

PROGRAM OF STUDIES 2025-2026

BURLINGTON HIGH SCHOOL

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Associate Principal

Brandon Kurovski, Ext. 1015

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Dean of Students

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Dean of Students

Devin Baker, Ext. 1013

Supervisor of Career and Technical Education

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Cory Johnson, Director of Curriculum
Stephanie Vititoe; Assistant Director of Curriculum
Laci Johnson, Director of Human Resources
Greg Reynolds, Director of Business Services

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EDUCATIONAL EQUITY POLICY STATEMENT

It is the policy of the Burlington Community School District not to discriminate on the basis of race, color, national origin, sex, disability, religion, creed, age (for employment), marital status (for programs), sexual orientation, gender identity and socioeconomic status (for programs) in its educational programs and its employment practices. There is a grievance procedure for processing complaints of discrimination. If you have questions or a grievance related to this policy please contact the district's Equity Coordinators at the District Administrative Office, 1429 West Avenue, Burlington, IA 52601; (319) 753-6791.

For Educational Programs: Cory Johnson, Director of Curriculum, cory.johnson@bcsds.org
For Employment: Laci Johnson, Director of Human Resources, laci.johnson@bcsds.org

HOW TO USE THIS GUIDE

The Program of Studies is intended to help you in the decision making process of planning a realistic educational program that will serve you well in your future.

You must give serious consideration to making your plan before deciding about specific courses because you will be expected to remain in the courses you select.

School personnel may initiate a change in your program if you fail a course and the department requires that you be dropped; if an instructor and/or counselor recommends a different course level; if it is necessary to "balance" class sizes or alter the master schedule; if a doctor certifies that your physical condition warrants a change; or if an error has been made in your program.

Prerequisites are listed when applicable. Prerequisites are conditions which must be met before enrollment; they have been established to provide the maximum assurance that the courses will be

completed satisfactorily. A student who passes a course may not repeat that course for credit unless stated in the course description and then only with instructor approval.

When selecting courses, it is important to choose on the basis of required graduation requirements, interest, desired Career Pathway(s), teacher recommendation, and academic ability and talent. Study the course descriptions, review your Interest Inventory, talk with your teachers and counselors, and discuss plans with your parents.

REQUIREMENTS TO ENROLL IN IOWA'S REGENT UNIVERSITIES

Iowa's three public Universities, the University of Iowa, Iowa State University, and the University of Northern Iowa, use the Regent's Admission Index (RAI) to define admission requirements. The RAI can be found at this link.

https://www.iowaregents.edu/institutions/higher-education-links/regent-admission-index/rai-info

The requirements for other colleges and universities vary. You can contact the admissions office for the college or university that you are interested in considering. Your Counselor can help you find this information.

GRADUATION REQUIREMENTS

English

8 credits including:

- 2 credits English 1 or equivalent
- 2 credits English 2 or equivalent
- 2 credits English 3 or equivalent
- 1 credit English 4 (multiple courses meet requirement)
- 1 credit Speech (multiple courses meet requirement)

Financial Literacy

1 Trimester of Financial Literacy

Math

6 credits including:

- 2 Credits of Algebra I or equivalent
- 2 Credits of Geometry or equivalent
- 2 Additional credits of Math

Physical Education and Health

- 4 PE credits (At least 1 required per year)
- 1 Health credit

Science

6 credits including:

- 2 trimesters of biology or equivalent
- 2 trimesters of either physical science or physics or equivalent
- 2 trimesters of either chemistry or practical applications of science or equivalent

Social Studies

6 credits including:

- 1 credit Behavior Science or equivalent
- 2 credits World Studies or AP Euro Study or equivalent
- 2 credits American Studies or AP US H or equivalent
- 1 credit Government or equivalent

THE PATH TO GRADUATION

Freshmen, sophomores, and juniors should enroll in 18 credits each year (6 each trimester). Seniors who elect to take a minimum number of classes and who later come up short to graduate may not take priority over others enrolled in classes. Seniors are encouraged to take advantage of college classes offered through BHS.

POLICY ON RETAKING A CLASS

The following guidelines exist for students who opt to retake a class:

- Upon completion of the repeated course, the higher grade will prevail.
- Both the original grade and the retaken grade will show on the transcript.
- A student cannot receive double credit for a course that is repeated unless stated in the Program of Studies book that it can be repeated for credit.
- GPA will be re-determined at the end of the trimester.

VIBE ON-LINE COURSE OPPORTUNITIES

VIBE focuses on bringing a personalized, online learning experience to students, while also offering optional in-person enrichment lessons and activities. Students may also request a Flex option, allowing them to take some classes through VIBE and some in person at BHS. Students wishing to transfer to VIBE from BHS and vice-versa, must complete the application. If accepted, transfers will occur at the beginning of the trimester.

More information about the VIBE program can be found at https://vibe.bcsds.org/.

Special Programs

Ashley Gavillet Transition Alliance Coordinator

iJAG

Courtney Mullen iJAG

Ivy Tranter GEAR UP Iowa Raegan Terrell BHS Boost

Michael Conrad SCC Student Success Advocate

EXTENDED LEARNING SERVICES

The mission of the Burlington Community School District's Extended Learning Services, in cooperation with staff, families, and the community, is to provide instructional opportunities to challenge students' thinking and creativity and to promote skills needed to become a self-directed learner and problem solver.

Some students have demonstrated the need for a Personalized Education Plan (PEP), others are served at various times and in different ways. A student's individualized program varies

depending upon the needs of the student. Giftedness is not a static label. We make inferences about student needs based on potential, accomplishments, and performances over time. Students whose abilities clearly lie beyond the traditional student population may require differentiated educational opportunities and support facilitated by the Extended Learning Coordinator in our Extended Learning Center. These opportunities may vary in kind, degree, delivery, and duration. Students are also eligible to access courses offered through the lowa Online AP Academy. Course offerings can be found at: https://belinblank.education.uiowa.edu/students/ioapa/

COLLEGE CREDITS OFFERED ON BHS CAMPUS

Burlington Community High School Offers 17 Concurrent Enrollment SCC classes on our campus as well as 6 AP courses to meet the needs of advanced learners in a variety of areas.

Advanced Placement Courses

AP US History AP Literature
AP European History AP Art Studio
AP Psychology AP Calculus

SCC Concurrent Enrollment Courses at BHS

Composition I and II Medical Terminology
Public Speaking Medical Law and Ethics

Survey of World Religions

Human Relations

Outlife of Newsign

Introduction to Psychology

Math for Liberal Arts

College Algebra

College Trigonometry and Analytic Geometry

Certified Nursing Assistant
Shielded Metal Arc Welding
Gas Metal Arc Welding
Welding Blueprint Reading

Calculus I and II

Gas Tungsten Arc Welding

Statistics Introduction to CAD

Introduction to Coaching

Athletic Development and Human Growth

Introduction to CNC Machining

Body Structure and Function The College Experience
Basic Athletic Training

Students can also enroll in other classes at SCC's Campus and online.

COURSE CATALOG

ENGLISH

Graduation Requirements for English:

- 2 trimesters of English 1 or equivalent
- 2 trimesters of English 2 or equivalent
- 2 trimesters of English 3 or equivalent
- 1 trimester of English 4 or equivalent
- 1 trimester of Speech or equivalent

Any additional courses completed will count as elective credits

ENGLISH 1

2 credits required for graduation

ENGLISH 1- 101A 101B

SCED 01001

OPEN TO: 9th DURATION: 2 trimesters CREDITS: 2 PREREQUISITE: None

English 1 is a literature-based writing class which includes a variety of reading, writing, speaking, critical thinking, and listening experiences. This course builds upon the students' language skills in the areas of vocabulary, mechanics, usage, appropriateness of expression, and upon the students' knowledge of the writing process.

ENGLISH 1 HONORS- 102A 102B

SCED 01001

OPEN TO: 9th DURATION: 2 trimesters CREDITS: 2 PREREQUISITE: None

English 1 Honors is a literature-based writing class which includes a variety of reading, writing, speaking, critical thinking, and listening experiences. The course builds upon the students' language skills in the areas of vocabulary, mechanics, usage, appropriateness of expression, and upon the students' knowledge of the writing process. Students in the honors section are required to read more selections and to be involved in more intensive writing, reading, and presenting experiences than in the average section. Students in the honors section should expect to do more extension work outside of the classroom.

ENGLISH 2

2 credits required for graduation

ENGLISH 2-104A 104B

SCED 01002

OPEN TO: 10th DURATION: 2 trimesters CREDITS: 2 PREREQUISITE: None

English 2 is a literature-based writing class which includes a variety of reading, writing, speaking, critical thinking, and listening experiences. The course builds upon the students' language skills in the areas of vocabulary, mechanics, usage, appropriateness of expression, and upon the students' knowledge of the writing process. Students will develop a sharper awareness of purpose, audience, and style in writing.

ENGLISH 2 HONORS- 105A 105B

SCED 01002

OPEN TO: 10th DURATION: 2 trimesters CREDITS: 2 PREREQUISITE: None

English 2 Honors is a literature-based writing class which includes a variety of reading, writing, speaking, critical thinking, and listening experiences. The course builds upon the students' language skills in the areas of vocabulary, mechanics, usage, appropriateness of expression, and upon the students' knowledge of the writing process. Students in the honors section are required to read more selections and be involved in more intensive writing, reading, and presenting experiences than in the average section. Students in the honors section should expect to do more extension work outside of the classroom.

ENGLISH 3

2 credits required for graduation

ENGLISH 3-106A 106B

SCED 01003

OPEN TO: 11th DURATION: 2 trimesters CREDITS: 2 PREREQUISITE: None

English 3 is an American literature-based writing class which includes a variety of reading, writing, speaking, critical thinking, and listening experiences. Conventions and stylistic devices of literature are explored. Students continue to refine language skills in the areas of clarity, logic, word choice, usage, and appropriateness of expression. Students improve skills in writing and thinking analytically. Formal research strategies will be used to develop topics in preparation for research projects.

ENGLISH 3 HONORS- 107A(H) 107B(H)

SCED 01002

OPEN TO: 11th DURATION: 2 trimesters CREDITS: 2 PREREQUISITE: None

English 3 is an American literature-based writing class which includes a variety of reading, writing, speaking, critical thinking, and listening experiences. Conventions and stylistic devices of literature are explored. Students continue to refine language skills in the areas of clarity, logic, word choice, usage, and appropriateness of expression. Students improve skills in writing and thinking analytically. Students in the honors section are required to read more selections and to be involved in more intensive writing, reading, and presenting experiences than in the average section. Students in the honors section should expect to do more extension work outside of the classroom. Formal research strategies will be used to develop topics in preparation for research projects.

ENGLISH 4

1 credit required for graduation

ENGLISH 4- Senior Literature E1056

SCED 01056

OPEN TO: 12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

English 4 is a literature-based writing class which includes a variety of reading, writing, speaking, critical thinking, and listening experiences. Students continue to refine skills in writing and thinking critically and

analytically as well as language skills in the areas of clarity, logic, word choice, usage, and appropriateness of expression.

ENGLISH 4 CONNECTIONS SCED1156G

SCED 01156

OPEN TO: 12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

English 4: Connections is a class which includes a variety of reading, writing, speaking, critical thinking, and listening experiences. These experiences will include applied communications activities designed to provide "real world" skill development. Emphasis is on skill development to aid in obtaining and maintaining employment. Students continue to refine skills in writing and thinking critically and analytically as well as language skills in the areas of clarity, logic, word choice, usage, and appropriateness of expression.

Note: This course is designed for students who are planning to enter the workforce directly after graduation.

ENGLISH 4 HONORS 01056H

SCED 01056H

OPEN TO: 12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

English 4 Honors is a literature-based writing class which includes a variety of reading, writing, speaking, critical thinking, and listening experiences. Students continue to refine skills in writing and thinking critically and analytically as well as language skills in the areas of clarity, logic, word choice, usage, and appropriateness of expression. Typically, students compose multi-paragraph pieces of writing. Students in the honors section should expect to do more extension work outside of the classroom than those in average sections.

Note: Available trimester 1 only

*AP LITERATURE 117A 117B 117C SCED 01006E

OPEN TO: 12th DURATION: 3 trimesters CREDITS: 3 PREREQUISITE: None

AP Literature is a full-year English course designed to engage students in the careful reading and critical analysis of literature from a variety of periods and genres. Students in this course should have strong independent reading skills and should be prepared to write frequently. This course will prepare students to take the Advanced Placement English Literature and Composition exam. There will be required summer reading.

Note: Satisfies English 4 Graduation Requirement

1 credit required for graduation

SPEECH 123 SCED 01151

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This course enables students, through practice, to develop communication skills for a variety of speaking situations such as small and large group discussion and speeches in front of audiences. The

course topics include research and organization, preparation for effective verbal delivery, visual and presentation skills, and development of self-confidence. Students must speak in front of a class.

SPEECH HONORS 138

SCED 01153H

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This Honors course enables students, through practice, to develop communication skills for a variety of orations and speech settings. We will explore small and large group discussions including town hall and panel discussions. The course topics include research and organization, preparation for effective verbal delivery, visual and presentation skills, argumentation and debate, and development of self-confidence. Students must speak in front of a class.

INTRODUCTION to COMPETITIVE SPEECH and DEBATE (FORENSICS) 126 SCED 01153G

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This class will explore the basics of debate. We will learn what goes into making a good argument. We will find out how to use evidence to support what we think. Students will practice asking good questions as well as being able to answer questions. What other class wants you to argue with each other just for fun? Students will participate in oral interpretation exercises as well as public speaking. Students will be required to participate in at least one speech and debate tournament as part of this course.

Note: This class counts toward the speech credit for graduation.

ENGLISH ELECTIVES

GUIDED LITERATURE 1 141A 141B 141C

SCED 01066B

OPEN TO: 9th-11th **DURATION:** 3 *trimesters* **CREDITS:** 3 **PREREQUISITE:** Teacher appointment only based on lowa Statewide Assessment of Student Progress and/or testing out of Read 180.

Guided Literature is a course for freshmen, sophomores, and juniors to improve reading fluency and comprehension. The course focuses on comprehension skills and strategies for both fiction and nonfiction textual materials. It also targets vocabulary development.

GUIDED LITERATURE 2 142A 142B SCED 01066B

OPEN TO: 10th-11th **DURATION:** 2 *trimesters* **CREDITS:** 2 **PREREQUISITE:** Teacher appointment only based on lowa Statewide Assessment of Student Progress and/or testing out of Read 180.

Guided Literature is a course for sophomores and juniors to improve reading fluency and comprehension. The course focuses on comprehension skills and strategies for both fiction and nonfiction textual materials. It also targets vocabulary development.

