICATION/ GRAPHIC DESIGN/WEB</u></b>	11-12	Full Year	
<b>DMACC Credits = 15 credits</b>		GRD 403 Communication Design I		(3 cr.) (1 <sup>st</sup> Sem.)
High School Credits = 4 credits		GRD 301 Intro to Desktop Publishing		(3 cr.) (1 <sup>st</sup> Sem.)
		GRD 470 Interactive Media I		(3 cr.) (2 <sup>nd</sup> Sem.)
		GRD 405 Typography I		(3 cr.) (2 <sup>nd</sup> Sem.)

Class meeting times: M-F 12:50 – 2:50 p.m. **(ANKENY CAMPUS ONLY)**

COURSE DESCRIPTION: Students will learn the basics of creating a web page along with computer graphics using multiple software packages. 15 DMACC credits area available upon completion of all DMACC Career Academy course offerings.

<b>7270</b>	<b><u>BUILDING TRADES/FINISH CARPENTRY- 1<sup>ST</sup> YEAR</u></b>	11-12	Full Year	4 Credits
<b>1<sup>st</sup> Year: DMACC Credits = 12 Credits</b>		= CON 336 Care/Use of Hand/Power Tools		(1 cr.) (1 <sup>st</sup> Sem.)
		CON 337 Construction Blueprint Reading		(1 cr.) (1 <sup>st</sup> Sem.)
		CON 333 Materials/Construction Theory		(5 cr.) (1 <sup>nd</sup> Sem.)
		CON 338 Materials Takeoff		(1 cr.) (2 <sup>nd</sup> Sem.)
		CON 346 Concrete System & Framing		(4 cr.) (2 <sup>nd</sup> Sem.)

High School Credits = 4 Credits

Class meeting times: 7:30 a.m. – 9:30 a.m. OR 12:50 p.m. – 2:50 p.m.

COURSE DESCRIPTION: This program allows students to engage in experiential learning in the areas of construction and/or carpentry. *Transportation to the job site is required.*

<b>7275</b>	<b><u>BUILDING TRADES/FINISH CARPENTRY – 2<sup>ND</sup> YEAR</u></b>	11-12	Full Year	4 Credits
<b>2<sup>nd</sup> Year:</b>				
<b>DMACC Credits = 9 Credits</b>		=CON 334 Construction Techniques		(7 cr.) (1 <sup>st</sup> Sem.)
		CON 341 Construction Drafting & Design		(2 cr.) (2 <sup>nd</sup> Sem.)

High School Credits = 4 Credits

Class meeting times: 7:30 a.m. – 9:30 a.m. OR 12:50 p.m. – 2:50 p.m.

COURSE DESCRIPTION: This course contains the core curricula for construction skills. 21 DMACC credits are available upon completion of all DMACC Career Academy course offerings. Completion of this program as a high school student provides the opportunity to complete the college diploma program in two college semesters. *Transportation to the job site is required.*

<b>7280</b>	<b><u>CERTIFIED NURSING ASSISTANT</u></b>	11-12	One Semester	
<b>DMACC Credits = 6 Credits</b>				
High School Credits = 2 Credits		HSC 172 * Nurse Aide 75 hours		(3 cr.)
		HSC 182 * Advanced Nurse Aide		(3 cr.)

Class meeting times: M-F: 7:30 – 9:30 a.m. (Fall semester)  
M-F: 12:50 – 2:50 p.m. (Spring semester)

COURSE DESCRIPTION: This is a semester-long certification program for students interested in becoming a C.N.A. 6 DMACC credits are available upon completion of all DMACC Career Academy course offerings.

\*Courses require extended clinical sessions in evenings and/or weekends. Students must pass criminal background check in order to be in C.N.A. course.

