

BALLARD HIGH SCHOOL COURSE GUIDE OFFERINGS 2024-2025



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 – Chris Deason
Assistant Principal – Dean Lansman
9th & 10th Grade Counselor – Lexi Flaherty
11th & 12th 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 class rank. 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 consider potential careers, research the requirements of these careers, and take 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. Freshmen and sophomore students will be required to schedule courses in the building for a full academic course load. Juniors are required to be in the building for a full academic course load unless they are taking an off-campus college course or an online course with one DMACC study period. Seniors will be required to take five academic course with two of them being in the building per semester. Exceptions may be made with administrative approval.
4. Students may schedule one study hall per semester.
5. 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 thoughtfully 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 week. **After one week, a drop becomes an F on their report card/transcript. Students who wish to withdraw from a course after the first week of each semester must first get approval from the principal or assistant principal.**
6. Courses described in this booklet are offered based upon sufficient student demand and teacher availability. This will be determined by the administration.
7. Our Master Schedule is built from student course requests. **Students need to be very accurate when entering their course requests in Infinite Campus.**
8. This course description book is also available online from our school website www.ballard.k12.ia.us. Click on the Guidance Office tab, then "Ballard 2023-2024 Course Guide."

ALTERNATIVE EDUCATION OPPORTUNITIES

POST-SECONDARY ENROLLMENT OPTIONS

The Post-Secondary Enrollment Options Program 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 9th or 10th grade (students who have been identified by the District as gifted and talented) and students in the 11th or 12th grades are eligible to participate in the post-secondary enrollment plan. 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, 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.

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

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

EARLY GRADUATION

Students may be permitted to graduate early, provided all graduation requirements are met, including the physical education requirement. Students may graduate up to two semesters with the required number of credits for a Ballard diploma. 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. Students must complete their final semester at 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 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.

	Ballard Diploma	Honor's Diploma	CORE Diploma
Class of 2025	46 credits	50 credits and a cumulative GPA of 3.33	35 credits
Class of 2026	48 credits	52 credits and a cumulative GPA of 3.33	37 credits
Class of 2027 and beyond	50 credits *Freshmen PE and Health graduation requirements	54 credits and a cumulative GPA of 3.33	39 credits

BALLARD DIPLOMA

Required courses from the following areas:

8 Credits of Language Arts:

Freshmen - 2 credits of Advanced/Survey of English

Sophomores - 2 credits of Advanced/American Studies & Composition

Juniors - 2 credits of World Literature & Composition

Sophomore, Junior or Senior year – 2 credits 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 Credits of Math:

A combination of Algebra I, Geometry, Intermediate Algebra with Stats, Advanced Algebra, Trigonometry, Applied Math 772 & 773, Calculus, Statistics, AP Statistics or AP Calculus will be required

8 Credits of Social Sciences:

Freshmen – 2 semesters of Global Issues

Sophomores – 2 semesters of US History or AP US History

Juniors – 2 semesters of Modern World History or AP World History: Country Study

Seniors – 1 semester of U. S. Government

Seniors – 1 semester of Economics

6 Credits of Science:

Freshmen – 2 semesters of Advanced/Physical Science

Sophomores – 2 semesters of Advanced/AP/Biology

Juniors & Seniors–2 semesters of Chem. Comm., Chemistry, or Adv. Chemistry

4 Credits of Physical Education:

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

Freshmen PE, Intro to Strength and Conditioning, Advanced Strength and Conditioning, Lifetime Fitness and Recreation

1 Credit of Health (for only Class of 2027 and beyond):

Freshmen- 1 semester of Health

1 Credit of Financial Literacy:

Juniors/Seniors- 1 Semester of Money Sense

Remaining Credits of Electives:

Band, Choir, Industrial Technology courses, Art courses, Family and Consumer Science courses, Agriculture courses, Business courses, English elective courses, Science elective courses, Social Studies elective courses, Math elective courses, Spanish courses, DMAcc courses

***The above-tagged courses receive Ballard English credits but are not NCAA or RAI approved courses.**

See page 47 for a full list of approved RAI courses.

BALLARD HONORS DIPLOMA

Students may attain the status of graduating with an Honors Diploma if they meet the requirements specified on page 4. The additional credits above and beyond the credits required for a Ballard Diploma would come from students taking certain upper level challenges in decided curricular areas, with an accumulative **G.P.A. of at least 3.33.**

8 Credits of Language Arts:

Freshmen - 2 semesters of Advanced/Survey of English
Sophomores - 2 semesters of Advanced/American Studies & Composition
Juniors - 2 semesters of World Literature & Composition
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)

8 Credits of Math:

Must include a minimum of 2 credits from Advanced Algebra, Trigonometry, (AP) Calculus, or (AP) Statistics

8 Credits of Science:

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

8 Credits of Social Sciences:

Credits in Social Science including; Government, Economics, Global Issues, US History, AP US History, Modern World History or DMACC AP World History: Country Study
Electives (Psychology, Sociology, Global Issues II, or Global Issues III)

6 Credits of World Language:

Credits of Spanish I, Spanish II, Spanish III, or Spanish IV

Remaining Credits of Electives:

Band, Choir, Industrial Technology courses, Art courses, Family and Consumer Science courses, Agriculture courses, Business courses, English elective courses, Science elective courses, Social Studies elective courses, Math elective course, Spanish elective courses, DMACC courses

1 Credits of Financial Literacy:

Juniors/Seniors – 1 Semester of Money Sense

1 Credit of Health (for only Class of 2027 and beyond):

Freshmen- 1 semester of Health

4 Credit of Physical Education :

Freshmen PE, Intro to Strength and Conditioning, Advanced Strength and Conditioning, Lifetime Fitness and Recreation

***The above-tagged courses receive Ballard English credits but are not NCAA or RAI approved courses.**

See page 46 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 administration). 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 credits identified by the chart on page 4 in the following coursework:

8 Credits in Language Arts

9th Survey of English

10th American Studies and Composition

11th 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)

6 Credits in Math

Algebra

Geometry

Intermediate Algebra with Stats or Advanced Algebra or Applied Math 772 & 773

8 Credits in Social Science

9th Global Issues

10th U.S. History

11th Modern World History or AP World History: Country Study

1 semester of Government

1 semester of Economics

6 Credits of Science

9th Physical Science

10th Biology

Plus: 2 credits from one of the following: Chem. Comm., Chemistry, or Adv. Chemistry

4 Credits in Physical Education

Freshmen PE, Intro to Strength and Conditioning, Advanced Strength and Conditioning, Lifetime Fitness and Recreation

1 Credit of Financial Literacy

Money Sense

1 Credit of Health (for only Class of 2027 and beyond):

Freshmen- 1 semester of Health

Remaining Credits of Electives:

Band, Choir, Industrial Technology courses, Art courses, Family and Consumer Science courses, Agriculture courses, Business courses, English elective courses, Science elective courses, Social Studies elective courses, Math elective courses, Spanish courses, DMAcc courses

FAILING REQUIRED COURSES

All required courses that are failed need to be made up for credit. There are multiple ways to do this.

COMPONENT RECOVERY

Students who earn between 50-59.99% may request to complete the class through component recovery. If the teacher, student and an administrator determine that component recovery is an option, the student will be given an Incomplete and allowed two weeks to complete the course work.

An INCOMPLETE is given when a student, for reasons of absence or other reasons acceptable to the teacher and administrative team, has been unable to complete assigned work. The deadline on an "incomplete" is two weeks after the end of the grading period. In extenuating circumstances, the administrative team will determine the appropriate course of action. All incomplete work at the end of the second semester will be recorded as a zero and figured in with the final grade.

RETAKEING COURSES IN THE CLASSROOM

Students who fail a required course will retake the course in the classroom. Both grades will be shown on the transcript, and the highest grade will be used in the GPA. Credit will only be awarded once toward graduation requirements. A student wanting to retake a course in the classroom for a better grade will be required to complete a form and submit it to the guidance counselor. If a student wishes to retake a course to improve a letter grade, the course MUST be re-taken in the regular classroom the following year.

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 Edmentum, 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 are supervised by a licensed teacher. They are able to practice skills and then use their knowledge on applications and tests. Students who take courses through the Success Center will receive a pass/fail grade instead of a letter grade.

***Credit recovery means that a course will be applied toward graduation credits; however, the "F" received previously will remain on the student's transcript. Administrative approval required to use Edmentum for credit recovery.**

SUCCESS CENTER GRADING:

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 Edmentum system is built around this standard, and students work on individual tasks until they achieve that level of mastery.

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

GRADING SYSTEM

Grades 9-12 will use the following system to determine a student's grade point average. Pluses and minuses will be retained for semester grades. The following system will be used:

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

AP, PSEO, and some DMACC courses will be weighted using the following system to determine a student's grade point average. Pluses and minuses will be retained for semester grades.

Weighted Grading System:

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

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. **Advanced Placement courses, PSEO and some DMACC courses will utilize the weighted grading scale.** 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, PSEO, or some DMACC 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, PSEO, or some DMACC courses 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.