READ 180

In this course, you will learn various practical reading and writing strategies. These strategies will enable you to become a proficient and confident reader and writer. Along the way, you will read novels that you select, all while applying these new strategies to your reading. You will get to study a variety of topics and materials throughout this course and will get to choose some of the topics you would like to explore during

the software portion of Read 180. Our goal is to strengthen your reading, writing, language conventions, active listening, and speaking skills.

PUBLIC SPEAKING SPC-112

SCED 01151C

OPEN TO: 11th-12th DURATION: 1 trimester CREDITS: 1 BHS, 3 SCC PREREQUISITE: None

This elective course examines both the theoretical and practical basis of speech communication, particularly public speaking. Emphasis is on speech preparation, organization, support, delivery, and audience analysis.

BEGINNING ACTING 05051

SCED 05051G

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This course is designed for students with little or no theater experience and promotes enjoyment and appreciation for all aspects of theater. Classwork focuses on the exploration of theater literature, performance, historical and cultural connections, acting techniques, and technical requirements. Students will attend theatrical performances and learn how to critique and show appropriate behaviors at live performances. Incorporation of other art forms in theater also helps students to gain appreciation for other art forms, such as music, dance, and visual art.

ADVANCED ACTING E05055

SCED 05055

OPEN TO: 10th-12th **DURATION:** 1 *trimester* **CREDITS:** 1 **PREREQUISITE:** Beginning Acting and teacher approval

Students will learn different acting techniques, improvisation, and scene work. Students will perform short scenes and one-act plays. Students will be required to memorize scenes and perform on the stage. We will also learn basic directing techniques, stagecraft, and other production-related jobs. Students will be required to act on the stage in order to earn credit for this course.

STAGECRAFT 1 05056A

SCED 05056G

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

Stagecraft is a hands-on practical exploration of the technical aspects of theater production. The focus of the course includes the various technical roles involved in creating the overall theatrical production. The students examine the fundamentals of technical theater and theatrical production. Students are taught the basic techniques of theatrical set design, costume design, makeup, lighting and sound design, set construction, set painting, stage management, general theater maintenance and scene shop organization, prop construction, and publicity.

STAGECRAFT 2 E05056B

SCED 05056G

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: Stagecraft 1

Stagecraft II is a continuation of the hands-on practical exploration of the technical aspects of theater production that was covered in Stagecraft I. The focus of the course includes the various technical roles involved in creating the overall theatrical production. The students examine the fundamentals of technical theater and theatrical production. Students will build upon the basic techniques of theatrical set design,

costume design, makeup, lighting and sound design, set construction, set painting, stage management, general theater maintenance and scene shop organization, prop construction, and publicity.

MYTHOLOGY, FOLK TALES AND HEROES IN LITERATURE 124 SCED 01061G

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This course will introduce students to major myths of various cultures (emphasis on Greek) by addressing such issues as why myths endure and how they explain nature and human nature. Students will explore the formula used to write hero stories and the value of hero stories. Mini-lessons will highlight mythological creatures such as the vampire, dragon, unicorn, leprechaun, and elf. There will be written and oral presentations for the class.

AFRICAN AMERICAN LITERATURE E01064

SCED 01064

OPEN TO: 11th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This course will examine the broad range of experiences of African-American people from the Protest Movement Literature of the 1940's through the Modern and Contemporary Literature of today. Particular attention will be devoted to issues of identity, language, social and political organizations, and the struggle for social justice. Students will be introduced to a wide variety of African American authors and an array of literary genres to fully understand and appreciate the identities of the people of African descent in the United States.

CREATIVE WRITING 114 SCED 01104G

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This course offers the student the opportunity to develop and improve technique and individual style in short stories. The emphasis of the class is on writing prose fiction. As part of the writing process, students will be expected to share writing with their classmates.

JOURNALISM 4- 135 SCED 11101G

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This course emphasizes journalistic writing style and techniques. Students will be introduced to the concepts of newsworthiness, press responsibility, and ethics. Students will develop skills in writing and editing for stories, headlines, and captions. Students will develop an understanding and appreciation of the First Amendment and its role in journalism.

POETRY EXPLORATION E01061 SCED 01061G

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

Students will explore reading different styles of poetry by past and contemporary authors. They will also write poetry, experimenting with different styles and structures. As part of the writing process, students will share poetry in a workshop format at their comfort level. Students will be encouraged to enter poetry contests or submit poetry to magazines/websites devoted to sharing and critiquing poetry.

Note: This class can be taken multiple trimesters for multiple credits.

INDEPENDENT READING E01066

SCED 01066G

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

Students will be able to read novels of their choice. They will be responsible for reading each week, journaling over the books, and book talks with the teacher when finished. The focus of the class is to enjoy reading and time to do it. Students will also contribute displays to the BHS library to recommend novels to other students.

Note: This class can be taken multiple trimesters for multiple credits.

HEROES AND VILLAINS E01065H SCED 01065G

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This course will examine relationships between heroes and villains in various fictional and nonfictional formats. Emphasis will be on character motivation, the concept of the "hero's journey", and how the journey translates into a variety of media including written work and film. There will be written and oral presentations in this class.

ENG 105 COMPOSITION 1 (SCC COURSE) ENG 105 SCED 01103C

OPEN TO: 11th-12th **DURATION:** 1 semester **CREDITS:** 1 BHS; 3 SCC **PREREQUISITE:** Mandatory COMPASS or ACT test score and mandatory eWrite score, or a C- or above in ENG-061 College Preparatory Writing

A study of the principles of writing. Emphasis on rhetoric, mechanics, and development of expository patterns: narration, description, illustration, comparison/contrast, classification, process, and cause/effect. Required for AA and AS Degrees.

ENG 106 COMPOSITION 2 (SCC COURSE) ENG 106 SCED 01103C

OPEN TO: 11th-12th **DURATION:** 1 semester **CREDITS:** 1 BHS; 3 SCC **PREREQUISITE:** PACE Composition 1

A continuation of study of the principles of writing begun in ENG-105. Emphasis is placed on persuasive writing as well as literary analysis and the MLA research paper. Time will also be spent exploring the research sources available from the library. Required for AA and AS Degrees.

MODERN LANGUAGES

SPANISH 1 460A 460B

SCED 124052G

OPEN TO: 9th-12th DURATION: 2 trimesters CREDITS: 2 PREREQUISITE: None.

The student will be introduced to basic grammar, simple vocabulary, and the spoken accent so that he/she will be able to read, write, and speak on a basic level. An appreciation of Spanish culture will be taught through art, food, music, holidays, geography, history, and traditions. The student will develop oral and written communication skills in the target language; develop listening and reading comprehension skills in the target language; develop an appreciation and respect for the target culture; and develop an awareness of the contributions of the target culture.

SPANISH 2 461A 461B

SCED 24053G

OPEN TO: 10th-12th DURATION: 2 trimesters CREDITS: 2 PREREQUISITE: Spanish 1

Spanish 2 enables students to expand upon what they learned in level one. The students will increase their oral and written skills; continue to develop listening and reading comprehension skills in the target language; engage in an in-depth examination of the target culture and explore historical and political aspects of the target culture.

SPANISH 3 462A 462B

SCED 24054G

OPEN TO: 11th-12th DURATION: 2 trimesters CREDITS: 2 PREREQUISITE: Spanish 2

Spanish 3 enables students to expand upon what they learned in level one. The students will increase their oral and written skills; continue to develop listening and reading comprehension skills in the target language; engage in an in-depth examination of the target culture and explore historical and political aspects of the target culture.

SPANISH 4 468A 466B

SCED 24055G

OPEN TO: 12th DURATION: 2 trimesters CREDITS: 2 PREREQUISITE: Spanish 3

In compliance with the World-Readiness Standards for learning languages, Spanish 4 students will actively use the target language through advanced speaking, listening, reading, and writing skills. This will include authentic short-films, thought-provoking discussion questions to make connections and comparisons, real-life, practical vocabulary, comprehensive grammar explanations and practice, and thematically and culturally relevant activities.

SOCIAL STUDIES

(*Denotes Honors)

Graduation Requirements for Social Studies:

- 2 Trimesters of World Studies, AP European History or equivalent
- 2 Trimesters of American Studies, AP US History or equivalent
- 1 Trimester of Behavior Science or equivalent
- 1 Trimester of Government or equivalent

Any additional courses completed will count as elective credits.

WORLD STUDIES

2 credits required for graduation

WORLD STUDIES 203A 203B

SCED 04051

OPEN TO: 9th DURATION: 2 trimesters CREDITS: 2 PREREQUISITE: None

This course provides an overview of human society from early government to contemporary period. Examining political, economic, social, religious, military, scientific and cultural development.

*ADVANCED PLACEMENT (AP) EUROPEAN HISTORY 216A 216B 216C

SCED 04056H

OPEN TO: 9th-12th DURATION: 3 trimesters CREDITS: 3 PREREQUISITE: None

This course focuses on developing students' understanding of European history from circa 1450 to the present. The students will investigate European history for significant events, individuals, developments, and processes in four historical periods, and develop and use the same thinking skills and methods historians use. AP Euro will provide five themes students explore to make connections among historical developments in different times and places. It is the equivalent of an introductory college course that provides an opportunity to take a national test qualifying them for college credit and/or advanced placement in college

AMERICAN STUDIES

2 credits required for graduation

AMERICAN STUDIES 201A 201B

SCED 04103

OPEN TO: 10th DURATION: 2 trimesters CREDITS: 2 PREREQUISITE: None

This course examines American history through a study of primary and secondary sources, reading excerpts, and project-based learning projects and assessments. Topics include political, economic, social, cultural, and military aspects of America and the changes that have occurred throughout our history.

ADVANCED PLACEMENT (AP) U.S. HISTORY 205A 205B 205C

SCED 04104

OPEN TO: 10th-12th DURATION: 3 trimesters CREDITS: 3 PREREQUISITE: None

AP US History is a survey of American history, offering students the opportunity to take a national test qualifying them for potential college credit. A willingness to practice personal development of study skills are necessary to succeed in this course and emphasis is placed on various critical thinking and writing skills. This course may be taken as a 3rd year American Studies requirement or as a fourth year elective by students who took American Studies in their third year.

BEHAVIORAL SCIENCE

1 credit required for graduation-

SOCIOLOGY SCED 04259

OPEN TO: 11th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

Sociology provides an in-depth look at American society and its effects on individual citizens and their communities.

PSYCHOLOGY 218

SCED 04254

OPEN TO: 11th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This is an introductory course into the field of psychology. Students will study how this field came about and how biological as well as environmental factors help to develop human thinking, feeling, and behavior.

AP (ADVANCED PLACEMENT) PSYCHOLOGY 215A 215B 215C

SCED 04254

OPEN TO: 11th-12th DURATION: 3 trimester CREDITS: 3 PREREQUISITE: None

This course introduces students to the principles and applications of the study of human behavior. As an equivalent to an introductory college course that provides an opportunity to take a national exam to earn college credit and/or advanced placement in college, qualified students are those with the willingness and ability to do the work, and who are capable of independent learning.

PSY 111 INTRO TO PSYCHOLOGY (SCC) PSY 111

SCED 04254

OPEN TO: 11th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This introductory course will explore elements of social norms, who we are as humans and how genetics and environment determine why we develop into the individuals we become. We will study human behavior, sleep and dream theories, learning theories, theories of motivation and elements of abnormal psychology.

GOVERNMENT

1 credit required for graduation

GOVERNMENT 209

SCED 04151

OPEN TO: 12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

Government is a required course that offers an overview of the structure and functions of the US government, the Constitution, and the rights, roles, and responsibilities of American citizens. This course is taken during the senior year of high school.

COMMUNICATION AND CIVIC ENGAGEMENT 209CE

SCED 04151

OPEN TO: 12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

While providing an overview of the structure and functions of the U.S. government and political institutions, this course will allow students the opportunity to gain the requisite experience to become a skilled public speaker, civic leader, and global citizen. It emphasizes engagement and involvement with the Government and our political institutions. Combining Government and Speech, this course will lay the groundwork for what it means to be a responsible and conscientious member of our community.

SOCIAL STUDIES ELECTIVES

MODERN ASIAN STUDIES SS04301

SCED 04061G

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This course is designed to explore MODERN histories of China, Japan, and the Koreas from the late 19th century to the present day. Students will investigate how the kingdoms and empires evolved into the present day of democratic and communist governments.

AMERICAN CULTURE: MUSIC SS04303M

SCED 04303G

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

American culture is a study of the various expressions of American Culture through music. This class will explore various forms of music and the cultural relevance that each has to the American identity. The class will be driven by a project-based curriculum that allows for independent exploration and development of analytical and evaluative skills.

AMERICAN CULTURE: FILM SS04303F

SCED 04303G

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

American culture is a study of the various expressions of American Culture through film. This class will explore various forms of film and the cultural relevance that each has to the American identity. The class will be driven by a project-based curriculum that allows for independent exploration and development of analytical and evaluative skills.

AMERICAN JUSTICE: CRIME AND PUNISHMENT SS04166C

SCED 04166

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

American Justice Crime and Punishment is the study of various expressions of American legal justice as well as the study of various primary and secondary sources of American crimes and their cultural relevance. This class will also explore different types of punishment and how our legal system affects the American identity. This class will be driven by a project based curriculum that will allow for independent exploration and development of analytical and evaluative skills.

U.S. ETHNIC STUDIES SS04107 SCED 04107

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

U.S. Ethnic studies examines the history, politics, economics, and culture of racial/ethnic groups in the United States. In this course students will focus on issues currently facing racial/ethnic groups in the United States and the history behind these issues. Students will be required to engage in discussion, research and problem solving activities. They will be asked to present their understandings in a creative manner i.e. poems, lyrics, stories, visual art presentations, a documentary, a play, etc.

REL 101 SURVEY OF WORLD RELIGIONS (SCC) REL 101 SCED 07002C

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 BHS, 3 SCC PREREQUISITE: None

A survey of the major religions of the eastern and western world. Each religion is placed in its historical context, and its major tenets are explored. This course includes a general understanding of the various religions studied, some specific insights into each religion's belief structures and discussion of the general function of religion in human experience.

EXPLORING WARS AND CONFLICTS 04064 SCED 04064G

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

The study of modern warfare Students will look at the cultural, social and military issues in wars. Students will explore questions such as: What causes violent conflict? Is war legal? What can be done to reduce violent conflict? Is conflict always a bad thing? What is the role of international and civil society in managing and resolving destructive wars?

MODERN HISTORY 1980-PRESENT 04106 SCED 04106G

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

Study of the United States presidents, political upheaval, the end of the Cold War, the rise of the global economy and terrorism, social and cultural change, and deepening political and social divisions. Students will look through an analytical lens to examine modern historical change, they will evaluate societal impact and will understand implications for future.