**7281 HEALTH OCCUPATIONS (Year Long Course. C.N.A. included)**

11-12 Full Year

**DMACC Credits = 14 Credits**

High School Credits = 4 Credits	HSC 120 Medical Terminology	(3 cr.)
	HSC 105 Intro to Health Careers	(1 cr.)
	HSC 109 Explore Health Career/Building Team	(3 cr.)
	HSC 101 Emergency Care	(1 cr.)
	HSC 172 * Nurse Aide 75 hours	(3 cr.)
	HSC 182 * Advanced Nurse Aide	(3 cr.)

Class meeting times: M-F: 7:30 – 9:30 a.m. or M-F: 12:50 – 2:50 p.m.

COURSE DESCRIPTION: This yearlong program will provide students the opportunity to explore careers in health care and work toward C.N.A. training. 14 DMACC credits are available upon completion of all DMACC Career Academy course offerings. \*Courses require extended clinical sessions in the evenings and/or weekends.

**7290 AUTOMOTIVE TECHNOLOGY 1<sup>st</sup> Year**

11-12 Full Year

<b>1<sup>st</sup> Year: DMACC Credits = 12 Credits</b>	AUT 111 Intro to Automotive Technology I	(6 cr.) (1 <sup>st</sup> Sem.)
High School Credits = 4 Credits	AUT 112 Intro to automotive Technology II	(6 cr.) (2 <sup>nd</sup> Sem.)

Class meeting times: M-F: 7:30 a.m. – 9:30 a.m. or 12:50 p.m. – 2:50 p.m.

COURSE DESCRIPTION: The automotive technology 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. 23 DMACC credits are available upon completion of all DMACC Career Academy course offerings.

**7291 AUTOMOTIVE TECHNOLOGY 2<sup>nd</sup> Year**

11-12 Full Year

<b>2<sup>nd</sup> Year: DMACC Credits = 11 Credits</b>	AUT 601 Auto Electrical I	(4 cr.) (1 <sup>st</sup> Sem.)
High School Credits = 4 Credits	AUT 163 Automotive Engine Repair	(3 cr.) (2 <sup>nd</sup> Sem.)
	AUT 612 Auto Electrical II	(4 cr.) (2 <sup>nd</sup> Sem.)

Class meeting times: M-F: 10:00 a.m. – 11:50 a.m.

COURSE DESCRIPTION: The automotive technology 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. 23 DMACC credits are available upon completion of all DMACC Career Academy course offerings.

**7297 AUTO COLLISION 1<sup>st</sup> Year**

11-12 Full Year

<b>1<sup>st</sup> Year: DMACC Credits = 15 Credits</b>	=CRR 150 Basic Shop Safety	(1 cr.) (1 <sup>st</sup> Sem.)
	CRR 325 Sheet Metal Fundamentals	(5 cr.) (1 <sup>st</sup> Sem.)
	CRR 101 Sheet Metal Welding	(2 cr.) (2 <sup>nd</sup> Sem.)
	CRR 841 Principles of Refinishing	(5 cr.) (2 <sup>nd</sup> Sem.)
	CRR 742 Estimating Theory	(2 cr.) (2 <sup>nd</sup> Sem.)

High School Credits = 4 Credits

Class meeting times: M-F: 7:30 – 9:30 a.m. or 12:50 p.m. – 2:50 p.m.

COURSE DESCRIPTION: 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. 27 DMACC credits are available upon completion of all DMACC Career Academy course offerings.

**7299 AUTO COLLISION 2<sup>nd</sup> Year**

11-12 Full Year

<b>2<sup>nd</sup> Year: DMACC Credits = 12 Credits</b>	=CRR 202 Plastic Repair	(3 cr.) (Year)
	CRR 760 Advanced Estimating	(2 cr.) (Year)
	CRR 877 Refinishing Applications	(7 cr.) (Year)

High School Credits = 4 Credits

Class meeting times: M-F: 10:00 – 11:55 a.m.

COURSE DESCRIPTION: 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. 27 DMACC credits are available upon completion of all DMACC Career Academy course offerings.