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 upcoming 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 selected 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.

AP COURSES AVAILABLE

AP Classes taught at Ballard in a classroom setting:

AP Calculus
AP Statistics
AP Biology
AP Chemistry
AP Computer Science Principles
AP Physics 1 / PHY 160 (DMACC) General Physics 160
AP Lang/Comp/DMACC 105 & 106 Comp I & II
AP Literature/Composition/DMACC Literature 101: Introduction to Literature
AP Literature/Composition/DMACC Literature 185: Contemporary Literature
AP US History
AP World History: Modern Course DMACC Country Studies: China
AP World History: Modern Course DMACC Country Studies: Middle East and Islam

AGRICULTURAL EDUCATION

7661A INTRODUCTION TO AGRISCIENCE/AFNR

7661B 9-12 Full Year 2 Credit

Fall Semester: Introduction to Agri science 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.

Spring Semester: Agriculture, Food and Natural Resources (AFNR) will continue to build on skills learned in Introduction to Agri science 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 Offered as Ag Elective or Science Credit

Recommended: 7661 A/B Intro to Agriscience/AFNR

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.

7675 ATHLETIC FIELD & LANDSCAPE MANAGEMENT

10-12 Fall Semester 1 Credit

Recommended: 7661 A/B Intro to Agriscience/AFNR

Studies sport facilities utilizing turf grasses including golf courses, football, soccer, baseball, and softball fields. Techniques of operation, management, maintenance, budgets, construction, and irrigation will be covered. Course also focuses on the fundamentals of creating a landscape project, including material take-offs, plant pricing, labor rates, measuring, reading landscape plans and math calculations.

7670 NATURAL RESOURCES

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

Recommended: 7661 A/B Intro to Agriscience/AFNR

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.

7668 AGRICULTURE BUSINESS

10-12 Fall Semester 1 Credit

Recommended: 7661 A/B Intro to Agriscience/AFNR

This course is designed to emphasize agricultural business management. Students will have hands-on experience with computers and other data serving networks. They will manage simulated businesses. Learning opportunities will include credit and money management marketing, planning and decision making. Management principles, record keeping, and occupational/career planning will be stressed.

7659A INDEPENDENT AG

7659B 11-12 Full Year

COURSE DESCRIPTION: Self-guided study in an agricultural field. **Instructor approval needed.**

AGA114 DMACC PRINCIPLES OF AGRONOMY

Offered as Ag Elective or Science Credit

Fall Semester 1 Credit/ 3 DMACC Credits

Recommended: 7661 A/B Intro to AgriScience/AFNR

COURSE DESCRIPTION: A foundation course in agronomy applying crop, soil, and environmental sciences in understanding agricultural systems in the world. Includes introductory concepts of plant, soil, tillage, pest, environmental, and sustainable aspects of crop production. The course will consist of hands-on learning experiences.

AGS114 DMACC SURVEY OF THE ANIMAL INDUSTRY

Spring Semester 1 Credit/ 2 DMACC Credit

Recommended: 7661 A/B Intro to Agriscience/AFNR

COURSE DESCRIPTION: Ways domestic animals serve the basic needs of humans for food, shelter, protection, fuel, and emotional well-being. Terminology, basic structures of the industries surrounding the production, care, and marketing of domestic animals in the United States.

AGC420 DMACC AGRICULTURAL ISSUES

Spring Semester 1 Credit/3 DMACC Credits

Recommended: 7661 A/B Intro to Agriscience/AFNR

COURSE DESCRIPTION: This course will explore the current issues that affect agriculture from the perspective of the producer and consumer in a society with little direct connection to food production. The course will review today's most pressing issues: the environment, the national debt, international trade and world health and how it relates to global society change.

APPLIED ACADEMICS DEPARTMENT

8200A STUDY HALL

8200B 9-12 No Credit

Students may choose to have one block for a study hall each semester.

1401A ACADEMY

1401B 9-12 No credit

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.

- **NOTE: Incoming Freshmen will be scheduled 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 Counselors, and HS Administration**

8071A EXTENDED LEARNING PROGRAM (ELP)

8071B 9-12 Advisor Period- Full Year No credit

COURSE DESCRIPTION: Advisory period for identified Extended Learning Program (ELP) students who are interested in meeting with the ELP teacher. ELP advisory will focus on the following:

- Connect students with opportunities for career exploration, workplace mentorship, and job shadowing experiences
- Explore self-understanding: continue identifying strengths, identities, and needs in socio-emotional development
- Develop a toolkit for self-advocacy, self-confidence, self-awareness, motivation, resilience, curiosity, independence, and risk-taking
- Promote effective interpersonal and technical communication skills
- Manage different stressors in adolescent experiences, such as perfectionism, scheduling, etc.

8050 FOUNDATIONS OF LEADERSHIP

9-12 One Semester 1 Credit

COURSE DESCRIPTION: Students in the Foundations of Leadership course will study leadership concepts that empower them to become a stronger leader in their school, community, and future endeavors. This course will define and explore individual and group leadership, help students employ leadership skills and practices, and promote the practice of leadership through service.

8275 DIGITAL MEDIA TECHNOLOGY

9-12 Fall Semester 1 Credit

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. Topics covered include Video Editing, Angle and Framing, Sound Editing, Script Writing, Movie Trailers, Short Film, PSAs and Promo Videos. Students will also work with computer applications to design graphics, announcements, and storyboards. Students must be able to set goals in order to meet deadlines.

AREAS OF STUDY:

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

8276 DIGITAL MEDIA TECHNOLOGY II

10-12 One Semester 1 Credits

Prerequisite: 8275 Digital Media Technology

COURSE DESCRIPTION: This course is an extension of DMT I. Students will use script writing skills to produce a variety of projects geared towards differing audiences. When applicable, they will have the opportunity to film school events and create content for the school and the community members. Students must be able to set goals in order to meet deadlines.

8051A SERVICE/HELPING**8051B** 9-12 Full Year No credit

COURSE DESCRIPTION: Students may choose or be assigned to a service/helping position within the school district during a regular class period or complete service hours outside of school. Students will learn the value of helping others through their service. 9th-11th grade students may earn service hours opposite their P. E. days if they are completing their service during the school day. Seniors may earn service hours during one full class period. Service within the school district may include: assisting teachers, mentoring, tutoring, volunteering at other district buildings, or helping office personnel. Prior approval of placement must be acquired prior to each semester. Service outside of the school district may include: service provided to others outside of your family that you do not get paid for and is signed off by a non-family member. Service hour sheets should be turned in at the end of each month throughout the school year. **Seniors** must have all hours turned in by May 1st: no hours will be accepted after this date. A minimum of 300 hours is needed to receive the silver cord for service at graduation. Service/Helping may not be used to waive PE. See page 50 of this course guide for more information about Service Hours Guidelines.

1059A YEARBOOK PUBLISHING**1059B** 9-12 Full Year 2 Credits

COURSE DESCRIPTION: Yearbook Publishing is a year-long course designed to have students understand the role of visual art and design, and its impact on society and culture, particularly in publication mediums. The course will focus on students understanding a designer's target audience and stimulating creativity through a variety of two-dimensional media. Then, students will apply this artistic process to create designs for the yearbook publication. Finally, they will maintain the integrity of design through the editing process, while collaborating and communicating with their colleagues on the yearbook staff. The assignments in the course will demonstrate a student's ability to apply the principles of design and effectively communicate their message. Assignments will also have students process, respond to, and judge design works using their knowledge of the elements of art and the principles of design.

Materials List: 3 ring binder, 2 pocket folders, pencil. Camera optional.

8080A SCHOOL TO WORK INTERNSHIP**8080B** 12th Full year 4 credits

The School to Work internship course combines essential career ready skills with supervised learning on the job. The in-class portion focuses on future plans and goals with the study of career assessment, career and post-secondary research, job-seeking skills, the work force and networking. The job-site provides students with practical work experience as well as training and networking with community business partners. Students must earn 120 on the job hours throughout the year. For this reason students must have room in their schedule to meet these requirements. **Limit 20 students per section.**

ART DEPARTMENT

Art Path



Ceramics Path

Ceramics 1 — Ceramics 2 — Ceramics 3 — Ceramics 4

Media Arts Path



5070

ART I

9-12

Fall or Spring Semester

1 Credit

COURSE DESCRIPTION: Explore the arts! This course is designed to give students experience in a wide variety of art making techniques using a variety of art media. Students will develop their creativity and problem-solving skills while implementing artistic behaviors and studio habits. Students will create digital portfolios and have opportunities to showcase their artwork in the conference art show and other exhibits when available. This class is open to all grade levels and all skill levels. Materials List: 9 x 12 spiral bound sketchbook

5073

SCULPTURE

10-12

Fall or Spring Semester

1 Credit

Prerequisite: 5070 Art 1

COURSE DESCRIPTION: Students will develop their skills with 3D media - including (but not limited to) plaster, clay, wire, paper mache, found objects, cardboard, paper, etc... This course emphasizes materials and techniques while students apply their creative ideas.