FINE ARTS

GENERAL ART COURSES

Electives

Foundation of Art (Formerly Intro to Art) EL1086

SCED 05154

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

In this introductory course, students will work with a variety of mediums such as drawing, painting, and sculpture to learn new skills and basic techniques while building a foundation of knowledge in the Elements and Principles of Design. This course lays the groundwork so you will be prepared, if you choose, to take other art classes.

Note: If you earn a D in this course, you may retake it to raise your grade to the C level target

BOOKMAKING AND COLLAGE ARTS A05199

SCED 05156

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: Foundation of Art

Unlock your artistic potential and embark on a journey of self-expression through the dynamic fusion of bookmaking and collage art. This hands-on course invites students to explore the limitless possibilities of combining traditional bookbinding techniques with the vibrant world of collage.

2-D ART COURSES

2-D ART 702 SCED 05155

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: Intro to Art with a C or

better

Embark on an artistic journey of drawing and creative expression! Dive into a world of diverse materials and innovative techniques awaiting exploration in this class. The 2-D Art course emphasizes design elements, principles, and fundamental drawing/painting skills. Intending to simplify artistry, this course aims to ignite enthusiasm and provide accessibility for students across all proficiency tiers.

Note: If you earn a D in this course, you may retake it to raise your grade to the C level target

2-D ART II 711 SCED 05151

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: 2D Art with a C or better

Embark on an artistic journey of drawing and creative expression! Dive into a world of diverse materials and innovative techniques awaiting exploration in this class. The 2-D Art course emphasizes design elements, principles, and fundamental drawing/painting skills. Intending to simplify artistry, this course aims to ignite enthusiasm and provide accessibility for students across all proficiency tiers.

DRAWING I 705 **SCED 05156**

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: 2D Art with a C or better

Step into the realm of this intermediate class designed to amplify your drawing prowess. Uncover a spectrum of new drawing mediums, from the innovative realms of dip ink pens and alcohol-based markers to the timeless reliability of pencils. Not only will you master the art of drawing and shading with heightened realism, but you'll also harness the opportunity to unleash your inner artist, expressing your unique ideas with fervor. Join us in this journey to refine your abilities while fostering your individual artistic voice.

ACRYLIC PAINTING 707

SCED 05157

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: 2D Art with a C or better

Are you eager to dive into a world of color blending? Join us in this captivating class where students will delve into the vibrant realm of acrylic painting and its versatile applications. Discover the artistry of wielding an easel and palette while mastering the skill of "stretching" a canvas, with berets being entirely optional! Unveil the wonders of acrylics and, time permitting, even explore a brief introduction to various other paints. Embrace the role of a painter and unleash your creativity!

Note: Moreover, with instructor approval, this course offers the possibility of repetition for credit, allowing you to hone your skills and artistic vision further.

PAINTING WITH WATERCOLOR AND MORE A05157WC

SCED 05157

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: 2D Art with a C or better

Are you someone who finds joy in exploring the fluidity of creativity? Join us for an exhilarating art class where the canvas comes alive with vibrant hues of colored water! Immerse yourself in the enchanting realm of watercolor painting and beyond, as we embark on an artistic journey experimenting with these lavish paints, an array of brushes, and diverse paper textures. Delve into a world of limitless possibilities encompassing watercolor, gouache, ink, and mixed media techniques. Explore a multitude of subject matters, drawing inspiration from whatever ignites your passion. Unleash your artistic ingenuity as we splash, blend, and create vibrant masterpieces in this immersive and inspiring artistic venture.

ILLUSTRATION & DIGITAL ART 708 SCED 05169

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: Drawing I with a C or better

Are you captivated by the world of graphic novels, book illustration, digital art, and perhaps even the vibrant realm of manga? Do you aspire to become a botanical or medical illustrator, or envision creating captivating artwork for children's storybooks? The art of illustration speaks volumes, complementing expressions across various media forms with vivid imagery. Join us in this dynamic class where we'll explore an array of illustration techniques, bridging the gap between traditional and digital methods. Delve into the intricacies of art careers while gaining invaluable insights into understanding and creating contracts within the industry. Unleash your creative potential as you embark on this illustrative journey, where images wield the power to enrich narratives and stories in extraordinary ways.

ADVANCED DRAWING/CONCENTRATION STUDY 706

SCED 05156

OPEN TO: 10th-12th **DURATION:** 1 *trimester* **CREDITS:** 1 **PREREQUISITE:** Drawing I with a B or better or a C or better and instructor recommendation.

Passionate about drawing? Welcome to an exhilarating class tailored for intermediate-level student artists driven by creativity and self-motivation! Centered around the captivating realm of human anatomy, this course offers a deep dive into the intricacies of the human form. Channel your artistic zeal as you embark on a series of advanced-level drawings curated around a theme of your choice. Explore an array of new media techniques while advancing and refining your existing skills. Unleash your artistic vision and creativity, crafting captivating artwork that transcends boundaries and embodies your unique expression.

3-D ART COURSES

3-D ART I 701 SCED 05158

OPEN TO: 9th-12th **DURATION:** 1 *trimester* **CREDITS:** 1 **PREREQUISITE:** Intro to Art with a C or better

This class is designed to introduce students to the exciting world of three-dimensional art creation using various mediums including clay, plaster and beadwork. Throughout the course, students will explore fundamental concepts, techniques, and tools employed in the creation of 3D artworks, fostering both technical skills and creative expression.

Note: If you earn a D in this course, you may retake it to raise your grade to the C level target

3-D ART II 713 SCED 05158

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: 3-D Art with a C or better

This course takes 3-D Art to the next level. Students will explore a variety of media which may include plaster, clay, glass, fibers, and paint. Emphasis is placed on craftsmanship and display of projects, as well as creativity.

CERAMICS 703 SCED 05159

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: 3-D Art with a C or better

Unleash your creativity and embark on a tactile journey through the ancient and captivating art of ceramics. This course invites students to delve into the world of clay where they will advance the fundamentals of ceramics with hand-building techniques, wheel thrown pottery, and the joy of transforming raw materials into unique, functional, and artistic pieces.

(This course may be repeated for credit with instructor approval.)

SCULPTURE A05158

SCED 05158

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: 3-D Art with a C or better

Embark on a creative exploration of form, space, and composition in the exciting realm of sculpture. This art class invites students to unleash their artistic potential, transforming raw materials into expressive three-dimensional artwork. Through hands-on projects and immersive experiences, participants will

develop essential sculpture skills, explore various mediums, and cultivate a deeper understanding of the language of three-dimensional art.

ADVANCED ART COURSES

AP STUDIO ART 715A 715B 715C

SCED 05172H

OPEN TO: 11th-12th DURATION: 3 trimesters CREDITS: 3 PREREQUISITE: Instructor

recommendation

Seeking the freedom of an independent artist within a high school setting? Welcome to a dynamic course tailored for art students craving the rigor of a college-level art experience. This three-trimester journey is designed to immerse you in the artistic process while fostering the creation of exemplary artwork. With daily studio sessions, you'll hone your craft and develop a comprehensive portfolio. Success in this course thrives on your ability to excel while working independently on your artistic endeavors. By the course's end, you'll have crafted a portfolio brimming with artwork ready for contests, college interviews, or real-world professional readiness, empowering you to showcase your artistic prowess and potential.

Note: We offer 3 different AP Art opportunities, 2D Art and Design, Drawing, and 3D Art and Design. Class may be taken multiple times for Credit.

SELF-GUIDED ART STUDIO / INDEPENDENT STUDIO 717 SCED 05170G

OPEN TO: 11th-12th **DURATION:** 1 *trimester* **CREDITS:** 1 **PREREQUISITE:** Instructor recommendation and 3 prior art courses

Step into the realm of self-guided exploration in this intermediate-level class crafted for passionate and self-motivated student artists. Embrace your creativity as you craft a compelling series of artworks centered around a theme of your choosing, experimenting with an array of diverse media techniques. Revel in the freedom to explore various subject matters, drawing inspiration from what truly ignites your artistic passion. This class offers an experience akin to AP Art Studio, empowering you to refine your artistic voice and skills.

Furthermore, the Independent Study serves as a specialized focus within other art classes, such as Illustration 2, Sculpture 2, Advanced Drawing 2, Advanced Ceramics 2, Advanced Painting, and Digital Art. Similar to the self-guided approach mentioned earlier, this independent study delves deeper into these specialized areas, providing a structured yet flexible environment for further exploration and artistic development.

Note: This course may be repeated for multiple trimesters for credit.

PHYSICAL EDUCATION AND HEALTH

Graduation requirements for Physical Education and Health:

1 credit of Health (Taken 10th grade year)

4 credits (at least one course taken each year)*

*unless excused for medical or religious reasons. To be excused for medical reasons, a statement from a physician must be submitted to the clinic. Any student excused for more than 4 weeks will not receive credit for physical education for that trimester.

Note: Students may take multiple PE courses per year for credit and may repeat most PE courses for credit

REQUIRED COURSES

9TH GRADE PE P080019

SCED 08001

OPEN TO: 9th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This class will give a general overview of the PE department at Burlington High School. Areas covered in this course will range from strength training, cardiovascular training, swimming, team sports, individual sports, basic calisthenics, team games and personal wellness activities.

HEALTH I 3772A

SCED 08051

OPEN TO: 10th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

Health 1 provides a basic overview of health and wellness. It is designed to help you make good decisions that lead to living a healthy and enjoyable lifestyle. Topics covered in health are social health, personal health, physical activity and development, tobacco and other drugs, and injury prevention.

GENERAL PHYSICAL EDUCATION COURSES

HOUND POWER 3756

SCED 08009

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: 9th Grade PE

These are data and scientifically driven strength programs. This program utilizes pre-workout safety checkpoints, partner spotting, free weights, and body weight exercises. Students will follow workouts provided by instructors. This is not a class to do your own workout plan.

PERSONAL WELLNESS 3755

SCED 08052

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: 9th Grade PE

This class will focus on developing better overall physical fitness through improving both cardiovascular conditioning and general health. This will be done through body weight exercises, light strength training,

basic calisthenics, walking, jogging and other forms of exercise. Elliptical trainers, airdyne bicycles, and treadmills will often be used in the class. Students will also walk in the neighborhoods near the high school.

TEAM AND INDIVIDUAL GAMES 3754

SCED 08002

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: 9th Grade PE

This class will focus on developing cooperation and friendly competition through playing team and individual sports. General physical fitness, increasing both cardiovascular endurance and strength through activity participation. Sports included, but not limited to, softball, basketball, volleyball, floor hockey, badminton and tennis.

LIFEGUARDING 3753

SCED 08010

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: 9th Grade PE

Students must be 15 years of age by trimester's end and proficient swimmers in front crawl and breaststroke. There will be a 300 yard swim and a deep water brick test for entry into the class. Upon completion of the class students will be Red Cross certified in lifeguarding, first aid, CPR and AED.

Note: Students who sign up for this course must be strong swimmers. There is a performance test for entry into the class.

OUTDOOR REC P08004

SCED 08004

OPEN TO: 11th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: 9th Grade PE

Outdoor Rec is a course designed for students to be involved as an individual or small group participant in a variety of activities performed outside in nature and urban settings, while under all climate conditions and seasons where deemed safe by the instructor. This course will engage each student to be involved and utilize local resources, groups whether public or upon permission, private entities. Activities will center around, but are not limited to modes such as general recreational safety, cycling, hiking, walking, fishing, kayaking, archery, bocce, and frisbee golf. Students will be traveling off campus.

CROSS TRAINING P08005

SCED 08005

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: 9th Grade PE

Cross Training is an intense course designed to direct students toward a fit lifestyle which can be applied directly to individual fitness levels, solo sports or as a viable fit member of a team sport. Forms of fitness will center around rigorous methods of cardiovascular base training, speed work, strength training, cycling, swimming, core exercises, plyometrics, flexibility while seeking the highest level of intrinsic motivation. Training will be intense and demand daily readiness, goal setting and vigor on behalf of the student participant.

SPORT SPECIFIC PHYSICAL EDUCATION COURSES

TENNIS PE08011

SCED 08011

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: 9th Grade PE

This class will work on the fundamentals of tennis (serve, ground strokes, volleys, overheads). Cardio, weight training and foot drills will also be incorporated on a daily/weekly basis. Students will also be playing competitive matches along with other net games.

TRACK AND FIELD 08012

SCED 08012

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: 9th Grade PE

This class is designed to develop the fundamentals of Track & Field along with a foundation for every other sport. Students will be required to participate in multiple aspects of overall athletic competition training. Class days will vary with days in the weight room, cardio room, and on the track utilizing video analysis. Aspects of track and field being covered vary from running form, use of starting blocks, cardio, hurdling, jumping, relay handoffs, and throwing along with the philosophy/concepts behind them and reinforced in this class. Prior knowledge and experience is not required.

SWIMMING 08010

SCED 08012

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: 9th Grade PE

Students will be participating in daily water exercise with lap swimming, water aerobics and/or water games. Swimming strokes and diving will be critiqued and form improved as needed

BASKETBALL 08002B

SCED 08002

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: 9th Grade PE

This class is designed to help players learn and develop a basic understanding of basketball. The class will include instruction in the basic skills of shooting, dribbling, passing, and defense through various concept games. The class will also cover tactical skills of basic basketball and defensive play. This class will also focus on incorporating 2-3 days of flexibility and physical/strength training.

FOOTBALL P08013F

SCED 08013

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: 9th Grade PE

Football is a course designed to expose students to the various aspects of lead up concepts helpful when applied in a supervised tackle football program. Students will develop levels of skill acquisition through throwing, catching, and kicking to excel in any type or level of football. Two days a week students will engage in strength training workouts. One day a week will be focused on film diagnostics.

SOCCER P08002S

SCED 08002

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: 9th Grade PE

Soccer is a course designed to expose students to various aspects of competitive soccer. Focus will generate around safety, acquisition of basic, lead up and advanced skills and strategies. Students will also perform strength training programs twice a week.

VOLLEYBALL P08002V

SCED 08002

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: 9th Grade PE

This class is designed to help players learn and develop a basic understanding of volleyball. The class will include instruction in the basic skills of serving, passing, setting, attacking and blocking, along with tactical skills of basic volleyball offensive and defensive play as well as the rules and scoring. Strength training workouts are incorporated in this class

BASEBALL/SOFTBALL P08002BS

SCED 08002

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: 9th Grade PE

Fastpitch softball and baseball strategy and theory for the competitive athlete. Strategies toward development of hitting, throwing and pitching skills. Weight training and cardiovascular conditioning emphasized. This class will also focus on hitting, fielding, and throwing skills for the sports of baseball and softball. Sessions in the batting cages will be utilized. Weight training and cardiovascular fitness will be emphasized along with baseball and softball strategy.