# **DMACC ON-LINE CAREER ACADEMY COURSES**

**The Program** – DMACC will be offering courses on-line. This will be a presentation on the delivery of Governor Chet Culver's Senior Year Plus program to high schools served by Des Moines Area Community College.

**Student Registration Guidelines** – Juniors may register for one on-line course per semester. Seniors may register for two online courses per semester.

Students planning to take a DMACC math class must first complete a placement test called ALEKS. Please see Ms. Doland before you register for any DMACC math courses.

## **Business**

### **ACCOUNTING**

#### **ACC 111 – Introduction to Accounting**

**Credits: 3**

An introductory course in accounting fundamentals and procedures. Includes capturing and analyzing business data and financial statement preparation.

#### **FIN 121 - Personal Finance**

**Credits: 3**

This course emphasizes family financial planning including financial statements, budgeting, taxes, risk management and retirement.

### **BUSINESS ADMINISTRATION**

#### **BUS 102 - Introduction to Business**

**Credits: 3**

An overview of the ever-changing world of business. Provides information in the areas of ownership, management, marketing, insurance, economic systems and finance, as well as the role of government.

### **BUSINESS ENTREPRENEURSHIP**

#### **BUS 148 - Small Business Management**

**Credits: 3**

Examines introductory business applications and strategies needed to start and operate a small business. Topics include entrepreneurship preparation, idea feasibility, business plan content, introductory marketing, management and finance concepts for small business.

## **CRIMINAL JUSTICE**

#### **CRJ 100 – Intro to Criminal Justice**

**Credits: 3**

An in-depth examination of the three components of the criminal justice system and the roles they play in society.

#### **CRJ111 – Police and Society**

**Credits: 3**

An examination of the role of the police and corrections in American society, and a discussion of prominent issues. The course will examine the various eras of policing and correctional agencies. The structure and style of various policing and correctional agencies will also be covered. Agency application of internal and ethical issues including use of force will be examined. Strategies and policies to improve policing and correctional work environment will also be discussed.

## **EARLY CHILDHOOD EDUCATION**

#### **ECE103 – Intro to Early Childhood Education**

**Credits: 3**

Gives students a historical and philosophical foundation of the field of early childhood education. Includes an overview of assessment and trends that influence best practices. Explores careers in the field. Addresses influences of families and diversity.

## **FITNESS & SPORTS MANAGEMENT**

### **PEC 110 – Coaching Ethics**

#### **Credits: 1**

Course covers techniques and theory of coaching, sports physiology, preparation for competition and issues in coaching.

### **PEH 110 – Personal Wellness**

#### **Credits: 1**

This course will aid in the enhancement of knowledge, skills, and attitudes necessary to promote positive lifelong wellness decisions. Students will look at the physical, social, intellectual, emotional, occupational and spiritual components of wellness.

### **PEH 190 – Sports Nutrition**

#### **Credits: 2**

Basic principles of human nutrition and nutritional needs for athletes and/or physically active populations. Issues discussed include ergogenic aids, carbohydrate loading/ manipulation, eating disorders, protein supplements and hydration. Practical application will include dietary analysis and composition for people in various activities and conditions.

## **HEALTH OCCUPATIONS**

### **HSC 120 - Medical Terminology I**

#### **Credits: 3**

Builds a medical vocabulary through an understanding of anatomic roots for words denoting body structures, prefixes, suffixes and body functions.

### **HSC 121 - Medical Terminology II**

#### **Credits: 3**

Continues to build a medical language vocabulary by studying body systems such as musculoskeletal, endocrine, nervous and integumentary systems. Prerequisite: HSC 120 with a grade of "C-" or better.

**It is recommended that students have a 3.5 Cum GPA or 21 ACT composite score to enroll in the following Arts and Sciences courses.**

## **LIBERAL ARTS-ENGLISH**

### **LIT 101 - Intro to Literature**

#### **Credits: 3**

Introduction to the study and appreciation of poetry, fiction and drama. Basic critical approaches are emphasized, and a broad range of authors from a variety of cultural and ethnic groups and a wide span of historical periods is presented.