Materials List: Sketchbook and 1 roll masking tape

5091

2D ART

10-12

Fall or Spring Semester

1 Credit

Prerequisite: 5070 Art 1

COURSE DESCRIPTION: Students will develop their skills with 2D media - including (but not limited to) drawing, painting, and printmaking. This course emphasizes materials and techniques while students apply their own creative ideas.

Materials needed: sketchbook and 1 roll masking tape

5092

MIXED MEDIA

10-12

1 Credit

Prerequisite: 5070 Art 1

COURSE DESCRIPTION: Students will develop their skills with mixed media methods - combining various media together to create artwork. 2D & 3D skills will be applied. This course emphasizes thinking outside the box to use traditional and non-traditional art media in new and interesting ways.

Materials List: Sketchbook and 1 roll of masking tape

5072 CERAMICS I

9-12 Fall Semester 1 Credit

COURSE DESCRIPTION: During this semester-long course, students will explore hand building ceramics techniques. They will create a wide variety of pieces from functional to decorative. Students will learn how to wedge and condition their clay, as well as firing and glazing methods. Students will document their work process and create a digital portfolio of their work. If time and class allow, students may get the opportunity to explore wheel throwing!

Materials List: Sketchbook or notepad, Apron &/or large button-down shirt, and quart or gallon bucket with lid (preferred, but optional)

5078 CERAMICS 2

9-12 Spring Semester 1 Credit

Prerequisite: 5072 Ceramics I

COURSE DESCRIPTION: Students will take their knowledge and skills from Ceramics 1 further in this course as they learn more complicated hand building and sculpting methods. Students will be introduced to the pottery wheel and be given the option to develop their wheel throwing skills if it interests them.

Materials List: Sketchbook or notepad required. Apron &/or large button down shirt, old towel, and quart or gallon bucket with lid (preferred, but optional)

5093 CERAMICS 3

10-12 Fall Semester 1 Credit

Prerequisite: 5072 Ceramics 1 and 5078 Ceramics 2

COURSE DESCRIPTION: Dive deeper into the world of ceramics! Students will rely on prior knowledge as they build, create, and sculpt with ceramics. They will learn more in depth about the chemical makeup of ceramics and the various glazes. Students will be expected to learn and understand the firing process and assist in the kiln firings and maintenance of the kiln. Students will research and experiment new surface treatment options and create some of their own tools.

Materials List: Sketchbook or notepad required. Apron &/or large button down shirt, old towel, and quart or gallon bucket with lid (preferred, but optional)

5094 CERAMICS 4

10-12 Spring Semester 1 Credit

Prerequisite: 5072 Ceramics 1, Ceramics 2 and Ceramics 3

COURSE DESCRIPTION: Students who take this class will spend the semester creating a cohesive body of work consisting of multiple pieces based on their skills from previous courses. Students will be expected to help maintain the studio space as well as assist with kiln firing. Students will also research and interview ceramic artists to learn about the costs and benefits of ceramics as a profession.

Materials List: Sketchbook or notepad required. Apron &/or large button down shirt, old towel, and quart or gallon bucket with lid (optional)

5080 PHOTOGRAPHY I

9-12 Spring Semester 1 Credit

Prerequisite: Intro to Digital Media

COURSE DESCRIPTION: You don't need a fancy camera to be a good photographer! Students will use their own personal cell phone camera as they learn the ins and outs of what makes a good photograph. Focusing on composition, lighting, and basic editing techniques, students will have fun photographing a variety of subjects. Students will use Adobe Photoshop and Lightroom to edit and organize their work.

Materials List: Smartphone with camera and spiral notebook or sketchbook.

5081 ADVANCED PHOTOGRAPHY (Offered on an every other year basis. Next offered in the 24-25 school year)

10-12 1 Credit

Prerequisite: Intro to Digital Media AND 5080 Photography 1

COURSE DESCRIPTION: Students will take their knowledge from first semester further as they apply those learned skills and techniques to shooting with a Digital Single Lens Reflex (DSLR) camera. They will learn about and apply knowledge regarding Shutter Speed, Aperture, ISO, and other camera settings. They will dive deeper into advanced editing techniques to create visually stunning composites using Adobe Photoshop & Lightroom. Students will develop their personal photographic style as they explore various artists, themes, subjects, and concepts while creating a body of work for display. Materials List: spiral notebook or sketchbook, DSLR Camera with SD card (preferred, not required)

5095 INTRO TO DIGITAL MEDIA ART

9-12 Fall Semester 1 Credit

COURSE DESCRIPTION: This course will allow students to learn new computer programs and utilize their creativity in new ways, relevant to today's creative and technological society. They will be introduced to digital files and the difference between jpg, png, pdf, etc. They will also learn how to navigate a desktop computer and organize files. This class is needed as an intro before graphic design or photography because those classes utilize the same programs. This class will reduce the redundancy of learning those programs for the students who take both photo and graphic design. It also allows students to get a taste for photo, design, as well as other digital art forms.

6088 GRAPHIC DESIGN 1

9-12 Spring Semester 1 Credit

Prerequisite: Intro to Digital Media Art

COURSE DESCRIPTION: Students will learn about the digital and commercial aspect of art and design. They will learn the principles of great design while using professional-grade Adobe design software, like Photoshop and Illustrator. Students will create logos, posters, greeting cards, digital drawings, and more! No art skills are required, just a desire to learn new things!

Materials List: Notebook & folder

5079 ADVANCED GRAPHIC DESIGN (Offered on an every other year basis. Next offered in the 24-25 school year)

10-12 Fall Semester 1 Credit

Prerequisite: Intro to Digital Media Art and 6088 Graphic Design

COURSE DESCRIPTION: Take your graphic design skills further and explore what it takes to design business cards, mailers, websites, and other products necessary to establish a brand. Students will learn more about Typography and create materials for personal use, as well as businesses or organizations using Adobe InDesign, Photoshop, and Illustrator.

Materials List: Notebook and folder

5088 STUDIO ART

11-12 Fall /Spring Semesters 1 Credit

Prerequisite: Art 1, PLUS at least 3 of the following art courses: 2D Art, 3D Sculpture, Mixed Media, Ceramics 1, Ceramics 2

COURSE DESCRIPTION: Students will develop their artistic voice as they apply and refine the skills learned in previous art courses. They will explore and document their artistic process as they create personal and meaningful works of art. Students will use personal reflections, group critiques, and other reflection methods to respond to and evaluate artistic work.

Materials List: 9 x 12 spiral bound sketchbook

5074A INDEPENDENT STUDY

12 Final Semester of Classes 1 Credit

PREREQUISITES: Senior portfolio (and all previous courses in chosen media) Instructor approval needed.

COURSE DESCRIPTION: This course is for students interested in pursuing art beyond high school. Students will need approval from the instructor prior to scheduling this course. Students will declare an area of study (Art, Ceramics, Photography, Graphic Design), and create independent projects that showcase their skills and talent in their area of study. High quality work and work ethic will be expected. It is an expectation that students enter work at the RRC Art Show and at least one additional competition or show (as available).

Materials List: Same as chosen area of study, plus any needed materials beyond what is provided.

5096 SENIOR PORTFOLIO

12 1 Credit

PREREQUISITES: All previous courses in chosen media. Instructor approval needed.

COURSE DESCRIPTION: This course is for students interested in pursuing art beyond high school. Students will need approval from the instructor prior to scheduling this course. Students will be required to participate in a National Portfolio Day event to get feedback on their art from college professors. Students will take that feedback and apply what they learned to their work as they create independent projects, building up a body of work. Students will learn how to create a high quality digital portfolio to submit to potential colleges for scholarships and admission acceptance. Students will also learn best practices with matting, framing, and displaying their work. It is an expectation that students enter work at the RRC Art Show and at least one additional competition or show (as available).

Materials List: Same as chosen area of study, plus any needed materials beyond what is provided.

BUSINESS EDUCATION AND COMPUTER SCIENCE DEPARTMENT

6060 INTRO TO BUSINESS

9-12 Semester 1 Credit

COURSE DESCRIPTION: This class will introduce students to the world of business. They will learn and practice the basics of giving professional presentations and working in a group. Units include Presentation Basics, Human Resources, Finance, Entrepreneurship, International Business, Marketing, Transportation and Logistics. Students will have the opportunity to participate in events put on by Ames Chamber of Commerce and the Economic Development Council.

6064 BUSINESS II

9-12 Semester 1 Credit

COURSE DESCRIPTION: Students will join the Career and Technical Student Organisation DECA, which prepares emerging leaders and entrepreneurs in marketing, finance, hospitality and management in high schools and colleges around the globe. Using the Iowa Clearinghouse and input from local business, students will take on Project Based Learning experiences.

6061 ACCOUNTING 1

10-12 Fall Semester 1 Credit

COURSE DESCRIPTION: Accounting is the study of how businesses keep track of their financial records. Students will learn the accounting cycle for a sole proprietorship. This subject stresses the organization of receipts, payments, sales, purchases and investments.