OFFICIATING 08019

SCED 08019

OPEN TO: 11th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

Students will learn to effectively operate timing systems and scoreboards. Students will also learn how to keep official scorebooks. The students will learn rules, mechanics and where to be in situations during officiating. This is a physical education elective, and does not qualify for a credit towards the PE requirement for graduation

COACHING ENDORSEMENT LICENSE

All 4 of these courses are required to earn the license

INTRODUCTION TO COACHING PEC-101

SCED 08049

OPEN TO: 11th-12th DURATION: 1 trimester CREDITS: 1 BHS, 3 SCC PREREQUISITE: None

Introduction to Coaching consists of a four-part course that includes coaching theory, sports medicine, sports psychology, and sports physiology. It leads to coaching authorization for the State of Iowa as a junior high or senior high coach. See counselor to fill out SCC Registration form.

ATHLETIC DEVELOPMENT AND HUMAN GROWTH PEC-116

SCED 08017

OPEN TO: 11th-12th DURATION: 1/2 trimester CREDITS: .5 BHS, 2 SCC PREREQUISITE: None

A study of the physical, cognitive, and psychosocial stages of development during middle childhood and adolescence and how these stages impact the coaching profession. This is one of the four courses

leading to the coaching and authorization issued by the lowa Department of Education as a head coach or assistant coach of any interscholastic athletic activity. See counselor to fill out SCC Registration form.

Note: This course is traditionally taken together in the same term, same class period, with Body Structure and Function.

BODY STRUCTURE AND FUNCTION PEC-120

SCED 08017

OPEN TO: 11th-12th DURATION: 1/2 trimester CREDITS: 5 BHS 1 SCC PREREQUISITE: None

An introduction to the physiological processes and anatomical features of the human body which are related to and affected by physical activity and training. This is one of the four courses leading to the coaching and authorization issued by the lowa Department of Education as a head coach or assistant coach of any interscholastic athletic activity. See counselor to fill out SCC Registration form.

BASIC ATHLETIC TRAINING PET-105

SCED 08049

OPEN TO: 11th-12th DURATION: 1 trimester CREDITS: 1 BHS, 3 SCC PREREQUISITE: None

This course serves as an introduction to the profession of athletic training. Students will be instructed in basic skills and theories of the profession including: measurement of vital signs, taping, wrapping, and immobilization. Students will become familiar with the roles, functions, and professional preparation of an athletic trainer as well as the history of the profession and its governing structures. See counselor to fill out SCC Registration form.

FINANCIAL LITERACY

Graduation Requirements:

1 Credit of Financial Literacy

FINANCIAL LITERACY 406

SCED 02157G

OPEN TO: 11th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: Algebra 1

Financial Literacy covers math concepts and skills to be used in a variety of consumer applications. Applications may include budgeting, taxation, credit, banking services, insurance, buying and selling products and services, home and/or car ownership and rental, managing personal income, and investment.

MATHEMATICS

(*Denotes Honors)

Graduation Requirements for Math:

2 Credits of Algebra I or equivalent

2 Credits of Geometry or equivalent

2 Additional credits of Math

Any additional courses completed will count as elective credits

Students planning to continue their education after high school (vocational and/or college bound) are strongly encouraged to take core classes at least through Algebra II.

Teacher approval is required for anyone taking two math courses at once.

ELECTIVES- Prerequisite of Geometry (or Practical Geometry) unless otherwise noted

Statistics (1 Trimester) Prerequisite one trimester of Algebra II Math for Liberal Arts/SCC (1 semester)(ALEKS Test) Statistics/SCC (1 trimester)(ALEKS Test) Algebra II Algebra II Foundations Algebra II Technical

ALGEBRA 1

2 credits required for graduation

ALGEBRA 1 404A 404B

SCED 02052

OPEN TO: 9th DURATION: 2 trimesters CREDITS: 2 PREREQUISITE: None

Algebra 1 courses include the study of properties and operations of the real number system; evaluating rational algebraic expressions; solving and graphing first degree equations and inequalities; translating word problems into equations; operations with and factoring of polynomials; and solving simple quadratic equations. Review topics: ratio and proportion, operations with sets, simplifying radical expressions, operations with exponents, and simple linear equations.



2 credits required for graduation

GEOMETRY 407A 407B

SCED 02072

OPEN TO: 9th-12th DURATION: 2 trimesters CREDITS: 2 PREREQUISITE: Algebra 1 or Algebra

1AB

A Geometry course exploring planes and solid figures including: perimeter, area, and volume; lines, segments, angles, and circles; congruence and similarity. Other topics include triangle congruence, 2-column proofs, rules of angle measurement in triangles, trigonometry, coordinate geometry, transformational geometry, and the connections between algebraic and geometric concepts.

PRACTICAL GEOMETRY 421A 421B

SCED 02071

OPEN TO: 10th-12th **DURATION:** 2 *trimesters* **CREDITS:** 2 **PREREQUISITE:** Algebra 1A and Algebra 1B or Algebra 1AB ONLY

A more practical approach to the study of Geometry exploring planes and solid figures including: perimeter, area, and volume; lines, segments, angles, and circles; congruence and similarity. Other topics may include triangle congruence, rules of angle measurement in triangles, basic trigonometry, coordinate geometry, transformational geometry, and the connections between algebraic and geometric concepts.

*GEOMETRY HONORS 408A 408B

SCED 02072H

OPEN TO: 9th-12th DURATION: 2 trimesters CREDITS: 2 PREREQUISITE: Algebra 1

Geometry course, emphasizing an abstract, formal approach to the study of geometry. This includes such topics such as properties of plane and solid figures, deductive methods of reasoning and use of logic; geometry as an axiomatic system including the study of postulates, theorems, and formal proofs; rules of congruence, similarity, parallelism, and perpendicularity; and rules of angle measurement in triangles, including trigonometry, coordinate geometry, and transformational geometry. Review topics: basic measurement, perimeter, area, and volume, and inductive methods of reasoning.

MATH ELECTIVES

May need at least 2 credits to earn up to 6 credits required for graduation

ALGEBRA 2 409A 409B

SCED 02056

OPEN TO: 9th-12th DURATION: 2 trimesters CREDITS: 2 PREREQUISITE: Geometry

Algebra 2 course is an extension of Algebra 1 topics. Topics include operations with rational and irrational expressions; factoring of rational expressions; in-depth study of linear equations and inequalities; quadratic equations; solving systems of linear and quadratic equations; properties of higher degree equations; operations with rational and irrational exponents. Enhancement topics: polynomial, logarithmic, and exponential functions and graphs and sequences and series.

*ALGEBRA 2 HONORS 410A 410B

SCED 02056H

OPEN TO: 9th-12th DURATION: 2 trimesters CREDITS: 2 PREREQUISITE: Geometry Honors

Algebra 2 course is an extension of Algebra 1 topics. Topics include operations with rational and irrational expressions; factoring of rational expressions; in-depth study of linear equations and inequalities; quadratic equations; solving systems of linear and quadratic equations; properties of higher degree equations; operations with rational and irrational exponents; complex numbers; and numerical tables. Enhancement topics: polynomial, logarithmic, and exponential functions and graphs; and sequences and series. The Honors program studies most topics in more depth.

*ALGEBRA 2 CORE

SCED 2055

OPEN TO: 9th-12th DURATION: 2 trimesters CREDITS: 2 PREREQUISITE: Geometry

Algebra II Core reviews and extends algebra and geometry concepts for students who have already taken Algebra I and Geometry. Algebra II Core includes a review of such topics as properties and operations of real numbers; evaluation of rational algebraic expressions; solutions and graphs of first-degree equations and inequalities; translation of word problems into equations; operations with and factoring of polynomials; quadratics; properties of plane and solid figures; rules of congruence and similarity; coordinate geometry including lines, segments, and circles in the coordinate plane; and angle measurement in triangles including trigonometric ratios.

*ALGEBRA 2 TECHNICAL

SCED 2153

OPEN TO: 9th-12th DURATION: 2 trimesters CREDITS: 2 PREREQUISITE: Geometry

Algebra II Technical courses extend students' proficiency in mathematics, and often apply these skills to technical and/or industrial situations and problems. This course is for students who have already taken Algebra I and Geometry. While this course prepares students for a variety of technical applications, they are not intended to serve as remedial mathematics courses. Algebra II Technical topics may include but are not limited to rational numbers; systems of measurements; tolerances; numerical languages; geometry; algebra; statistics; and using tables, graphs, charts, and other data displays. Technology is integrated as appropriate.

PRACTICAL STATISTICS M02201

SCED M02201

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: Algebra

Students will learn about statistics concepts that apply to real life. Topics will include reading and creating graphs of different types, probability, analyzing data, finding various measures of central tendency and understanding their differences and significance.

PRE ALGEBRA 401A 401B

SCED 02051

OPEN TO: 9TH DURATION: 2 trimester CREDITS: 2 PREREQUISITE: None

Pre Algebra is designed to prepare students for a standard algebraic class. This course focuses on integers, one-step math problems, fractions, square roots, linear equations using variables, decimals, graphs and functions, percent, and probabilities,

STATISTICS 418

SCED 02205

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: Algebra 2

It is recommended that all college bound students take this course. Statistics emphasizes both descriptive and inferential statistics. Topics include probability and counting, probability distributions including binomial and normal distributions; analysis of data; measures of central tendency and variability; random variables; random sampling; central limit theorem; confidence intervals and hypothesis testing.

PRE-CALCULUS 412A 412B

SCED 02110

OPEN TO: 10th-12th DURATION: 2 trimesters CREDITS: 2 PREREQUISITE: Algebra 2

Pre-Calculus courses combine the study of Trigonometry, Elementary Functions, Analytic Geometry, and Math Analysis topics as preparation for calculus. Topics include the study of complex numbers; polynomial, logarithmic, exponential, rational, right trigonometric, and circular functions, and their relations, inverses and graphs; trigonometric identities and equations; solutions of right and oblique triangles; the polar coordinate system; conic sections; sequences and series; and limits and continuity. Review topics: structure of the real number system, solutions of linear and quadratic equations and systems of these equations. Enhancement topics: derivatives and integrals. This course is intended for the college bound student entering a non-math related field.

MAT-120 COLLEGE ALGEBRA

MAT120

OPEN TO: 11th-12th **DURATION:** 1 *trimester* **CREDITS:** 1 BHS, 3 SCC **PREREQUISITE:** ALEKS score of 46

The study of rational, exponential, logarithmic, and polynomial functions and relations, their graphs and related equalities. The study of circular functions, graphs, and applications.

MAT-134 TRIGONOMETRY AND ANALYTIC GEOMETRY

MAT134

OPEN TO: 11th-12th **DURATION:** 1 *trimester* **CREDITS:** 1 BHS, 3 SCC **PREREQUISITE:** MAT-120 with a minimum grade of C-, ALEKS score of 61

The student will study degree and radian angles; apply basic geometric and trigonometric concepts to solve triangles; apply and graph trigonometric functions and their inverses to solve applied problems; verify trigonometric identities; convert paired data between rectangular and polar notation systems; apply math operations on vectors and complex numbers; graph polar equations; and analyze/graph elliptic, hyperbolic, and other conic equations.

MAT-210 CALCULUS I

MAT210

OPEN TO: 11th-12th **DURATION:** 1 Semester **CREDITS:** 1.5 BHS, 4 SCC **PREREQUISITE:** MAT-134 ALEKS76

This course includes the study of limits and continuity, derivatives and differentiation, differentials, maximum and minimum function values and techniques of graphing, applications, and an introduction to integration. Depending on class enrollment, this class may be offered on SCC campus only.

MAT-216 CALCULUS II

MAT-216

MAT-210

This course is a study of integration, techniques of integration, applications and accompanying mathematical structure. A follow-up course to MAT-210 Calculus 1. Depending on class enrollment, this class may be offered on SCC campus only.

MAT-156 STATISTICS

MAT156

and ALEKS score of 46

This course is an applied course in statistics, designed to introduce students to some of the concepts, symbols, procedures and vocabulary used in the field of statistics. Topics covered in this course include: organizing and graphing data, descriptive statistics, probability, various distributions, the sampling distribution of the mean, estimating a population mean, confidence intervals, inferential statistics (hypothesis testing), comparing two population parameters, analysis of variance, correlation, simple linear and multiple regression, contingency tables, and nonparametric statistics (time permitting). Depending on class enrollment, this class may be offered on SCC campus only.

MAT-702 - Introduction to Math Applications

Lecture: 2 Lab: 2

Credit: SCC 3

This course is offered to students who can profit from an applied course in mathematics and will prepare students who need to develop skills for MAT-704. It is designed as an introductory level algebra course recommended for students with one year of high school algebra. Emphasis is on the building of basic algebra skills and the application of these mathematical techniques. The course studies the relationship of geometry and algebra as they apply to various fields. This course will also cover whole numbers/decimals, integers, fractions/percents, direct measurement, basic geometric concepts/relationships, linear equations and right-triangle trigonometry. Prerequisite: MAT-052 or meet minimum placement testing requirements.

FINE ARTS

MUSIC THEORY 1 727A

SCED 05113

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This advanced course focuses on the fundamentals of music, covering rhythm, melody, keyboard skills, major and minor scales, key signatures, intervals, modes, triads, and tonality. Students will also enhance their aural skills through rhythmic and melodic dictation.

Note: Prior musical experience and note-reading skills are recommended.

MUSIC THEORY 2 727C

SCED 05113

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: Music Theory 1 or

instructor approval

This advanced course builds on the skills learned in Music Theory 1. Students will explore atonal theory, set theory, and 20th-century music. Additionally, they will develop aural skills through advanced rhythmic and melodic dictation, including two-part dictation and sight-singing.

Note: Prior musical experience and note-reading skills are recommended.

MUSIC APPRECIATION 1 MU05118

SCED 05118

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This course introduces students to the history, basic theory, and genres of music. The course explores the history of music, from the surviving examples of rudimentary musical forms through contemporary pieces from around the world. The course explores the relationship between music and social movements and reveals how the emergent global society and the prominence of the Internet are making musical forms more accessible worldwide.

MUSIC APPRECIATION 2 MU05118Y2

SCED 05118

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This course picks up where Music Appreciation 1 leaves off, however, Music Appreciation 1 isn't required, but will be helpful. This course will focus on how music plays a role in life's meaning (love, religion, celebration, death), creativity, musical theater, opera, film, jazz, your generation, and folk music.