## **LIBERAL ARTS-HUMANITIES**

### **DRA 101 – Intro to Theatre**

#### **Credits: 3**

A survey of the elements and techniques of theatre with emphasis on acting, directing and playwriting. Attendance at dramatic productions required.

### **HUM116 – Encounters in Humanities**

#### **Credits: 3**

An interdisciplinary course exploring the human condition through literature, painting, sculpture, architecture, music and dance. The course examines the cultural context of individual works and movements, the thematic relationships between the arts and the relevance of the arts in our lives today.

### **PHI 101 – Introduction to Philosophy**

#### **Credits: 3**

Exploration of basic questions in epistemology, metaphysics and ethics. Emphasis on western philosophy tradition.

## **LIBERAL ARTS-MATH**

### **MAT 110 – Math for Liberal Arts – (Need to have ALEKS score on file)**

**Credits: 3**

The student will begin to think critically by studying logic, sets and statistical reasoning. The student will examine problem solving and decision-making by studying probability, application of statistical data, modeling, and financial mathematics. The student will become aware of possible abuses of mathematics. Finally, the student will understand the broad usefulness of mathematics by studying history of mathematics and application of mathematics in art, music, business and/or politics. Prerequisite: 1 year of high school algebra or MAT 064

### **MAT 141 - Finite Math - (Need to have ALEKS score on file)**

**Credits: 4**

A general education course in practical mathematics for those students not majoring in mathematics or science. This course will include such topics as set operations and applications, methods of counting, probability, systems of linear equations, matrices, geometric linear programming and an introduction to Markov chains. Prerequisite: One year H.S. Algebra or MAT 063.

### **MAT 157 – Statistics – (Need to have ALEKS score on file)**

**Credits: 4**

Tabular and graphical presentation, measures of central tendency and variability, standard elementary procedures involving the binomial, normal, student's T, chi-square and F distributions, correlation, regression, analysis of variance and several nonparametric procedures. Students will not receive credit for both MAT 157 and BUS 211 Prerequisite: Two years H.S. Algebra, department permission or MAT 073

## **LIBERAL ARTS-SCIENCE**

### **ENV 103 – Sustainable Living**

**Credits: 1**

This class provides an up-close-and-personal look at the sustainability movement. Develop an understanding of the environment you live in. Learn more about the role you can play in creating a sustainable lifestyle for yourself and your family at home, work and school.

## **LIBERAL ARTS-SOCIAL AND BEHAVIORAL SCIENCES**

### **ECONOMICS**

#### **ECN 120 – Principles of Macroeconomics**

**Credits; 3**

This course is an introduction to basic macroeconomic concepts and principles. It deals with problems of resource allocation, supply and demand, national income, employment, price levels, fiscal and monetary policy, money and banking systems and elements of global finance. ECN 120 is not a prerequisite for ECN 130.

#### **ECN 130 – Principles of Microeconomics**

**Credits: 3**

Course covers survey of demand and supply conditions, cost structure, market structure and how these elements affect individual household, business firms, government and global trade. ECN 120 is not a prerequisite for ECN 130.

### **GEOGRAPHY**

#### **GEO 111 – Intro to Geography**

**Credits: 3**

This course utilizes the basic concepts of cultural geography (area, landscape, ecology, diffusion and integration) in a systematic examination of the contemporary world. The course is intended to provide an elementary acquaintance with the field of geography.

## **HISTORY**

### **HIS 112 - West Civ.: Ancient to Early Modern**

**NOTE: THIS CLASS IS TAUGHT IN THE CLASSROOM AT BALLARD**

**Credits: 4**

The student surveys the great civilizations from Greece and Rome through the rise of Christianity, to Europe in the Middle Ages, the Renaissance and Reformation, the modern state, the new science and the secular outlook, parliamentary government in England and political absolutism in France and Eastern Europe.