6062 ACCOUNTING 2

10-12 Spring Semester 1 Credit

Prerequisite: Accounting 1

COURSE DESCRIPTION: Accounting is the study of how businesses keep track of their financial records. Students will learn the accounting cycle for a merchandising business organized as a corporation. This includes special journals, subsidiary ledgers, preparation of financial statements, payroll records, taxes, depreciation, and related topics.

6080A COMPUTER SCIENCE PRINCIPLES

6080B 9-12 Year 2 Credits

Prerequisite: 2046 A&B Algebra 1

COURSE DESCRIPTION: CS Principles introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. More than a traditional introduction to programming, it is a rigorous, engaging, and approachable course that explores many of the foundational ideas of computing, so all students understand how these concepts are transforming the world we live in. Enrolled students will have the option to complete the AP requirements. More information is available at code.org.

6091 COMPUTER PROGRAMMING AND WEB DESIGN

9-12 Semester 1 Credit

Students will be able to choose from a number of programming and web design courses offered through codeacademy.com. Pathways include but are not limited to: Python, C++, Java, SQL, Web Development, Web Design, Data Science, Cybersecurity. There will also be opportunities in class to produce 3D designs for printing. Students must be able to set goals and self-pace for their chosen path of study.

FAMILY AND CONSUMER SCIENCES DEPARTMENT

7051 FOODS

9-12 Fall Semester 1 credit

COURSE DESCRIPTION:

Students will learn about safety and sanitation, foodborne illnesses, basic food preparation and procedures, the principles of cooking and baking through demonstrations and lab experiences. Their experience includes a final individual practical lab using the skills acquired during the term.

7052 ADVANCED FOODS

9-12 Spring Semester 1 credit

Recommended: 7051 Foods

COURSE DESCRIPTION:

Students will gain knowledge and develop skills needed to select and prepare foods with a primary focus on meeting the nutritional needs of the human body. Students will practice employability skills and apply criteria for product development testing and presentation processes. Their experience includes multiple labs using the skills acquired throughout the semester.

7064 CULINARY ENTERPRISE

10-12 1 semester 1 credit

Recommended: 7051 Foods and 7052 Adv. Foods

COURSE DESCRIPTION:

Culinary Enterprise provides students with knowledge and skills related to commercial and institutional food service establishments. Course topics include customer relations, cost accounting, food cost controls, and marketing. Culinary Enterprise will be ran like a business and will sell product to the public. Whether a student plans to go on to college or head straight for a career, the business skills that Culinary Enterprise develops will serve them well in the years ahead and opens student's eyes to the vast and varied career options available to them in this exciting industry.

7057 CHILD DEVELOPMENT I

10-12 Fall Semester 1 credit

COURSE DESCRIPTION:

This child development course explores the following topics: considerations of parenthood, effective parenting skills, conception, prenatal development, birth process, postnatal care, infancy, and toddlers.

7058 CHILD DEVELOPMENT 2

10-12 Spring Semester 1 credit

Recommended: 7057 Child Development I

COURSE DESCRIPTION:

This child development course centers around various topics related to children ages 3-6 years old. Topics include: developmental theories, developmentally appropriate practice, center-based care, observational methods, and exceptional children. This is a great class for those interested in childcare careers.

7060 HOUSING AND INTERIOR DESIGN

9-12 Fall semester 1 credit

COURSE DESCRIPTION: This is an introductory course for those interested in academic enrichment or career exploration and skills related to the housing, interior design, or furniture industry. This course addresses knowledge and skills related to elements and principles of design; factors that influence housing, architecture and floor plans, interpreting and applying client needs and wants to a design and career opportunities in the industry.

7069 FASHION

9-12 Spring semester 1 credit

COURSE DESCRIPTION: This is an introductory course for those interested in academic enrichment or career exploration and skills related to fashion, textiles, and the apparel industry. This course addresses knowledge and skills related to fibers and textiles; elements and principles of design; past, present, and future fashion trends; technical sewing construction skills, fashion merchandise and design; and career opportunities.

FINANCIAL LITERACY

2040 MONEY SENSE

11-12 (Required) 1 Semester 1 Credit

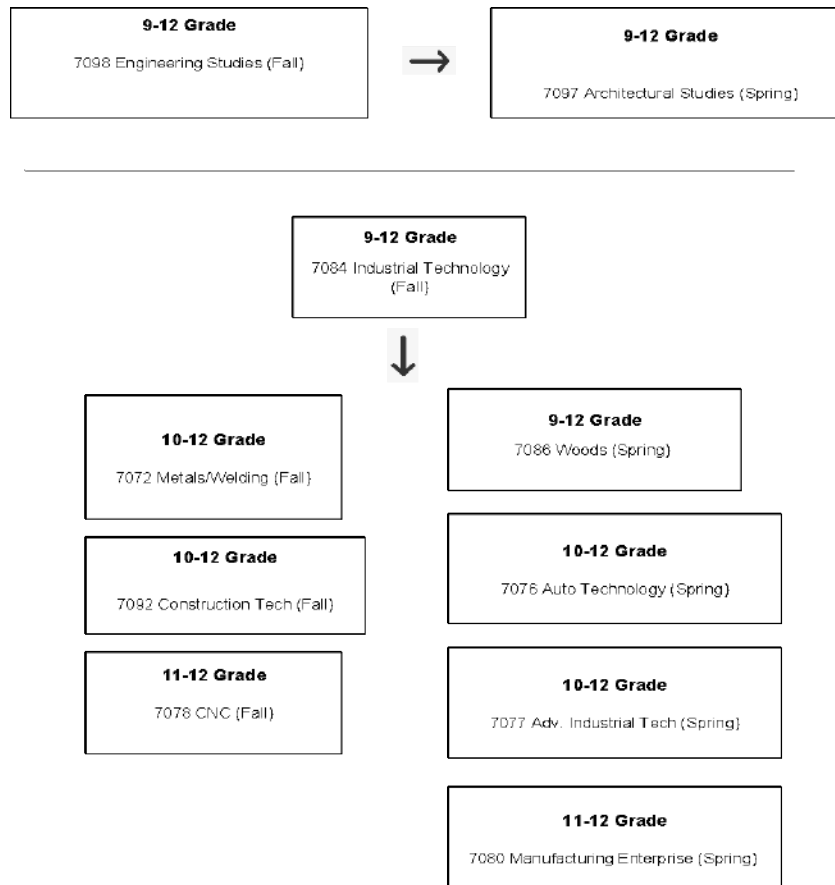
COURSE DESCRIPTION: This financial literacy class will cover many topics associated with the use and misuse of money. One of the goals of this class is to inform students of some of the financial pitfalls and springboards that are out there in the “real world”. Students will be required to discuss many 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 | 6. taxes |
| 2. Checking/debit accounts | 7. saving strategies |
| 3. Credit | 8. loans/applications |
| 4. Financial fraud and identity theft | 9. large purchases |
| 5. Credit card usage | 10. many different types of investing |

INDUSTRIAL TECHNOLOGY DEPARTMENT



7072 METALS / WELDING

10-12 Fall Semester 1 Credit

Recommended: 7084 Ind Tech

COURSE DESCRIPTION: In this basic metal course, students will be introduced to the machines and tools used to create metal products. They will learn machine processes and safety. Students will study a wide range of topics including welding, sheet metal design, and plasma cutting. Students will learn the safety precautions and procedures of the lab classroom and will gain critical thinking and problem-solving skills while developing multiple projects. **Limit 20 students per section.**

7076 AUTO TECHNOLOGY

10-12 Spring Semester 1 Credit

Recommended: 7084 Ind Tech

COURSE DESCRIPTION: In this basic automotive course, students will be introduced to basic auto care and maintenance. Students will study a wide range of topics including oil changes, tire issues and many other basic automotive skills. Students will learn the safety precautions and procedures of the lab classroom and will gain critical thinking and problem-solving skills while learning automotive skills. **Limit 20 students per section.**

7077 ADVANCED INDUSTRIAL TECHNOLOGY

11-12 Spring Semester 1 Credit

Recommended: 7084 Ind Tech

COURSE DESCRIPTION: In this class, Students can advance their skills in a specific topic of their choice. These topics must be in the area of Industrial Technology, whether that be woodworking, metalworking, welding, automotive or construction. Students will create projects and learn new skills in the area they have chosen. Students may also decide to take a class that their schedule does not allow them to. **Limit 20 students per section.**

- 7080 MANUFACTURING ENTERPRISE**
 11-12 Spring Semester 1 Credit
Recommended: Credits in any two IT courses.
 COURSE DESCRIPTION: In this 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.**
- 7084 INDUSTRIAL TECHNOLOGY**
 9-12 Fall Semester 1 Credit
 COURSE DESCRIPTION: In this class, students will get an introduction into the world of Industrial Technology. This will include students learning safety and proper shop procedures while creating projects in the areas of Industrial Technology. These areas include woodworking, metalworking, CAD, small engines, and problem-solving activities. This course is highly recommended as an entry level course in the Industrial Tech Dept
Limit 20 students per section
- 7086 WOODS**
 9-10 Spring Semester 1 Credit
Recommended: 7084 Ind Tech
 COURSE DESCRIPTION: In this basic wood 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 multiple projects.
Limit 20 students per section.
- 7092 CONSTRUCTION TECHNOLOGY**
 10-12 Fall Semester 1 Credit
Recommended: 7084 Ind 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 homeowner 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 workplace best practices. Students will gain problem solving and critical thinking skills that will focus on the utilization of course concepts. **Limit 20 students per section.**
- 7097 ARCHITECTURAL STUDIES**
 9-12 Spring Semester 1 Credit
Recommended: 7098 Engineering Studies
 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 workplace best practices. Students will complete projects designed to build confidence using the software. Students will develop problem solving, research, and critical thinking skills. **Limit 20 students per section.**
- 7098 ENGINEERING STUDIES (Offered on an every other year basis. Next offered in the 25-26 school year)**
 9-12 Fall Semester 1 credit
 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 be a variety of hands-on and design-based projects. There will be a focus on engineering careers and workplace 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 20 students per section.**

LANGUAGE ARTS DEPARTMENT

1041A SURVEY OF ENGLISH

1041B 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.