INSTRUMENTAL MUSIC

ORCHESTRA 733A 733B 733C

SCED 05104

OPEN TO: 9th-12th **DURATION:** 3 *trimesters* **CREDITS:** 3 (1.5 if taken in combo with another music course) **PREREQUISITE:** Experience in orchestra or instructor approval

Performing groups include the string orchestra and the symphonic orchestra with winds, brass and percussion. All of the participants, including the strings, must have prior approval of the director since a certain level of playing ability is required. Those string students who also play woodwind, brass or percussion instruments will have the opportunity to participate in band on a combination basis. Course must be completed to receive credit. May be repeated for credit. There is an opportunity to play in select groups such as Chamber Ensemble, quartets, quintets, trios, etc.

Note: This course can be taken in combination with other music courses

Note: If you are in band as well, enroll in Symphonic Band.

MARCHING / CONCERT BAND 741A 741B 741C

SCED 05104

OPEN TO: 9th-12th **DURATION:** 3 *trimesters* **CREDITS:** 3 (1.5 if taken in combo with another music course) **PREREQUISITE:** Experience in band or instructor approval

For the first 8-10 weeks, students will rehearse as a marching band, focusing on basic marching techniques and performing at varsity home football games, area parades, and festivals. Attendance at all performances and scheduled activities is required.

After the marching season, students will audition for chair placement in the concert band. This ensemble will focus on the analysis and performance of standard and advanced high school concert band music. Students will prepare for formal concerts, festivals, and perform as a pep band at home basketball games. They will also have the opportunity to participate in the state solo and ensemble festival. Attendance at all performances and lessons is expected and is a graded component of the class.

Note: If you are also enrolled in Orchestra, this is the band section to choose. Both this course and Orchestra will count as 0.5 credits per trimester, combining for a total of 1 credit each term.

Note: This course can be taken alongside other music courses.

COLOR GUARD 729/730

SCED 08006

OPEN TO: 9th-12th **DURATION:** 1 *trimester (fall)* **CREDITS:** 1 **PREREQUISITE:** Audition process in spring

This performance group emphasizes precision and dance, performing with the marching band at all home games, parades, and competitions. Students must audition for acceptance and should be prepared to work hard and maintain good physical condition. Attendance at all performances and scheduled activities is required.

Note: Color Guard also meets during Zero Hour in Trimester 1.

JAZZ ENSEMBLE (JAZZ BAND 1) AND JAZZ BAND (JAZZ BAND 2) 731A 731B 731C SCED 05105

OPEN TO: 9th-12th **DURATION:** 3 *trimesters* **CREDITS:** 1.5 **PREREQUISITE:** Enrolled in the band program.

Students in the jazz program will study and perform a variety of styles, including swing, blues, funk, and fusion. They will also focus on jazz inflection, ensemble playing, and improvisation. Attendance at all performances and scheduled activities is required. The course must be completed to receive credit and may be repeated for additional credit.

Note: Piano, guitar, and bass players not enrolled in the band program may join with instructor approval.

Note: This ensemble meets during Zero Hour, every other day, throughout the entire year. Students earn 0.5 credits per trimester.

PERCUSSION ENSEMBLE 743A 743B 743C

SCED 05106

OPEN TO: 9th-12th DURATION: 1-3 trimesters CREDITS: 1-3 PREREQUISITE: None.

The purpose of this course is to study and perform music written especially for percussionists. Emphasis will be placed on proper technique on mallets, snare, timpani, as well as work on the drum set. Students enrolled will learn the standard rudiments as well as four mallet technique. May be repeated for credit.

Note: This course is for novice and experienced musicians alike.

BRASS ENSEMBLE 746A 746B 746C

SCED 05106

OPEN TO: 9th-12th DURATION: 1-3 trimesters CREDITS: 1-3 PREREQUISITE: None.

The purpose of this course is to study and perform music written especially for brass ensembles. Some styles to be studied include brass quintet, brass choir, trumpet quartets and choirs, and low brass ensembles. Emphasis will be placed on proper brass technique. Students will work on advanced lip flexibilities, multiple tonguing, range and endurance exercises, the pedal register, and tone development. May be repeated for credit.

Note: This course is for novice and experienced musicians alike.

WOODWIND ENSEMBLE 748A 748B 748C

SCED 05106

OPEN TO: 9th-12th DURATION: 1-3 trimesters CREDITS: 1-3 PREREQUISITE: None.

The purpose of this course is to study and perform music written especially for woodwind ensembles. Some styles to be studied include woodwind quintet, clarinet and flute choir, saxophone quartets, and woodwind choirs. In addition to basic woodwind techniques, students will learn multiple tonguing and tone development exercises. Emphasis will be placed on proper woodwind techniques. May be repeated for credit

Note: This course is for novice and experienced musicians alike.

VOCAL MUSIC

MIXED CHORUS 735A 735B 735C

SCED 05110

OPEN TO: 9th-12th DURATION: 3 trimesters CREDITS: 3 PREREQUISITE: None.

A vocal performance ensemble open to students in grades 9-12. Emphasis will be placed on developing and improving vocal production, sight-reading and rhythm skills. A varied repertoire of choral literature will be studied as well as basic music education. The course is designed to improve technique and part-singing. Attendance at all performances required.

TREBLE CHOIR 745A 745B 745C SCED 05111

OPEN TO: 9th-12th DURATION: 3 trimesters CREDITS: 3 PREREQUISITE: Audition process by request.

A vocal ensemble with specific focus on the treble voice. Participation in the group is by audition only. A variety of choral literature for treble voices will be studied from renaissance to Contemporary. Attendance at all performances and scheduled activities is required. May be repeated for credit.

BASS CHOIR 747A 747B 747C

SCED 05110

OPEN TO: 9th-12th DURATION: 3 trimesters CREDITS: 3 PREREQUISITE: Audition process by request.

A vocal ensemble with specific focus on the bass voice. Participation in the group is by audition only. A variety of choral literature for bass voices will be studied from renaissance to Contemporary. Attendance at all performances and scheduled activities is required. May be repeated for credit.

ACAPPELLA 738A 738B 738C

SCED 05110

OPEN TO: 10th-12th DURATION: 3 trimesters CREDITS: 3 PREREQUISITE: Audition process by request.

Participation in the choir is by audition only. Students must show confidence and independence as singers. A variety of choral literature styles are presented. Singers are expected to be independent part singers. Attendance at all performances and scheduled activities is required. May be repeated for credit. **Note:** Students must have 12 credits earned in high school before they can audition for this ensemble.

PURPLE-AIRES AND NEW LEGACY 737A 737B 737C

SCED 05111

OPEN TO: 10th-12th DURATION: 3 trimesters (does not meet daily) CREDITS: 1.5 PREREQUISITE: Audition process by request.

Course is designed for those students who are above-average vocalists and who can sing a variety of musical styles. The concentration is on pop/jazz music. Attendance at all performances and scheduled activities is required. Course must be completed to receive credit. May be repeated for credit.

Note: This ensemble meets during Zero Hour, every other day, for the entire year. Students earn .5 credits per trimester.

SCIENCE

Graduation Requirements for Science:

- 2 trimesters of-physical science
- 2 trimesters of biology
- 2 trimesters of either chemistry or practical applications of science
- Any additional courses completed will count as elective credits

PHYSICAL SCIENCES

2 credits required for graduation

PHYSICAL SCIENCE 301A 301B SCED 03159

OPEN TO: 9th-12th DURATION: 2 trimesters CREDITS: 2 PREREQUISITE: None. See note

This course is aligned to the Iowa Core standards. This two trimester course uses laboratory activities to investigate the concepts of forces and interactions, waves and electromagnetic radiation, space systems, and earth history.

Note: This is a required class for all 9th grade students.

GENERAL PHYSICS 310A 310B

SCED 03151

OPEN TO: 11th-12th **DURATION:** 2 *trimesters* **CREDITS:** 2 **PREREQUISITE:** Four credits of Core Science courses

This course is intended to help students see a conceptual and mathematical overview of physics. General Physics is intended for students who want a course in physics. Emphasis is placed on real world applications of how science is used in daily life.

*HONORS PHYSICS 311A 311B 311C SCED 03151H

OPEN TO: 11th-12th **DURATION:** 2 trimesters **CREDITS:** 2 **PREREQUISITE:** Four credits of Core Science courses

This course utilizes a coordinated set of resources including text, laboratory, and supplementary reading materials designed to examine the structure of physics. Emphasis is placed on the acquisition of knowledge, development of intellectual skills, and enlarging ideas. Honors Physics is intended for those students who will follow a concentrated four-year college curriculum, especially engineering, medicine, and other science related professions.

BIOLOGICAL SCIENCES

BIOLOGY 306A 306B SCED 03051

OPEN TO: 10th-12th **DURATION:** 2 *trimesters* **CREDITS:** 2 **PREREQUISITE:** 9th grade Physical Science required

This two trimester course uses laboratory activities to investigate ecological concepts, the cell and cell cycle, cellular energy transfers such as photosynthesis and cellular respiration, genetics, and finally evolution.

*HONORS BIOLOGY 323A 323B SCED 03056H

OPEN TO: 10th-12th **DURATION:** 2 trimesters **CREDITS:** 2 **PREREQUISITE:** Completion of Physical Science at least a C or instructor approval

Honors Biology is designed to offer students a solid foundation in introductory college-level biology including laboratory investigations. The course is structured around the four big ideas, enduring understandings, and science practices as recommended by AP. The utilization of this structure moves the course from rote memorization of biological facts to a true understanding of the interconnectedness within the biological world. Students will have the option to take the AP Biology test in the spring, Tests are ordered in November.

CHEMICAL SCIENCES

2 credits required for graduation

PRACTICAL APPLICATIONS OF SCIENCE S03201A S03201B SCED 03201B

OPEN TO: 11th-12th **DURATION:** 2 *trimesters* **CREDITS:** 2 **PREREQUISITE:** Biology and Physical Science

This class is designed to introduce students to chemistry basics, as well as some physics and earth science. Emphasis will be on real world applications of how science is used in daily life.

GENERAL CHEMISTRY 308A 308B SCED 03101

OPEN TO: 11th-12th **DURATION:** 2 *trimesters* **CREDITS:** 2 **PREREQUISITE:** Recommended Algebra 1, Physical Science and Biology with a C or better

This lab oriented course is a descriptive course with an emphasis upon processes and fundamentals of inorganic chemistry including the basic topics of nomenclature, mole concept, atomic theory, solutions, and concentrations. The emphasis is on the qualitative approach to understanding chemistry.

HONORS CHEMISTRY 317A 317B

SCED 03101

OPEN TO: 11th-12th **DURATION:** 2 3 trimesters **CREDITS:** 2 3 **PREREQUISITE:** Concurrent enrollment in Algebra 2. Honors Biology with a grade of C or higher

Honors Chemistry is a rigorous course taught at a faster pace than General Chemistry. Topics include the mole, chemical bonding, fundamental description of matter, reaction behavior, solutions bonding thermochemistry and electrochemistry. Lab techniques, data collection and organization, and reporting form are emphasized.

SCIENCE ELECTIVES

The following courses are in addition to, and cannot replace the six (6) credits of required core courses.

ASTRONOMY 304

SCED 03201B

OPEN TO: 10th-12th **DURATION:** 1 *trimester* **CREDITS:** 1 **PREREQUISITE:** Three credits of Science courses

This course will introduce the student to astronomy and also present the latest discoveries and theories of this rapidly changing science. The course is primarily a project-based course. It is designed for the student and is kept as nontechnical as possible.

ANATOMY AND PHYSIOLOGY I 314A

SCED 03053G

OPEN TO: 10th-12th **DURATION:** 1 *trimester* **CREDITS:** 1 **PREREQUISITE:** Two credits of Biology with a C or better

The purpose of this course is to enable you to gain an understanding of how your body works. The emphasis will be on normal structure and function. We will examine the anatomy and physiology of the major body systems and how they interact to form a stable functioning unit. Topics to be covered in this course include terms of relative position, tissue types found in the human body, the integumentary system and skeletal system. Laboratory activities involve the study of tissues, preserved specimens and anatomic models.

ANATOMY AND PHYSIOLOGY II 314B

SCED 03053G

OPEN TO: 10th-12th **DURATION:** 1 *trimester* **CREDITS:** 1 **PREREQUISITE:** Anatomy and Physiology I with a C or better

Is a continuation of Anatomy I. The purpose of this course is to enable you to gain an understanding of how your body works. The emphasis will be on normal structure and function. We will examine the anatomy and physiology of the major body systems and how they interact to form a stable functioning unit. Topics to be covered in this course include the muscular system, nervous system, somatic sense and the digestive system. Laboratory activities involve the study of tissues, preserved specimens and anatomic models. Dissection is required.

ANATOMY AND PHYSIOLOGY III 314C

SCED 03053G

OPEN TO: 10th-12th **DURATION:** 1 *trimester* **CREDITS:** 1 **PREREQUISITE:** Anatomy and Physiology II with a C or better

Is a continuation of Anatomy II. The purpose of this course is to enable you to gain an understanding of how your body works. The emphasis will be on normal structure and function. We will examine the anatomy and physiology of the major body systems and how they interact to form a stable functioning unit. Topics to be covered in this course include the cardiovascular system, blood, the respiratory system and the dissection of the fetal pig. Laboratory activities involve the study of tissues, preserved specimens and anatomic models. Dissection is required.

SCIENCE RESEARCH 302

SCED 03097H

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This is a trimester long course in which the student selects a topic or problem to develop into an experimental research project. Students will develop and design their own experiment, collect and analyze data, and present their data to an appropriate audience.

ZOOLOGY 313A SCED 03061G

OPEN TO: 11th-12th **DURATION:** 1 trimester **CREDITS:** 1 **PREREQUISITE:** Biology with a C or better

Designed to survey the animal world. Basic biological concepts are applied to the study of structures and functions of individual organisms, emphasizing their evolutionary histories. A summary of animal relationships in their natural environment is also included.

Ecology of Iowa

OPEN TO: 11th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: Biology with a C or better

Ecology of lowa is a trimester course designed to introduce students to the geological and ecological history of lowa. Students will explore the diverse ecosystems found within the state and surrounding regions, learn how to identify local plants and animals, and examine the environmental challenges lowa faces today. This course provides a comprehensive understanding of lowa's natural history and its ongoing conservation issues.

Career and Technical Education

BUSINESS

ACCOUNTING 1 514A SCED 12104

OPEN TO: 11th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

Accounting is the language of business. All businesspersons should have knowledge of the accounting process in order to function properly in the business world. The purpose of the accounting program is to provide a good foundation for those students desiring to enter the business world. This course provides an understanding of the basic elements and concepts of double entry accounting systems. Activities include the accounting equation, the accounting cycle, entering transactions in journals, posting to ledgers, end-of-period statements and inventories, and notes and interest.