### **HIS 113 - West Civ: Early Modern to Present**

**NOTE: THIS CLASS IS TAUGHT IN THE CLASSROOM AT BALLARD**

**Credits: 4**

Survey of political, economic, social and intellectual developments from the 18th century to the present. Enlightenment, revolutions and reactions, national unifications, national rivalries, world wars and post-war developments.

### **HIS 150 - U.S. History to 1877**

**Credits: 4**

A survey of main themes of American history from 1492 to 1877 with emphasis on the political, social, economic, religious and intellectual aspects of the pre-settlement, Colonial, Revolutionary, Antebellum Civil War and Reconstruction eras.

### **HIS 153 - U.S. History since 1877**

**Credits: 4**

A survey of main themes of American history from 1877 to the present with emphasis on political, social, economic, religious and intellectual aspects of the Gilded Age, the Progressive Era, WWI, the Roaring Twenties, the Great Depression, WWII and post WWII Era.

## **POLITICAL SCIENCE**

### **POL 111 – American National Government**

**Credits: 3**

A study of the American political system and how and why the citizenry relate to the government as they do. Emphasis is placed upon the organization and functioning of the presidential, legislative and judicial subsystems.

## **PSYCHOLOGY**

### **PSY 111 - Introduction to Psychology**

**Credits: 3**

A survey of psychology including theoretical and experimental findings and applications from areas such as neurobiology, learning, memory, personality, social, abnormal, and therapy.

### **PSY 121 – Developmental Psychology**

**Credits: 3**

The study of factors that affect human development from conception to death, with emphasis on topics such as physical, cognitive, and social changes, methods of study and current issues.

## **SOCIOLOGY**

### **SOC 110 - Introduction to Sociology**

**Credits: 3**

The study of human interaction, groups and society. Topics included are culture, socialization,

organizations, deviance, inequality, institutions, health, population, ecology, social change and research methods.

### **SOC 115 – Social Problems**

**Credits: 3**

An analysis of the nature, dimensions, causes, and characteristics of selected social problems of major interest. Consideration is given to theories, research and programs for prevention and treatment.

### **STUDY**

### **SDV 115 – Study Strategies**

**Credits: 2**

Provides students with study/reading strategies for independent learning and academic success. An examination of college policies and procedures is also included.

## **STORY COUNTY ACTIVE LEARNING EXPERIENCES (SCALE)**

SCALE draws upon the expertise of business partners to bring real world applications into the comprehensive high school experience. Through a collaboration of education, business, and industry, the SCALE program seeks to develop highly skilled and adaptable innovators and leaders. With inquiry-based learning and authentic projects and experiences, students add value to business partners while exploring passions and career possibilities identified by economic trends in Story County. Students will do a combination of classroom work and work-based internship-type experience.

### **COURSES INCLUDE:**

#### **Fall Semester**

##### **Multi-Disciplinary Engineering: 7:30-9:30am**

Engineering Orientation (EGR100) .....(1 credit)  
Electronic Portfolio Development (SDV164) .....(2 credits)

##### **Health and Human Services: 7:30-9:30am**

Introduction to Human Services (HSV109) .....(3 credits)

##### **Business Communication and Technology: 12:50-2:50pm**

Business Communications (ADM154) .....(3 credits)

#### **Spring Semester**

##### **Multi-Disciplinary Engineering: 7:30-9:30am**

Engineering Orientation (EGR100) ..... (1 credit)  
Electronic Portfolio Development (SDV164) ..... (2 credits)

##### **Health and Human Services: 7:30-9:30am**

Introduction to Human Services (HSV109) ..... (3 credits)

##### **Business Communication and Technology: 12:50-2:50pm.**

Business Communications (ADM154) ..... (3 credits)

##### **Renewable Energy and Bio-Sciences: 12:50-2:50pm**

Career Exploration (SDV130) ..... (1 credit)  
Workplace Professionalism (ADM269) ..... (3 credits)