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
Communication skills | 6. Research skills |
| | 7. Vocabulary |

1040A ADVANCED SURVEY OF ENGLISH

1040B 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
communication skills | 7. Vocabulary |
| 4. Grammar/usage/mechanics | |

1043A AMERICAN STUDIES AND COMPOSITION

1043B 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.

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 ADVANCED AMERICAN STUDIES AND COMPOSITION

1044B 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 WORLD LITERATURE AND COMPOSITION

1042B 11 Full Year 2 Credits

COURSE DESCRIPTION: This course is designed to expose students to a variety of texts from cultures and time periods around the world. It fulfills the requirements of junior-level English.. It will include the areas of writing, reading, speaking, and listening.

AREAS OF STUDY:

- | | |
|-------------------------------|---|
| 1. World Literature texts | 5. Research Skills |
| 2. Writing process and styles | 6. Vocabulary |
| 3. Speaking and Listening | 7. Rhetorical strategies ethos, pathos, and logos |
| 4. Grammar/usage/mechanics | |

1045A SENIOR ENGLISH**1045B** 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 | 4. Critical reading |
| 2. Formal and informal writing | 5. Research skills |
| 3. Grammar/usage/mechanics | 6. Speaking and listening |
| | 7. Rhetorical Analysis |

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**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.

LIT 101 AP LITERATURE & COMPOSITION/DMACC LITERATURE 101: INTRO TO LITERATURE

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 | 4. Literary Analysis |
| 2. Plays | 5. Critical Theory |
| 3. Novels | |

LIT 185 AP LITERATURE AND COMPOSITION/DMACC LITERATURE 185: CONTEMPORARY LITERATURE

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. Poetry | 4. Literary Analysis |
| 2. Plays | 5. Critical Theory |
| 3. Novels | |

ENG 105 AP LANGUAGE/COMPOSITION/DMACC 105 & 106: COMPOSITION I & II ENG 106

Full Year 2 Credits

Recommended: 1044A&B or 1042A&B**Prerequisite for ENG 106: Grade of C- or better in ENG 105**

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

One Semester 1 HS Credit / **3 DMACC Credits**

This course covers many aspects of human communication.

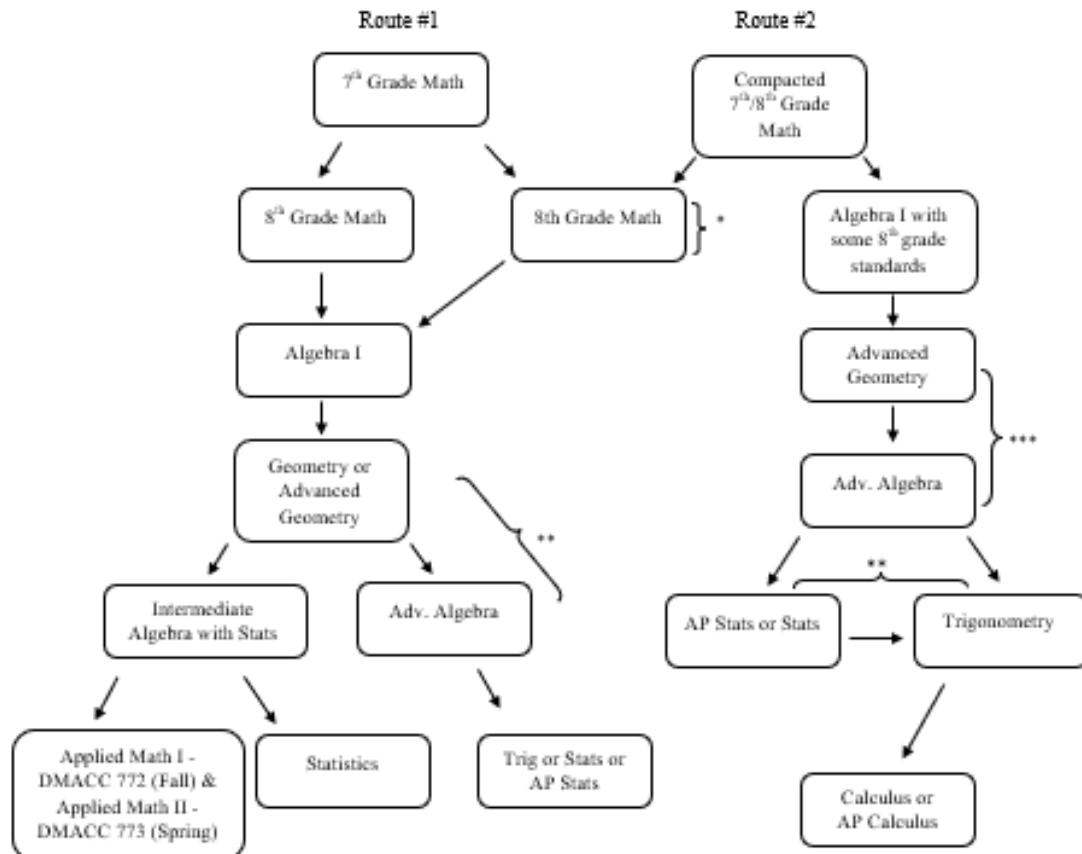
Sections will be capped at 20. Seniors will be given priority for enrollment.

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



* If necessary, student can take 8th Grade Math as recommended by the math teacher.

** Can double up if the student wants to take Calculus.

*** Can double up if the student wants to be able to take Calculus I at ISU or DMACC their senior year.

**** For students to be successful, the math department strongly advises that students follow the recommendation 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 their current math teacher's recommendation. ***

Students who choose route #2 could potentially end up 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.

2046A ALGEBRA I**2046B** 9-12 Full Year 2 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 | |

1402A ALGEBRA I LAB**1402B** 9-12 Full Year 1 Credit - Elective*Criteria for consideration: ISASP scores, AAIMS assessment, FAST assessment*

COURSE DESCRIPTION: Algebra I lab is taken concurrently with the Algebra I course. The Algebra I lab will provide more instruction and support for the concurrent Algebra I course, front loading and reinforcing the major concepts from Algebra I. Additionally, the lab is intended to provide additional support around skills on which the foundations of Algebra are built: operations with fractions and integers, applying order of operations, and solving, graphing, creating, modeling, and evaluating expressions and equations. The Algebra I lab is an elective pass/fail class and therefore does not count towards the three years of high school math credits required for graduation.

2047A GEOMETRY***2047B** 9-12 Full Year 2 Credits**Recommended: 2046A&B Algebra**

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 |

2050A ADVANCED GEOMETRY***2050B** 9-12 Full Year 2 Credits**Recommended: 8th Algebra C or better/Teacher Recommendation**

COURSE DESCRIPTION: This course will provide the fast-track mathematically-minded students with more in depth concepts and non-priority concept exposure. This will keep them challenged and more prepared for a math-based future. This course one of the second level of high school math courses for those students planning to attend a four-year college. Areas of study for this course will be the same as Geometry with more emphasis on circles and more relationships with triangles. A scientific calculator is required.

1403A GEOMETRY LAB**1403B** 9-12 Full Year 2 Credits - Elective*Criteria for consideration: ISASP scores and AAIMS assessment*

COURSE DESCRIPTION: Geometry lab is taken concurrently with the Geometry course. The Geometry lab will provide more instruction and support for the concurrent Geometry course, front loading and reinforcing the major concepts. Additionally, the lab is intended to provide additional support around skills on which the foundations of Algebra and Geometry are built: operations with fractions and integers, applying order of operations, modeling with mathematics, writing proofs, and graphing. The Geometry lab is an elective pass/fail class and therefore does not count towards the three years of high school math credits required for graduation.

2049A INTERMEDIATE ALGEBRA WITH STATS**2049B** 11-12 Full year 2 credits**Recommended: 2047A&B Geometry**

COURSE DESCRIPTION: This course advances Algebra I topics and introduces statistical topics with a focus in application. This course uses a combination of advanced algebra standards as well as statistics standards.