ADVERTISING/SALES 519

SCED 12202

OPEN TO: 10th-12th **DURATION:** 1 trimester **CREDITS:** 1 **PREREQUISITE:** Introduction to Business

In this course you will learn about selling and customer service. You will learn to determine the client's needs and wants, how they think and then to respond to the customer through planned, personalized communication that influences purchase decisions. Focus is on the steps of the selling process to better sell products and services, ideas and you. Students will learn the basic advertising principles, media, psychology, and the relationship of sales promotion to the total marketing process. An emphasis will be placed on the business aspects of advertising.

BUSINESS LAW 517

SCED 12054

OPEN TO: 11th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This course is designed to acquaint students with the basic legal principles relevant to their roles as citizens, consumers, and employees. Content includes the origin of law, the court system, criminal and civil law, rights and duties, basic elements of contracts, consumer protection, and legal affairs affecting property such as ownership, transfer, landlords and tenants, wills and estates and community property. The law is interpreted through case studies. Reading assignments are given followed by class discussions. Vocabulary is emphasized.

BUSINESS MANAGEMENT 518

SCED 12055

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: Introduction to Business

This course is an introduction to the concepts, terminology, principles, and theories that are the substance of management. Field trips, guest speakers, and computer simulations will be used to reinforce learning. Students will also be introduced to the essential concepts that apply to the practice of management with an explanation of the complexities of management principles and theories. This course is beneficial to students pursuing a variety of career goals that entail management of other employees.

BUSINESS MATH 516

SCED 02154

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

Business math covers personal record keeping, banking, taxes and investments such as stocks and bonds, mutual funds and real estate, as well as presenting lessons and problems about assets, liabilities and capital; income and expenses, profit and loss; debits, credits and double-entry bookkeeping; journals, statements and accounting categories all from a biblical perspective. There is also a unit on management that explores such subjects as ratio analysis, percent analysis, the breakeven point and inventory turnover.

BUSINESS OCCUPATION EXPLORATION 500

SCED

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

Business Occupation Exploration enables students to explore the training, tasks, and job skills that are utilized in a variety of business career pathway occupations. This course is designed to provide students with the knowledge and direction to ultimately prepare them for careers in the business world. Through readings, in-class and online coursework, guest speakers, lectures and activities, students will explore and experience various aspects of the many types of careers in marketing, accounting, entrepreneurship, management, finance and many more. Students will begin creating their Business Pathway Portfolio.

ENTREPRENEURSHIP 522

SCED 12053

OPEN TO: 11th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

The purpose of Entrepreneurship is to provide students with an introduction to the career option of small business ownership and to the management skills necessary for successful operation of a small business. This is where the new jobs are. This course would benefit students in Industrial Technology, Marketing, and other career areas.

INTERACTIVE MARKETING CAPSTONE 10203

SCED 10203

OPEN TO: 9th-12th DURATION: 1-3 trimesters CREDITS: 2-6 PREREQUISITE: None, see note

In this course students will use their knowledge and skills to create, design, and produce interactive media products and services. The course emphasizes the development of video, digitally generated and/or computer-enhanced promotional media for the district and/or a community business partner. Course topics include videography, video editing, graphic media, web page development, and print materials. This class is a two period class each trimester. Students may repeat this course multiple trimesters

Note: Students would benefit from taking any of these classes; Intro to Business, Business Management, Entrepreneurship, Advertising/Sales, Marketing, Sports Marketing, Digital Marketing, and any of the Graphic Communication Courses

INTRODUCTION TO BUSINESS 501

SCED 12051

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This applied course explains the role of business in our economic system by developing an understanding of business ownership, forms of business organization, new technologies, and current trends in our free

enterprise system. The students will also learn about insurance, the use of credit, and finding a career. This very practical course can be beneficial to any student.

MARKETING 521 SCED 12152

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This course is to provide understanding on the importance of a successful promotion campaign needed by businesses. Sales promotion activities are learned. Activities including advertising, publicity and display. Students will be exposed to an intro sports marketing, hospitality, travel and tourism. Students will develop a strategy for a promotion program, which includes print layouts and radio scripts. These principles and practices will contribute to a firm's success.

MARKETING II 523

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: Marketing

In this advanced Marketing II Capstone course, students will apply their foundational knowledge to real-world projects, focusing on promotional campaigns, sports marketing, and the hospitality/tourism industries. They will develop comprehensive marketing strategies, create higher-grade promotional materials like print projects and evaluate business effectiveness in various industries. A capstone project allows students to create a simulated project, culminating in a final presentation. This hands-on experience equips students with practical skills to succeed in the competitive marketing field. Students will have the opportunity to network with various industry leaders to gain further knowledge.

RECORDKEEPING 502

SCED 12007

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This applied class provides the information and activities necessary to develop competency for both personal and business recordkeeping in our everyday lives. Keeping records is a part of everyone's personal and business lives. As individuals, we maintain personal records for taxes, budgets, credit, and banking. As employees, we prepare and use records of many kinds, sales, purchases, payroll, inventory, and accounting.

WORKPLACE READINESS B22152 SCED 22152

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This course is designed to prepare students to enter the workplace with confidence. Job-searching, resume', application letter, application forms, job interview, follow-up, job survival skills, and a strategy for maintaining and updating a career portfolio will be included in the course. Guest speakers will be an important part of the class. The course will focus on job-keeping skills-teamwork, organization, self-management and problem solving. In addition, one unit included in WPR will be on budgeting, saving, using credit cards wisely, and making smart borrowing decisions before they go to college or enter the workforce.

CAREER EXPLORATION/INTERNSHIPS

INTERNSHIP/WORKPLACE 923A 923B 923C

SCED 22998

OPEN TO: 11th-12th DURATION: 1-3 trimesters CREDITS: 1 (each period) PREREQUISITE: None

This is a planned and supervised career development experience related to the learning and career goals for juniors and seniors. Any paid work experience requires students setting up their own work site which must be approved by the teacher. Students engaging in paid work experiences must work a minimum of 30 hours per month. Evaluations will be completed by the supervisor each grading period. Students' grades will be determined by employer's evaluation, weekly reports and reflections, and WBL curriculum. Other work-based learning activities such as job shadowing, short unpaid internships, and in-depth career exploration will be guided by a designated instruction.

EXPLORING CAREERS (SCC WBL-100)

This course will provide guidance in choosing a career goal and preparing for employment. Emphasis will be placed on identifying interests, abilities, and values, and exploring options for careers. Students will learn how to access labor market information and employment trends. Additionally, students will develop the skills and aptitudes necessary to obtain employment, emphasizing the development of characteristics associated with job success.

EMPLOYABILITY SKILLS (SCC WBL-110)

This course is designed to assist students in developing the skills necessary to obtain employment, and to learn and practice the skills and attitudes required for job success. Students will practice resume writing, job application completion and interviewing techniques. Additionally, students will practice work-place problem solving strategies and demonstrate skills required to work in a diverse environment.

THE COLLEGE EXPERIENCE (SCC SDV-108)

This course is designed to empower new students to successfully transition to college. Students will learn academic success skills, strategies for personal development and exploration, college culture and expectations, and how to access college resources and services.

CAD/ENGINEERING

COMPUTER-AIDED DRAFTING I (CAD I) (SCC CREDIT AVAILABLE) 673 SCED 21107

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This course is an introduction to Computer Aided Drafting fundamentals 2D & 3D. This course is recommended for ALL FRESHMEN and those wanting to continue into advanced Career and Technical Education classes.

When a student completes CAD I, II, and III they will receive the 3 SCC credits for CAD-101 "Introduction to CAD"

Note: This class is a Prerequisite for All Manufacturing Industrial Technology Advanced Classes and Registered Apprenticeships in the department.

COMPUTER-AIDED DRAFTING II (CAD II) (SCC CREDIT AVAILABLE) 674 SCED 21107

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: CAD I or IED

This course is an in-depth survey of Revit Architecture and Inventor Professional 3D modeling and use. This course is recommended for those students entering engineering, architecture, all trade occupations, and the industrial technology career pathway.

When a student completes CAD I, II, and III they will receive the 3 SCC credits for CAD-101 "Introduction to CAD"

COMPUTER-AIDED DRAFTING III (CAD III) (SCC CREDIT AVAILABLE) 675A SCED 21107

OPEN TO: 10th-12th DURATION: 2 trimesters CREDITS: 2 PREREQUISITE: CAD II

Must pass 1st trimester with C- or better to continue in 2nd trimester.

In this course the student may choose either Architectural or Mechanical Drawing. Architectural drawing will involve the study of residential house design and construction by the student designing his/her own house and making all required drawings with AutoDesk Revit. Mechanical drawing will involve tolerance based parts and dimensioning general dimensioning and tolerancing.

When a student completes CAD I, II, and III they will receive the 3 SCC credits for CAD-101 "Introduction to CAD"

COMPUTER-AIDED DRAFTING IV (SCC CREDIT AVAILABLE) 676A 676E SCED 21107

OPEN TO: 9th-12th DURATION: 2 trimesters CREDITS: 2 PREREQUISITE: CAD II

In this course the student will take a more in depth study of Architectural or Mechanical Drawing. Architectural drawing will involve the study of residential house design and construction by the student designing his/her own house and making all required drawings with AutoDesk Revit. Mechanical drawing will involve tolerance based parts and dimensioning general dimensioning and tolerancing.

When a student completes CAD IV they will receive the 3 SCC credits for CAD-277 "3-D Dimensional Modeling I"

INTRODUCTION TO ENGINEERING DESIGN (IED)- PLTW (Project Lead The Way) 319A 319B SCED 21017G

OPEN TO: 9th-12th **DURATION:** 3 *trimesters* **CREDITS:** 3 **PREREQUISITE:** Taken or enrolled in Geometry, 2.5 GPA or NPR of 42 or higher in math and science

Students use a problem solving model to improve existing products on the market today and invent new ones. They learn how to apply this model to solve problems in and out of the classroom. Using sophisticated three-dimensional modeling software, students communicate the details of the products. Emphasis is placed on analyzing potential solutions and communicating ideas to others while making projects. This class is ideal for all students interested in Engineering and Industrial Vocations.

PRINCIPLES OF ENGINEERING (POE) - PLTW 320A 320B 320C SCED 21018G

OPEN TO: 10th-12th DURATION: 3 trimesters CREDITS: 3 PREREQUISITE: IED or Physics

Principles of Engineering is designed to help students understand career possibilities in engineering and engineering technology. Through activity based exercises students explore engineering systems and manufacturing processes, students will continue to develop the problem solving skills used on the college level and in the workplace. In addition, students will learn how engineers address concerns about the social and political consequences created by technological change.

COMPUTER INTEGRATED MANUFACTURING (CIM) - PLTW 690A 690B 690C

SCED 21022G

OPEN TO: 11th-12th **DURATION:** 3 *trimesters* **CREDITS:** 3 **PREREQUISITE:** IED and POE <u>OR</u> Precision Machining and Manufacturing

Computer Integrated Manufacturing is designed to teach students to better understand the knowledge learned in IED, POE and career possibilities in engineering and engineering manufacturing technology. Through activity based exercises students explore manufacturing systems and the manufacturing processes, students will continue to develop the problem solving skills used on the college level and in the workplace. In addition, students will learn how to program (CNC) Computer Numeric Control Machines, Robotics and program an Automated Systems and programming.

PLTW Civil Engineering and Architecture (CEA) (Classes at WBAHS) TE21012G SCED 21012G

OPEN TO: 10th-12th DURATION: 3 trimesters CREDITS: 2 PREREQUISITE: IED

CEA is the study of the design and construction of residential and commercial building projects. In this course students design a shed, a Habitat for Humanity house, and a commercial project using Autodesk Revit. Revit is industry standard software used by most general contractors and engineering firms. Proper building construction and applicable 23 building codes are applied throughout the design process. Proper building design is covered throughout in relation to component/system calculation. When students finish this course they have a firm understanding of what civil engineering is, and how important proper building construction is.

PLTW ENGINEERING DESIGN/DEV-CAPSTONE: PLTW (EDD) 691A 691B 691C SCED 21007

OPEN TO: 12th **DURATION:** 3 trimesters OR 1 trimester in 2 hour block **CREDITS:** 3 **PREREQUISITE:** Completion of three PLTW courses including IED

In this capstone course, students work in teams to design and develop an original solution to a valid open-ended technical problem by applying the engineering design process. Students perform research to choose, validate, and justify a technical problem. After carefully defining the problem, teams design, build, and test their solutions while working closely with industry professionals who provide mentoring opportunities. Finally, student teams present and defend their original solution to an outside panel. This course is appropriate for 12 grade students.

COMMUNICATIONS TECHNOLOGY

DIGITAL IMAGING AND PHOTOGRAPHY (Formerly Intro to Photography) 670 SCED 11156G

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

In Digital Imaging, students begin by learning the basic functions of digital cameras and general photographic concepts such as composition, subject, exposure, lighting and flash. Students then learn how to use image editing/processing software to create and manipulate digital images. Specific skills taught in this course include using layers, cropping images, color and lighting concepts such as hue and saturation. As a culminating activity, students build a portfolio of work to demonstrate the skills they have learned. Students do not need to have access to a digital camera or photography experience to take this course

DIGITAL DESIGN (SCC Credit) GRA 140 SCED 11054C

OPEN TO: 10th-12th DURATION: 1 trimesters CREDITS: 1 BHS 3 SCC PREREQUISITE: None

The student will gain familiarity with the function of graphic layout using electronic pagination software. Emphasis will be placed on publication design, development, reproducibility, and utilization of proper design techniques. Students will use this publishing package to create a variety of print media.

GRAPHIC DESIGN PRINCIPLES (SCC Credit) GRA 175A

SCED 11153C

OPEN TO: 10th-12th DURATION: 1 trimesters CREDITS: 1 BHS, 3 SCC PREREQUISITE: None

A beginning course in designing printed pieces. This course will provide the student with an introduction to some of the basic principles of design aesthetics for print and web media. A history of the desktop publishing process, basics of communication, basic document structure, typography, use of color and illustration will be covered.

PRODUCTION GRAPHICS TECHNOLOGY 669A 669B

SCED 11153

OPEN TO: 10th-12th **DURATION:** 1 *trimester* **CREDITS:** 1 **PREREQUISITE:** Digital Imaging, Digital Design, Graphic Design Principles and instructor approval

This class is an in-depth study of various forms/production/outputs of graphic communication. Students will experience design, layout, paste-up, binding, finishing, screen printing, various publication forms, computer graphics, desktop publishing and video depending on the avenue of industrial processes and the technology involved in the area of communication reproduction. This course is for the student interested in a career in the graphic communication field, but could be applied to many areas.