ALGEBRA AREAS OF STUDY:

1. Linear functions
2. Matrices
3. Quadratic functions
4. Polynomial functions

STATS AREAS OF STUDY:

1. Understanding data
2. Relationships between variables
3. Gathering data
4. Experimental design
5. Probability

2048A ADVANCED ALGEBRA**2048B** 9-12 Full Year 2 Credits**Recommended: 2046A&B Algebra 1**

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.

2054A TRIGONOMETRY**2054B** 10-12 Full Year 2 Credits**Recommended: 2047A&B Geometry & 2048A&B Advanced Algebra**

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 | 5. Higher order equations |
| 2. Trig. ratios and applications | 6. Series and sequences |
| 3. Trig. identities | 7. Conic sections |
| 4. Polar coordinates/complex numbers | |

2058A CALCULUS**2058B** 11-12 Full Year 2 Credits**Recommended: 2054A&B Trigonometry**

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

AREAS OF STUDY:

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

2060A AP CALCULUS**2060B** 11-12 Full Year 2 Credits**Recommended: 2054A&B Trigonometry**

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 | 5. Continuity |
| 2. Limits of functions | 6. Related rates |
| 3. Derivatives and applications | 7. Definite integral |
| 4. Implicit differentiation | |

2070A STATISTICS**2070B** 10-12 Full Year 2 Credits**Recommended: 2048 A&B Advanced Algebra**

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

2061A AP STATISTICS**2061B** 10-12 Full Year 2 Credits**Recommended: 2048 A&B Advanced Algebra**

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

MAT 772 APPLIED MATH

11-12 Fall Semester 1 Credit

COURSE DESCRIPTION: A course in elementary mathematical skills for technicians. Topics covered include fundamental operations with whole numbers, fractions, decimals and signed numbers; percent's; geometric figures and basic constructions; area and volume formulas; English/Metric systems; measurements; and the interpretation of graphs and charts.

MAT 773 APPLIED MATH II

11-12 Spring Semester 1 Credit

Prerequisite: Minimum ALEKS scores of 30% or MAT 063 with C- or higher.

COURSE DESCRIPTION: A course in algebra and trigonometry for technicians. Topics covered include polynomials, equations, systems of linear equations, factoring, quadratic equations, trigonometry, powers, roots and logarithms.

Math 772 may transfer to some DMACC CTE programs.

Math 773 will only transfer to a couple of DMACC CTE programs.

If you have questions about which CTE programs require Math 772 or 773, please see your guidance counselor.

MUSIC DEPARTMENT

9050A MUSIC THEORY

9050B 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

9051 MUSIC HISTORY

11-12 One semester r 1 Credit

COURSE DESCRIPTION: The major focus would be a look at the history of music and how it has impacted the world. Thought medieval to contemporary music we would take a look at the characteristics of each era and how they impacted the world at that time.

9055A BAND

9055B 10-12 Full Year 2 Credits

9059B 9th BAND

Recommended: Junior High Band

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 CONCERT CHOIR

9065B 9-12 Full Year 2 Credits

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.**

9068A TREBLE CHOIR

9068B 9 Full Year 2 Credits

COURSE DESCRIPTION: Treble Choir is open to all 9th 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.

For all choral classes' 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

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.

9084A EARLY BIRD ADVANCED STRENGTH AND CONDITIONING

9084B 9-12 Semester .5 Credit

Prerequisite: 9290 Intro to Strength and Conditioning or 9289 Academic Weightlifting

COURSE DESCRIPTION: In this course students will follow a set program that is designed to help them improve their functional strength, speed, quickness, agility, explosiveness, mobility and flexibility, and confidence. This class will meet twice each week before school starts for a semester.

9280A FRESHMEN PE

9280B 9 Semester 1 Credit

COURSE DESCRIPTION: This course is designed to help students develop skills, knowledge and behaviors for active living while fostering responsibility and respect for self and others. Activities will include general fitness, lifetime activities, recreational sports and competitive team sports.

9288A LIFETIME FITNESS AND RECREATION

9288B 10-12 Semester 1 Credit

COURSE DESCRIPTION: This course is designed to help students develop skills, knowledge and behaviors for active living while fostering responsibility and respect for self and others. Activities will include general fitness, lifetime activities, recreational sports and competitive team sports.

9290A INTRO TO STRENGTH AND CONDITIONING

9290B 9-12 Full year 1 Credit

COURSE DESCRIPTION: In this course students will be introduced to appropriate technique, weight room safety and etiquette, and various strength and conditioning exercises. This course can only be taken one time and is a prerequisite for Advanced Strength and Conditioning.

9291A ADVANCED STRENGTH AND CONDITIONING

9291B 10-12 Semester 1 Credit

Prerequisite: 9290 Intro to Strength and Conditioning or 9289 Academic Weightlifting

COURSE DESCRIPTION: In this course students will follow a set program that is designed to help them improve their functional strength, speed, quickness, agility, explosiveness, mobility and flexibility, and confidence.

7061 HEALTH

9 REQUIRED

10-12 ELECTIVE Semester 1 credit

COURSE DESCRIPTION: This is a required Health class for freshmen students and an elective for sophomores, juniors and seniors.

AREAS OF STUDY:

Health skills, personal health & physical activity, mental & emotional health, alcohol, tobacco & other drugs, family & social health, communicable & chronic disease, growth & development, consumer & community health, nutrition, environmental health, injury prevention & personal safety

9180A PE WAIVERS

9180B 10-12 Semester

Students in grade 9 may waive PE under the following circumstances:

Involved in a school-sponsored activity that meets the minimum physical activity requirements for PE during the semester that the waiver is requested.

Students in grades 10-12 may waive PE under the following circumstances:

Grades 10-12: Student is enrolled in 8 Ballard classes per semester.

Grades 10-12: Student is enrolled in 8 classes (a combination of Ballard, DMACC, ISU and AP classes) per semester

Grades 10-12: Involved in a school-sponsored activity that meets the minimum physical activity requirements for PE during the semester that the waiver is requested.

Grades 11-12: Student is taking 15 or more DMACC/ISU/AP credits per semester.

Grades 11-12: Student is enrolled in off-campus ISU/DMACC courses with administrator approval.

*Students may not use Service/Helping to waive PE.

SCIENCE DEPARTMENT

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 | |

3045A ADVANCED BIOLOGY

3045B 10 Full Year 2 credits

COURSE DESCRIPTION: Advanced 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 | |

3052A CHEMISTRY

3052B 10-12 Full Year 2 Credits

Recommended:: 2047A&B Geometry; 3042A&B Biology or 3045A&B 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 | | |

3046A ADVANCED CHEMISTRY

3046B 10-12 Full Year 2 Credits

Recommended:: 2047A&B Geometry; 3042A&B Biology or 3045A&B 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 | |

3062A CHEM COMM

3062B 11-12 Full Year 2 Credits

****Recommended:** 3041 A&B Physical Science and 3042 A&B Biology

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 |

3051A ANATOMY & PHYSIOLOGY

3051B 11-12 Full Year 2 Credits

Recommended: 3042 A&B Biology or 3045A&B Adv. Biology

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 | |

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 in the second semester. Students will earn 1 Ballard science credit and they will earn 5 DMACC credits. Students enrolled in this course will fill out the DMACC paperwork at the beginning of the second semester.**

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.

3060 ADVANCED SCIENTIFIC FRONTIERS

11-12 1 Semester 1 Credit

RECOMMENDED: Biology 3042

COURSE DESCRIPTION: Advanced scientific frontiers is an application of environmental science and energy/transportation through cross-curricular areas involving biology, chemistry, and physics. This semester long 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. Environmental Science
2. Ecological principles and applications
3. Environmental Interrelationships
4. Matter, Energy and Environment
5. Energy Sources and Uses

*areas are subject to change

3061 GENETICS

11-12 1 Semester 1 Credit

RECOMMENDED: Biology 3042

COURSE DESCRIPTION: Genetics is an application of heredity and biotechnology through cross-curricular areas involving biology, chemistry, and physics. This semester long course is intended to expand the student’s knowledge of heredity and the variation of inherited characteristics along with the understanding of biotechnology. This course is highly recommended for students interested in biology or natural sciences. Students must be able to use math (see above) to compute mathematical problems.

***AREAS OF STUDY:**

1. DNA Transcription/Translation

2. Classical (Mendelian) Genetics
3. DNA technology
4. DNA transformation
5. DNA isolation
6. Recombinant DNA tech
7. Bioethics

*areas are subject to change

3063A AP CHEMISTRY

3063B 11-12 Full Year 2 Credits

Recommended: Recommended successful completion of chemistry or advanced chemistry. No prior chemistry classes are required to enroll in this course.

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 gasses, 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.