ADVANCED DIGITAL IMAGING AND PHOTOGRAPHY 670B SCED 11156G

OPEN TO: 9th-12th **DURATION:** 1 *trimester* **CREDITS:** 1 **PREREQUISITE:** Digital Imaging and Photography

Students will review the photography and image editing skills they learned in Digital Imaging and Photography. Students will learn advanced photography skills, including camera handling, lighting, composition and artistic vocabulary. Students will also learn more advanced capabilities of the image editing programs to modify images. Specific skills taught in this course will include more advanced image modification techniques such as adding light effects, photo separation and retouching, removing color casts and creating web graphics such as logos and buttons. At the end of the course, students will submit a portfolio that demonstrates the skills they have learned and will describe how their photography and image editing skills have changed and improved throughout the course.

Note: Successful completion of Digital Design or Graphic Design Principles will be beneficial

GRAPHIC COMMUNICATION CAPSTONE TE11155

SCED 11155

OPEN TO: 10th-12th **DURATION:** 1 *trimester (repeatable)* **CREDITS:** 1 **PREREQUISITE:** Production Graphics and instructor approval

In this course students will use their knowledge and skills from graphic communication programs to create, design, and produce graphic projects. Students can work independently or in conjunction with the marketing capstone class to create products. Students will be challenged with real world projects that support school and community programs and projects. Students will also create a digital portfolio of work completed in the graphic communication program.

PATHFINDER (YEARBOOK) 132A 132B 132C

SCED 11152G

OPEN TO: 10th-12th DURATION: 1 trimesters CREDITS: 1 PREREQUISITE: None

This course may be repeated.

This course covers the production and distribution of the school yearbook. Students will learn and practice more refined journalistic techniques and will gain experience in critical evaluation of story content and the publication as a whole. Work involves several aspects of publications including writing, business management, and the mechanics of layout. The course may be repeated for credit. Time will be required after regular school hours, and students will be expected to participate in order to receive credit.

Note: Must enroll in all three trimesters. Open to 9th graders with instructor approval. Photography or Graphic Arts will be beneficial.

COMPUTER SCIENCE

COMPUTER APPLICATIONS 1 530

SCED 10004

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This course will provide the student with the opportunity to use word process equipment to produce a variety of business-related documents. It will use Microsoft Word and Excel to produce word documents and tables. Today most businesses use Microsoft Office to prepare all kinds of documents from one-page letters to multi-page newsletters. This course is exercise-oriented. These exercises provide a working knowledge of the basic and advanced capabilities of Microsoft Word and Excel.

COMPUTER APPLICATIONS 2 531

SCED 10004

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: Computer Applications 1

This course will provide the student with the opportunity to use word processing equipment to produce a variety of business-related documents. Microsoft office applications in PowerPoint and Access will be used. Students use computers to prepare writing assignments and a variety of business documents with an emphasis on presentations and data analysis.

COMPUTER SCIENCE ESSENTIALS-PLTW 10150A 10150B

SCED 10013

OPEN TO: 9th-12th DURATION: 2 trimesters CREDITS: 2 PREREQUISITE: None

Computer Science Essentials exposes students to a diverse set of computational thinking concepts, fundamentals, and tools, allowing them to gain understanding and build confidence. Students use visual, block-based programming and seamlessly transition to text-based programming with languages such as Python® to create apps and develop websites, and learn how to make computers work together to put their design into practice.

They apply computational thinking practices, build their vocabulary, and collaborate just as computing professionals do to create products that address topics and problems important to them.

CYBERSECURITY-PLTW 10151A 10151B

SCED 10151

OPEN TO: 9th-12th DURATION: 2 trimesters CREDITS: 2 PREREQUISITE: None

Cybersecurity is a course in which students explore the tools and concepts of cybersecurity and create solutions that empower people to share computing resources while protecting privacy. Globally, computational resources are vulnerable and frequently attacked; in Cybersecurity, students solve problems by understanding and closing these vulnerabilities. Students raise their knowledge of and commitment to ethical computing behaviors. They develop their skills as consumers, citizens, and professionals who can effectively contribute to communities with a dependable and secure cyber-infrastructure. This blended learning course integrates traditional face-to-face learning and online independent learning components.

INTERMEDIATE PROGRAMMING 10152-2 SCED 10152G

OPEN TO: 10th-12th **DURATION:** 1 *trimester* **CREDITS:** 1 **PREREQUISITE:** Computer Science Essentials

This is an introduction to the object-oriented / event-driven programming language of Visual C, and Python in Microsoft Windows. Emphasis is placed upon creating structured programs to solve problems. Topics will include programming fundamentals, problem solving, algorithm design, control structures, input/output, and data manipulation. For a final project students will build a game using coding. This class is designed as a middle level course for programming.

KEYBOARDING 504

SCED 12005

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This is a beginning course in which students learn to use a computer to input data by the "touch (without watching the hands) method. The primary emphasis is on using good technique at the keyboard, followed by later development of accuracy and speed. Letter, report, table and memo formatting is introduced during the second half of the course.

WEB DESIGN 533 SCED 10201

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

Students will be instructed on web design applications on a PC platform. The various software programs and digital applications students will be exposed to include Adobe Creative Suite 6, HTML, and Google Apps. Students will learn to design and publish original websites for personal use and for businesses. Students will leave the course with a strong foundation in web design which will enable them to independently create websites.

CONSTRUCTION

HOME MAINTENANCE 657 SCED 17010G

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

The Home Maintenance course will cover projects based on hand & power tools, electric wiring, plumbing, drywall, and home upkeep. This class will also introduce students to careers in the construction industry.

RESIDENTIAL ELECTRICITY TE17103

SCED 17103G

OPEN TO: 10th-12th **DURATION:** 1 *trimester* **CREDITS:** 1 **PREREQUISITE:** Home Maintenance or Instructor Approval

Students will be introduced to the basics of electricity including tools, materials, techniques, and codes used in residential buildings.

CONCRETE AND MASONRY TE17008

SCED 17008G

OPEN TO: 10th-12th **DURATION:** 1 *trimester* **CREDITS:** 1 **PREREQUISITE:** Home Maintenance or Instructor Approval

Concrete and Masonry will introduce students to tools, skills and techniques used when working with concrete and brick/mortar in the construction industry.

CARPENTRY 1 TE17003

SCED 17003

OPEN TO:10th-12th **DURATION:** 1 *trimester* **CREDITS:** 1 **PREREQUISITE:** Home Maintenance or instructor approval

This course is focused on using tools commonly used in the construction industry and improving upon the basic skills learned in Home Maintenance and Repair. Students will learn basic framing, roofing, siding, and window installation.

CARPENTRY 2 658A 658B 658C

SCED 17003G

OPEN TO: 11th-12th DURATION: 2-3 trimesters CREDITS: 4-6 PREREQUISITE: Carpentry 1 and CAD

(2 consecutive periods per trimester taken) (Pre-Apprenticeship) (SCC Credits Awarded)

The program is designed to teach students the basics of residential construction while demonstrating how those skills can apply to a variety of high-skill, high-wage, high-demand careers within the industry. In this class students will work as a team to learn basic residential carpentry skills, while remodeling an existing structure.

Note: Students will earn the OSHA 10-Hour certification to ensure jobsite safety.

Note: Students may take for 2-3 trimesters and periods are 2 consecutive periods per trimester

CARPENTRY 3 659A 659B 659C

SCED 17003G

OPEN TO: 11th-12th **DURATION:** 1-3 *trimesters* **CREDITS:** 3-9 **PREREQUISITE:** Carpentry 2 (2 consecutive periods per trimester taken) (Pre-Apprenticeship) (SCC Credits Awarded)

Carpentry program is designed to teach students the basics of residential construction while demonstrating how those skills can apply to a variety of high-skill, high-wage, high-demand careers within the industry. In this class students will work as a team to build a home from foundation to completion, while learning cutting-edge techniques used in both residential and commercial construction. Emphasis is placed on energy efficiency, sustainability and environmentally friendly practices. Students are increasing their individual skills from proficient to mastery at this level.

Note: Students will earn the OSHA 10-Hour certification to ensure jobsite safety.

Note: Students may take for 1-3 trimesters and periods are 2 consecutive periods per trimester

WOODWORKING I 654 SCED 17006 OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None.

A woodworking class designed for the student who has very little woodworking experience. The major activities in this class include basic wood working knowledge and two individual projects assigned by the instructor. There is a constant effort emphasized on the safe use of woodworking equipment and tools.

WOODWORKING II 655A 655B SCED 17006

OPEN TO: 10th-12th **DURATION:** 2 *trimesters* **CREDITS:** 2 **PREREQUISITE:** Woodworking I AND one trimester of CAD I or IED - Must pass 1st trimester with C- or better to take Woodworking II 2nd trimester.

This is a problem-solving course in machine working. Emphasis is placed on learning to use woodworking equipment carefully and safely while having the opportunity to construct various projects. Each student will learn to design, plan, and construct projects made from wood. The first two projects are assigned by the instructor; the student then is expected to build an additional project APPROVED by the instructor. Materials used are paid for on an individual basis.

CABINET MAKING / PRODUCTION 17007

SCED 17006

OPEN TO: 11th-12th **DURATION:** 1 trimester, 2 blocked periods **CREDITS:** 2 **PREREQUISITE:** Woodworking I and II

This course is designed for the woodworking student to improve their skills from proficient to Mastery level while working on teacher approved individual projects.

CULINARY

Introduction to Culinary Arts 600

SCED 16056

OPEN TO: 9th-12th DURATION: 1 trimester, CREDITS: 1 PREREQUISITE: None

This engaging and hands-on course introduces students to the fundamentals of culinary arts, with a focus on the skills and knowledge needed for a successful career in the culinary industry. Students will learn essential cooking techniques, how to read and interpret recipes and develop culinary math skills such as measurement and portioning. Emphasis will be placed on food safety and sanitation practices to ensure students understand how to maintain a professional and safe kitchen environment.

The course offers a variety of activities, including classwork, hands-on cooking labs, and interactive experiences with guest speakers from the culinary field. Students will gain insight into various career paths, from chefs and bakers to food stylists and restaurant managers, and learn about the education, training, and qualities necessary for success. By the end of the course, students will have a comprehensive understanding of culinary arts and what it takes to pursue a career in the industry.

PROSTART CULINARY 601A 601B SCED 16056

OPEN TO: 9th-12th DURATION: 2 trimester, CREDITS: 2 PREREQUISITE: Introduction to Culinary

These classes cover preparing and serving food, safety and sanitation, basic food principles, and the nutritional value of foods. The course is designed to lead to careers in culinary arts, but is equally useful

for anyone who wants to learn to cook. The course involves reading, writing, math skills, science, and laboratory activities. There are assignments to turn in. Units of study include sanitation & safety, eggs, quick bread, fruits, vegetables, yeast breads, pulses, pasta, dairy foods, sandwiches/pizza, and salads. Both ProStart class A and ProStart Culinary B are required before enrolling in Prostart Capstone 1/ProStart Capstone 2, unless the teacher gives approval.

PROSTART BAKING AND FOOD SCIENCE 616A 616B SCED 16056

OPEN TO: 10th-12th **DURATION:** 1 *trimester, 2 period block* **CREDITS:** 1 **PREREQUISITE:** Prostart Culinary

This course prepares students for a career in culinary arts. Students develop scientific, mathematical, critical thinking, and problem solving skills, as they learn the scientific evaluation of food with special emphasis on the Baking & Pastry. Food and workplace safety are an integral part of the class instruction. The course is designed to lead to careers in culinary arts, but is equally useful for anyone who wants to learn how to bake. Units of study include cookies,petit fours- pastry, rich yeast dough, commercial pastry, and specialty desserts. Assembling and decorating cakes, basic syrups, creams and sauces; pastry and pate au choux; and lean dough.

PROSTART CAPSTONE 1 613A 613B

SCED 16052

OPEN TO: 10th-12th **DURATION:** 2 *trimesters* **CREDITS:** 2 **PREREQUISITE:** Prostart Culinary, Baking and Food Science

The course involves reading, writing, math skills, science and laboratory activities. There are assignments to turn in. This course prepares students for a career in culinary arts, restaurant and foodservice restaurant management. Food and workplace safety are an integral part of the class instruction. This class is great preparation for almost any career, even if food service is not your future career choice. Study of preparation of food service industry, food safety, ServSafe principles, workplace safety, professionalism, equipment and knife skills, techniques, fruits/vegetables, serving guests, potatoes, grains, and how to build a successful career in the foodservice industry.

PROSTART CAPSTONE 2 614A 614B 614C

SCED 16051

OPEN TO: 10th-12th DURATION: 2 trimesters, CREDITS: 2 PREREQUISITE: Prostart Capstone 1

The course involves reading, writing, math skills, science and laboratory activities. There are assignments to turn in. This course prepares students for a career in culinary arts, restaurant and foodservice restaurant management. Food and workplace safety are an integral part of the class instruction. This class is great preparation for almost any career, even if food service is not your future career choice. Preparation of salads, garnishes, meat, poultry, seafood, breakfast food, sandwiches and global cuisine allow students practice with professional kitchen equipment and techniques to build a successful career in the foodservice industry. Nutrition, cost control, marketing, purchasing and inventory will be highlighted. Students also gain valuable hands-on experience by taking advantage of the opportunity to earn the National Certificate of Achievement for ProStart. ProStart competitions include the lowa ProStart Invitational with categories for Restaurant Management and Culinary.

EDUCATION AND TRAINING

EXPLORING THE TEACHING PROFESSION TP19151

SCED 19151

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This course introduces students to the principles underlying teaching and learning, the responsibilities and duties of teachers, and the techniques of imparting knowledge and information. This course exposes students to classroom management, student behavior, leadership and human relations skills, assessment of student progress, teaching strategies, and various career opportunities in the field of education.

INTRO TO EXCEPTIONAL STUDENTS TP19154

SCED 19154

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This course introduces students to the responsibilities and duties of teachers. Students will design activities for fellow students. Topics include dealing with cognitive disabilities, addressing social skill deficits, strategies for improving self-esteem and mentoring strategies. Students will engage in a wide range of educational and recreational activities.

EDU-212 EDUCATIONAL FOUNDATIONS EDU212

SCED

OPEN TO: 11th-12th **DURATION:** 1 *trimester* **CREDITS:** 1 BHS, 3 SCC **CO-REQUISITE:** EDU920 Field Experience

Examine historical, philosophical, sociological, political, economic, and legal foundations of the American public education system. Students will explore design and organization of school curriculum, and characteristics of effective Pk-12 schools.