3043A AP BIOLOGY

3043B 11-12 Full Year 2 Credits

Highly Recommended: 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 |

3047 ZOOLOGY 1

11-12 One Semester 1 Credits

Highly Recommended: Completion of Biology

COURSE DESCRIPTION: Zoology 1 is a semester course introducing students to the diversity of life on the planet and through history. It will primarily be focused on invertebrates. Students will explore the diversity of invertebrate life through laboratories, simulations, investigations, activities, and research. Through these activities students will garner a greater appreciation and understanding for the world around them. Dissection is a major component in this course.

3048 ZOOLOGY 2

11-12 One Semester 1 credit

Highly Recommended: Completion of Biology and Zoology 1

COURSE DESCRIPTION: Zoology 2 is a semester course continuing the exploration of animal life. The focus will be on the vertebrates (Fish, reptiles, birds, and mammals) and their diversity and characteristics. Students will explore the diversity of vertebrate life through laboratories, simulations, investigations, activities, and research. Through these activities students will garner a greater appreciation and understanding for the world around them. Dissection is a major component in this course.

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.

4046A AP U.S. HISTORY

4046B 10 Full Year 2 Credits

COURSE DESCRIPTION: In AP U.S. History, students investigate significant events, individuals, developments, and processes in nine historical periods from approximately 1491 to the present. Students develop and use the same skills and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, continuity and change. The course also provides eight themes that students explore throughout the course in order to make connections among historical developments in different times and places: American and national identity; work, exchange, and technology; geography and environment; migration and settlement; politics and power; America in the world; American and regional culture; and social structures.

This course will prepare students for the AP U.S. History Examination. Upon successful completion of the AP Exam, colleges may award college credit for a two-semester introductory course in U.S. History.

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.

GLS200 AP WORLD HISTORY: MODERN/DMACC COUNTRY STUDY: CHINA (Spring Semester)

GLS220 AP WORLD HISTORY: MODERN/DMACC COUNTRY STUDY: MIDDLE EAST & ISLAM (Fall Semester)

1 HS Credit (per course) 3 DMACC Credits (per course)

COURSE DESCRIPTION: These courses will primarily follow the guidelines of the AP World History but will also include the competencies for DMACC's GLS 200 country Study: China and GLS 220 Middle East and Islam. Students will be able to earn 3 college credits for each of the DMACC courses. Students may also earn college credit by taking the AP World History exam and earning a score of 3 or higher (out of 5).

In AP World History: Modern, students investigate significant events, individuals, developments, and processes from 1200 to the present. Students develop and use the same skills, practices and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change over time. The course provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation. (From the College Board course description).

The competencies for the DMACC courses will be incorporated into the AP World History curriculum. Students taking this class should be prepared for an intensive reading and writing course.

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: 4061 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.

4052 CONSTITUTIONAL LAW

11-12 One Semester 1 Credit

COURSE DESCRIPTION: Constitutional Law is a survey course where the primary focus is to promote an understanding of the Constitutional framework of law that guides our daily lives. The course material is designed to actively engage students in thought and personal reflection in numerous areas of American law, with a particular focus on constitutional and criminal law. Students will read, analyze, evaluate, debate, and write critically about concepts in American law. In this course historical cases will be analyzed to understand precedence and historical instances of why laws are the way they are today. Discussion and arguing cases are major components of the course.

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 every other day. The focus of this course is to build organizational skills and independent study skills.

AREAS OF STUDY:

1. Based on individual IEPs.

ESL/ENGLISH SECOND LANGUAGE DEPARTMENT

9999 ESL AND ESL STUDY SKILLS

9998 9-12 Full Year 1 credit/2 credits

COURSE DESCRIPTION: This course is designed to help ESL students improve their skills in English listening, speaking, reading and writing. Students are given class support for homework. Students enrolled in course 9998 meet every other day.

WORLD LANGUAGE DEPARTMENT

5051A SPANISH I

5051B 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: 5051A&B Spanish 1

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: 5052A&B Spanish II

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: 5053A&B Spanish III

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 | |

PSEO/Concurrent Enrollment Courses

DMACC/ISU Grading

Some DMACC and all PSEO courses will be using the Weighted Grading Scale. See your guidance counselor for the list of DMACC classes that use the Weighted Grading Scale.

DMACC Drop Policy

Students wishing to drop a DMACC course after the course has started need to meet with the high school guidance counselor. When deciding to drop a course, students should consider the following:

*Within the first two weeks of the start date, students can drop a DMACC course without penalty.

*Students who drop their DMACC class after the first two weeks of the semester, but before DMACC's official drop date, will receive a W (withdraw) on both their high school transcript and DMACC college transcript.

*Students who drop a DMACC course after DMACC's official drop date will receive an F on both their high school transcript and DMACC college transcript. Please check with your guidance counselor for those dates.

*Failed DMACC courses will affect student's extracurricular eligibility.

DMACC Scheduling of Courses

Students will be scheduled into DMACC courses offered and taught at Ballard High School. If a scheduling conflict arises, students may be eligible to take the course through the online academy or at a DMACC campus. Students will be required to complete a form available from the guidance counselor for approval. Superintendent approval is also required.

Freshmen and Sophomores:

Freshmen and Sophomores will be allowed to take an online DMACC class as one of their eight periods during the day. For that period, they will be assigned a study hall. If a student would like to take additional online DMACC classes, they will be required to take it as a 9th period class (only allowed to have one study hall per semester).

Juniors:

Juniors who are scheduled in DMACC online during the first or last block of the day may have an open period for DMACC study; otherwise, they will be scheduled in a study hall.

Seniors:

Seniors will be allowed to have open campus during their DMACC online class periods.

DMACC CAREER ACADEMY

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.

Listed are consortium class offerings for the upcoming 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. These classes provide area high school students with excellent educational opportunities

All listed times and courses are subject to change.

7204A SCIENCE ACADEMY (ANKENY CAMPUS)

7204B FULL YEAR

Class meetings times: Monday - Friday 7:30 - 11:00 a.m. **(ANKENY CAMPUS ONLY)**

COURSE DESCRIPTION: The DMACC Science Academy is for exceptional science students who wish to pursue college level. Chemistry and Physics courses while in high school. Completing these challenging courses during high school gives students a chance to explore various careers in science and engineering. These science courses will help students springboard ahead of their peers, preparing them to be a year ahead in your major. Being a step ahead of the rest of your peers could potentially open doors to you such as being first in line for advanced undergraduate research projects or obtaining a coveted internship.

7215 BUSINESS ACADEMY (AMES CAMPUS)

One Semester

Class meeting times: Monday-Friday 12:50-2:50 **(AMES HUNZIKER CAMPUS ONLY)** .

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

BUSINESS ACADEMY (ANKENY CAMPUS)

Full Year

Class Meeting times: M- F 12:50 - 2:50 **(ANKENY CAMPUS ONLY)**

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

7220 CULINARY ARTS 1st Year

Full Year

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.

7230 CRIMINAL JUSTICE

Full Year

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 into the field of criminal justice and a survey of its agencies, as well as an introduction to criminology and juvenile delinquency. This program prepares students to consider a career of service in a variety of areas, and lays the foundation for a college major of criminal justice.

7251 FASHION

Full Year

Class Meeting times: M-F 12:50 - 2:15 **(ANKENY CAMPUS ONLY)**

COURSE DESCRIPTION: Immerse yourself in a dynamic, creative environment with other students who are passionate about the apparel and interior fashion industry. Whether you want to design, learn the business, or discover the latest trends, we'll help you find your place in the fashion industry. Twelve DMACC credits are available upon completion of all DMACC Career Academy course offerings.

7264 COMPUTER PROGRAMMING (ANKENY CAMPUS)

Full Year

Class meeting times: M-F, 7:45 - 9:45 a.m. (**ANKENY CAMPUS**)

COURSE DESCRIPTION: These courses provide an introduction to the latest in computer science and programming.

COMPUTER PROGRAMMING (CARROLL CAMPUS MEETS VIRTUALLY)

Class meeting times: M-F, 8:00 - 9:15 a.m. or 2:10 - 3:25 p.m. (Meets virtually)

Class meeting times: M-F, 2:10 - 3:25 p.m. (Meets virtually)

7265 **VISUAL COMMUNICATION/ GRAPHIC DESIGN/WEB**

Full Year

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 are available upon completion of all DMACC Career Academy course offerings.

7267 **COMPUTER-AIDED DESIGN TECHNOLOGY**

Class meeting times: M-F, 1:00- 3:00 p.m.

COURSE DESCRIPTION: If you're a dependable team member with mechanical aptitude, attention to detail, and analytical thinking, CAD Tech could be for you. Careers are available in computer-aided design (CAD), including drawing in both two-dimensional and three-dimensional realms, designing new products, creating models, and more. Through DMACC's CAD technology program, you'll learn how to use a variety of software packages, create prototypes, practice reverse engineering, perform geometric dimensioning, and more. Twelve DMACC credits are available upon completion of all DMACC Career Academy course offerings.

7270 BUILDING TRADES/FINISH CARPENTRY-1ST YEAR

Full Year

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.*

7275 BUILDING TRADES/FINISH CARPENTRY – 2ND YEAR

Full Year

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.*

7280 CERTIFIED NURSING ASSISTANTS

One 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)

Full Year

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 1st Year

Full Year

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 2nd Year

Full Year

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.

7292 EMERGENCY MEDICAL TECHNICIAN (EMT)

One Semester

Class meeting times: M-F, 7:45 - 9:45 a.m.

COURSE DESCRIPTION: The Emergency Medical Technician program will provide students with fundamental knowledge and skills needed to provide lifesaving services to your community. In EMT students will function in uncommon and high stress situations by performing comprehensive patient assessments, obtain vital signs, control hemorrhaging, bandage wounds, administer cardiopulmonary resuscitation, including use of automated external defibrillators and provide prehospital emergency medical care of simple and multiple system injuries. Six DMACC credits are available upon completion of all DMACC Career Academy course offerings.

*Students will have the opportunity to enroll either Fall or Spring.

*Students must be 17 years of age by the first day of class.

*In addition to classroom time, students will be required to attend clinical and field rotations during the course of the class which will require an investment of approximately 32 hours outside of the normal classroom hours. Students will also have to complete a criminal background check.

7297 AUTO COLLISION 1st Year

Full Year

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.

7298 DIESEL/CATERPILLAR TECHNOLOGY

Full Year

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

COURSE DESCRIPTION: This program prepares students for a career in the area of diesel repair. Instruction is in the repair, maintenance, and testing of diesel engines, power trains, and components of trucks and construction equipment.

7295 MACHINE OPERATIONS/TOOL & DIE (ANKENY CAMPUS)

Full Year

Class meeting times: M-F: 12:45-2:45 p.m. on **Ankeny campus of DMACC**

COURSE DESCRIPTION: Students will learn the basics of welding, automation, machining tool operation (CNC), computer-aided drafting and design (CAD), and other workplace skills. Two years of this program are available on an alternating schedule.

7296 TEACHER ACADEMY

Full Year

Class meeting times: M-F: 7:30 – 9:30 a.m.

COURSE DESCRIPTION: Provides students with an opportunity to explore education-related professions and take part in real-life teaching experiences. Students will spend a total of 120 hours shadowing elementary and secondary teachers during portions of their assigned class times. Courses fulfill Level I Field Experience requirement at many four-year colleges.

8090A WELDING

8090B Full Year

Class meeting times: M-F, 7:30–9:30 am ***NOTE: This series of courses is only offered at Nevada High School.**

COURSE DESCRIPTION: This program allows students to engage in experiential learning in the area of welding. In addition to a welding skill base, students will explore the greater career field of advanced manufacturing through workplace experience. Ten credits are available upon completion of all DMACC Career Academy course offerings.

DMACC ONLINE COURSES

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

The following courses are board-approved DMACC courses. Students who wish to take a DMACC class that is not board-approved must submit a request to the guidance counselor by August 1 for fall semester courses and December 1 for spring semester courses.

DMACC ONLINE CAREER ACADEMY COURSES-OLCA (Student receives college credit)

ACC 111	DMACC ACC 111 ONLINE
ACC 131	PRINCIPLES OF ACCOUNTING
ACC 132	PRINCIPLES OF ACCOUNTING II
BIO 104	INTRO TO BIO WITH LAB
BUS 102	INTRO TO BUSINESS
BUS 185	DMACC BUSINESS LAW ONLINE
CHM 122	INTRO TO GENERAL CHEMISTRY
CHM 165	GENERAL CHEMISTRY
CHM 175	GENERAL/INORGANIC CHEMISTRY
CRJ 100	INTRO TO CRIMINAL JUSTICE
CRJ 101	CRIMINOLOGY
CRJ 107	SURVEY OF CRIMINAL JUSTICE
CRJ 201	JUVENILE DELINQUENCY
CSC 116	INFORMATION COMPUTING
DRA 101	DMACC INTRO TO THEATRE
ECN 120	DMACC MACROECONOMICS
ECN 130	DMACC-PS-PRIN MICRO
EGR 100	ENGINEERING ORIENTATION
ENG 108	DMACC TECHNICAL WRITING
ENV 115	DMACC ENVIRONMENTAL SCIENCE
ENV 116	DMACC ENVIRONMENTAL SCIENCE LAB
FIN 121	DMACC-ONLINE PERSONAL FINANCE
FLS 151	ELEMENTARY SPANISH I
FLS 152	ELEMENTARY SPANISH II
GEO 111	DMACC INTRO TO GEOGRAPHY
HIS 110	DMACC-WEST CIV-ANCIENT TO EARLY MODERN
HIS 111	DMACC-WEST CIV-ERLY MODERN TO PRESENT
HSC 114	MEDICAL TERMINOLOGY
HUM 116	DMACC ENCOUNTERS IN HUMANITIES
JOU 110	INTRO TO MASS MEDIA
MAT 110	DMACC MATH FOR LIBERAL ARTS
MAT 121	COLLEGE ALGEBRA
MAT 141	FINITE MATH

MAT 156	STATISTICS
MAT 162	PRINCIPLES OF BUSINESS STATISTICS
MAT 211	CALCULUS 1
MGT 101	PRINCIPLES OF MANAGEMENT
MGT 145	HUMAN RELATIONS IN MANAGEMENT
MKT 110	PRINCIPLES OF MARKETING
PHI 101	DMACC INTRO TO PHILOSOPHY
PHI 105	DMACC INTRO TO ETHICS
PHY 106	SURVEY OF PHYSICS
PHY 161	GENERAL PHYSICS II
PHY 213	CLASSIC PHYSICS 1
PHY 223	CLASSIC PHYSICS II
POL 111	DMACC-ONLINE AM NATL GOVT
PSY 111	DMACC-ONLINE INTRO TO PSYCH
PSY 121	DMACC DEVELOPMENTAL PSYCHOLOGY
PSY 251	SOCIAL PSYCHOLOGY
REL 101	DMACC SURVEY OF WORLD RELIGION
SOC 110	DMACC-ONLINE INTRO TO SOC
SOC 115	DMACC SOC 115 SOCIAL PROBLEMS

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.
World Language	2 years of a single world language for admission to the College of Liberal Arts and Sciences and the College of Engineering. World language courses are not required for admission to the Colleges of Agriculture, Business, Design, or Human Sciences.	2 years of a single world 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.	World language courses are not required for admission. However, two years of a world language in high school with a C- or above in the last 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

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 your guidance counselor 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 to the application, academic transcripts, and test scores.

Ballard Core Classes:

ENGLISH:

Survey of English
Adv. Survey of English
American Literature
Adv. American Lit
World Literature
Creative Writing
DMACC Speech
Senior English
English 105/106
Lit 101/185

SCIENCE:

Physical Science
Adv. Physical Sci
Biology
Adv. Biology
Chemistry
Adv. Chemistry
Physics
Advanced Scientific
Frontiers
Anatomy & Physiology
AP Chemistry
Genetics
Zoology

MATH:

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

FOREIGN LANGUAGE

Spanish 1
Spanish 2
Spanish 3
Spanish IV

SOCIAL SCIENCE:

Global Issues
US History
AP US History
World History
AP World History
US Government
Economics
Psychology
Sociology
Constitutional Law

SERVICE HOUR GUIDELINES

Service Definition: Work performed by one that serves others outside of one's family.

“Leadership is not about a box you check, or a single event. It’s an ongoing experience of commitment and **service**.” ~unknown

Rules and Expectations: (200 hours required)

1. Students can start earning service hours the summer after their 8th grade year.
 - a. 9th grade: 50 hours
 - b. 10th grade: 50 hours
 - c. 11th grade: 50 hours
 - d. 12th grade: 50 hours

It is suggested that students complete a minimum of **50 hours of approved service activities per year** to reach the total 200 total hours, however, students may accumulate their 200 hours in varying amounts during their four years of high school.

2. Service hours must be submitted within **2 months** of their completion.
 - a. Summer hours should be submitted by September 1st of the following school year.
 - b. **Senior** hours must be completed and turned in by May 1st of their graduating year. No hours will be accepted after this date. (anticipated peer helping **May** hours may be logged and signed by your cooperating teacher/supervisor)
3. Student manager hours - Complete a season in good standing with Coaches signature receive:
 - a. 50 hours for a season
 - b. Eligible for manager letter (if applicable)

Examples that count towards Silver Cord hours:

- Activity manager
- Tutoring (outside of class time)
- Club activities (FFA, FCCLA, etc.)
- Yard work/snow removal for a person in need
- Church activities (teach Sunday School, Greeter, etc.)
- Volunteer at fundraisers
- City, community, and/or school cleanup
- Blood drive donations
- Salvation Army bell ringer
- Nursing home/daycare volunteer
- Volunteer youth coaching

Examples that do not count towards Silver Cord hours:

- Anything to do with family, including extended family
- Anything that is paid (babysitting)
- School activities that are a requirement (ex., FCCLA clean-up)
- Any type of school practice (fine arts or sports)
- Anything done during school class time
- Fundraising for self/team
- Anything that earns credit toward a class