EDU-920 FIELD EXPERIENCE EDU920

SCED

OPEN TO: 11th-12th **DURATION:** 1 *trimester* **CREDITS:** 1 BHS, 3 SCC **CO-REQUISITE:** EDU212 Educational Foundations

Field Experience provides the student an opportunity to observe a teacher in a local classroom and to work with students in that classroom under direct supervision.

ECE-103 INTRODUCTION TO EARLY CHILDHOOD EDUCATION ECE103

SCED

OPEN TO: 11th-12th DURATION: 1 trimester CREDITS: 1 BHS, 3 SCC PREREQUISITE: None

Overview of early childhood programs and curricula, historical and present, and an examination of qualities and skills necessary for working with young children.

ECE-133 CHILD HEALTH, SAFETY, AND NUTRITION ECE133

SCED

OPEN TO: 11th-12th DURATION: 1 trimester CREDITS: 1 BHS. 3 SCC PREREQUISITE: None

Focuses on evidence-based concepts in the fields of health, safety, and nutrition to the development of the young child ages birth to eight. The course blends current theory with problem solving, practical applications, and assessments.

COSMETOLOGY

Introduction to Cosmetology

OPEN TO: 9th-12th **DURATION**: 1 trimester **CREDITS**: 1 BHS

PREREQUISITE: None

Course Description: Introduction to Cosmetology will give students an opportunity to explore the careers in cosmetology. Blending theory with hands-on practice students will learn about basic skills in hair care, styling, coloring, chemical treatments, customer service, and the basics of salon management. By the end of the course, students will have gained practical skills in cosmetology and a deeper understanding of the business side of the industry. This course provides a strong foundation for those interested in pursuing further education or a career in cosmetology.

Cosmetology 1: Beginning Techniques

OPEN TO: 10-12 DURATION: 1 Trimester CREDITS: 1 BHS

PREREQUISITE: Introduction to Cosmetology

Course Description: This course builds on the foundation of Introduction to Cosmetology, focusing on advanced skills in coloring, styling, chemical treatments, nails, and skincare. Students will explore techniques like roller sets, finger waves, intricate up dos, perms, and relaxers, while diving deeper into color theory and the chemistry behind treatments. Basic nail care, including manicures and nail art, as well as makeup application and facials, will also be introduced. Extended lab sessions provide hands-on practice, ensuring students have the time to refine their skills and build confidence. Theoretical knowledge will be reinforced with *Pivot Point Fundamentals of Cosmetology Curriculum*, connecting bookwork to practical applications.

Cosmetology 2: Professional Techniques and Career Preparation

OPEN TO: 11-12 **DURATION:** 1 Trimester **CREDITS:** 1 BHS

PREREQUISITE: Cosmetology 1

Course Description: This advanced course prepares students for real-world cosmetology careers by honing professional techniques and emphasizing client-ready skills. Students will master advanced hair cutting, coloring corrections, and creative styling, including bridal and special event designs. Chemical services, such as advanced perms and relaxers, will be refined, alongside nail enhancements, gel applications, and intricate nail art. Skin treatments will expand to include advanced facials, brow shaping,

and skincare product knowledge. A focus on workplace readiness includes customer service, salon management basics, and preparation for licensure exams. Extended lab sessions will allow students to apply their skills in a salon-like environment, perfecting their craft and gaining confidence in their professional capabilities. In addition to technical skills, students will complete **OSHA** (**Occupational Safety and Health Administration**) **10-hour training** to gain valuable safety certification recognized across industries.

FAMILY LIFE

FAMILY AND INTERPERSONAL RELATIONSHIPS 608

SCED 19259G

OPEN TO: 11th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This course is designed to assist males and females in understanding and coping with relationships they will enter during their lives. Information covered in class includes examining one's own behavior, exploring relationships between oneself and one's parents and siblings, and relating to peers. Dating and maintaining long-term relationships with the opposite sex will be covered, including issues in human sexuality and reproduction. Creating and evaluating healthy relationships, selecting a marriage partner, adjustments to married life, coping with crises in relationships, and determining the choice to become a parent are also covered.

INDEPENDENT LIVING 612

SCED 19257

OPEN TO: 11th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

Independent Living features information from all areas of Family and Consumer Sciences, which is deemed essential to the management of one's resources when living on one's own. Decision making process which enables: calculating expenses, savings and managing finances, setting goals and priorities is a focus. Students also explore methods of making decisions concerning issues such as career, housing, and financial choices. Also covered are transportation needs, clothing and laundry needs, time management and personal organization. Nutritional needs will be covered and preparation of food will occur as laboratory space permits.

HUMAN DEVELOPMENT 611

SCED 19052

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

Early Childhood Development explores the physical, social, emotional, and intellectual growth and development of children. The course is designed to help young people acquire knowledge and skills essential to the care and guidance of children as a parent or caregiver. Developing safe, stimulating and nurturing environments that foster the optimum growth and development of children from infant to adolescents are examined. The importance of proper nutrition, toy selection and storytelling, how their bodies are changing and how they affect the overall development of a child are addressed.

PREGNANCY TO INFANT DEVELOPMENT 609

SCED 19055

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This course is suited for any student that intends on having children at any time in their lifetime or has the desire to work with children. The focus is on the essential facts of development from conception through pregnancy and infancy. Content includes a focus on interpersonal skills, decision-making, promotion of family strengths and well being, child development and care and on how much responsibility having a child really is. Other studies address nutrition and dietary practices, food selection, budgeting, consumer-buying practices and management of family housing needs.

TEXTILES

TEXTILE CONSTRUCTION 1 604A

SCED 19201

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None.

This course is open to all students and covers basic textile construction techniques. The study of pattern interpretation, construction of textile projects, the care of clothing and characteristics and qualities of fabrics are covered to enhance the student's understanding of constructing and maintaining his/her personal wardrobe. Students must provide material for making garments.

Note: A minimum of 15 students signed up for this class needs to be met.

TEXTILE CONSTRUCTION 2 604B

SCED 19201

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: Textile Construction 1

This course is open to all students and covers basic textile construction techniques. The study of pattern interpretation, construction of textile projects, the care of clothing and characteristics and qualities of fabrics are covered to enhance the student's understanding of constructing and maintaining his/her personal wardrobe. Students must provide material for making garments.

HEALTH SCIENCES

HEALTHCARE SYSTEMS 14002

SCED 14001G

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: NONE

This course will focus on how the health system functions at the department level, organizational level, and overall healthcare environment. Students will understand individual and team responsibilities in the healthcare setting.

HEALTHCARE OCCUPATION EXPLORATION 14001

SCED 14002G

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: Health Systems

This course will explore the Health Science Careers. These five pathways include: Therapeutic Services, Diagnostic Services, Health Information, Support Services, and Biotechnology Research and Development. Students will be independently researching careers in each pathway. Guest speakers from the different pathways will share career specific information as well as answer questions.

INTRO TO PATIENT CARE I 14051

SCED 14051G

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: Healthcare Systems

This course will introduce students to essential skills and concepts required to be successful in patient care. A focus on patient care skills will be the emphasis of this course. Example: Therapeutic and Diagnostic career pathways.

INTRO TO PATIENT CARE II 14052

SCED 14052

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: Intro to Patient Care I

This course will introduce students to essential skills and concepts required to be successful in a patient care setting. Some of the skills learned will also be valuable in other health science careers. Example: Therapeutic and Diagnostic career pathways.

COMMON PROCEDURES IN HEALTHCARE 14055

SCED 14055

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None.

This course will introduce students to the essential skills and concepts needed in an emergency medical situation. Emergency medical procedures as well as legal and ethical responsibilities will be addressed. **Note:** Students who successfully meet the requirements of the American Heart Association will become certified in CPR/AED.

TRANSITION TO THE HEALTHCARE PROFESSIONAL 14998

SCED 14998

OPEN TO: 12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: Healthcare Systems

This course will give students insight on safety and employment laws in the workplace and how to improve employability skills to secure a job in healthcare. Resume building workshops, teambuilding, professionalism, and the role of social media in finding the perfect job will be some of the topics covered. In addition, students will have the potential opportunity depending on career choice for a limited job shadowing experience and/or work based simulated learning project in their chosen career.

MEDICAL TERMINOLOGY (SCC CREDIT) HSC 114

SCED 14154C

OPEN TO: 11th-12th DURATION: 1 trimester CREDITS: 1 BHS, 3 SCC PREREQUISITE: None.

This course is designed to study the basic language related to medical science with emphasis on word analysis, construction, definitions, pronunciations, spelling and standard abbreviations.

Note: Intent to enroll in this class must be made to the BHS Counseling Department before April 1 of the year preceding enrollment.

MEDICAL LAW AND ETHICS (SCC CREDIT) MAP 401

SCED 14003C

OPEN TO: 11th-12th **DURATION:** 1/2 *trimester* **CREDITS:** .5 BHS, 1 SCC **CO-REQUISITE:** MAP 431 Human Relations

Medical Law and Ethics is designed to expose students to legal concepts of standard of care, scope of employment, criminal and civil acts, contract, negligence and ethical concepts.

Note: Intent to enroll in this class must be made to the BHS Counseling Department before April 1 of the year preceding enrollment. This course must be taken in conjunction with Human Relations.

HUMAN RELATIONS (SCC CREDIT) MAP 431 SCED 14999C

OPEN TO: 11th-12th **DURATION:** 1/2 *trimester* **CREDITS:** .5 BHS, 1 SCC **CO-REQUISITE:** MAP 410 Medical Law and Ethics

Human Relations includes the study of the fundamental principles related to human relations, self-improvement, professional appearance and attitudes, limitations, and behaviors. Principles of individualized client care and etiquette of the medical practice are emphasized.

Note: Intent to enroll in this class must be made to the BHS Counseling Department before April 1 of the year preceding enrollment. This course must be taken in conjunction with Medical Law and Ethics.

CERTIFIED NURSING AIDE/SCC: CNA (SCC CREDIT) HSC 168 SCED 14051C

OPEN TO: 11th-12th **DURATION:** 1 *Trimester 2 Periods* **CREDITS:** 2 BHS, 3 SCC **PREREQUISITE:** Medical Terminology recommended, Grade C or better in Biology recommended.

Emphasis of this course is on students gaining a basic level of knowledge and demonstrating skills to provide safe, effective resident care. This course meets the lowa Department of Inspection and Appeals requirements for nurse aides working in long-term care and skilled facilities. Upon completion, students are eligible to take the written/oral and skills performance competency tests to become a Certified Nurse Aide. Some Saturday attendance may be required for clinical experience.

Patient Access to Healthcare CPC-170 SCED 14153

OPEN TO: 11th-12th **DURATION:** Online **CREDITS:** 1 BHS, 2 SCC **CO-REQUISITE:** MAP 431 Human Relations, MAP 410 Medical Law and Ethics, and HSC 114 Medical Terminology

This course prepares the student for the front line of healthcare services for patients entering a hospital or clinic. This course places an emphasis on customer service skills, patient registration, patient scheduling, the fundamentals of the revenue cycle, billing and reimbursement, HIPAA and practical experience and understanding of electronic health records.

Healthcare Assistant MAP-101

SCED14151

OPEN TO: 11th-12th DURATION: 1 trimester CREDITS: 1 BHS, 3 SCC PREREQUISITE: None

The Healthcare Assistant Course will give the student the concepts, skills and techniques to work efficiently in the healthcare setting. The student will learn the basic concepts of medical asepsis and infection control. The student will learn to schedule patient appointments, techniques on answering the telephone, entering data in the electronic health record accurately, and maintain inventory of supplies in both administrative and clinical areas. Assisting the medical provider and staff by learning the skills on rooming and interviewing the patient regarding the office visit, and performing accurate height, weight, and vital signs will also be introduced. The course will incorporate competency-based learning outcomes. Student will reinforce and incorporate medical terminology, communication skills, and legal, as well as ethical concepts in this course.

MANUFACTURING

INTRODUCTION TO MANUFACTURING (Formerly Metals I) 662A SCED 13202

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None.

In this class students learn basic measurement, planning and layout skills as they pertain to Metalworking. They will melt an alloy and pour that molten metal into a student made mold, forming a casting. Students will cut and form sheet metal into a usable Tool Box using shears and brakes and will also learn how to operate a Machine Lathe and produce a turned project. Introduction to Manufacturing is recommended for students interested in Metalworking, Machining and Welding or any Manufacturing field.

MACHINING AND MANUFACTURING 661A 661B SCED 13202

OPEN TO: 10th-12th **DURATION:** 2 *trimester* **CREDITS:** 2 **PREREQUISITE:** Introduction to Manufacturing (Metals I) and 1 trimester of CAD I or IED OR instructor approval

This course is designed for the student interested in career fields of Machining and Machine Operating, however is very applicable to any Manufacturing Engineering or any Engineering field or trade student. The course gives students an invaluable opportunity to apply gained knowledge of most metal cutting Machines. Precision measurement and tolerances are emphasized and on all class work and projects completed. The students will operate Lathes, Vertical Milling Machines, Band Saws, Drill Presses, an Introduction to Computer Numerical Controlled Machines (CNC), WaterJet cutting using G Code. Students complete mandatory projects and individual projects.

PRECISION MACHINING AND MANUFACTURING 665A 665B SCED 13202

OPEN TO: 11th-12th **DURATION:** 2 *trimesters* **CREDITS:** 2 **PREREQUISITE:** Machining and Manufacturing or CIM and CAD I or IED or instructor approval

This course is designed for the student interested in career fields of Machining and Machine Operating, however is very applicable to any Manufacturing Engineering or any Engineering field or trade student. The course gives students an invaluable opportunity to apply gained knowledge of most metal cutting Machines. Precision measurement and tolerances are emphasized and on all class work and projects completed. The students will operateComputer Numerical Controlled Machines (CNC), 400 Watt Laser and Water Jet cutting using G Code. Students complete mandatory projects.

MFG - 156 INTRODUCTION TO CNC MACHINING (SCC CREDIT) NEW MFG156A MFG156B SCED 13202

OPEN TO: 11th-12th **DURATION:** 2 *trimesters* **CREDITS:** 2 **PREREQUISITE:** Machining and Manufacturing <u>OR</u> CIM <u>AND</u> CAD I or IED

This course is SCC College credit. It is designed for the student interested in a career in CNC Machining and Machining. Machine Operating, The course gives students an introduction to writing G and M codes to program a Vertical Milling Center. Covers basic and advanced tooling, programming using G & M codes and CAM software. Precision measurement and tolerances are emphasized and in all class work critical thinking, problem solving and teamwork through hands-on experience and practical applications. The students will operate Computer Numerical Controlled Machines (CNC), Water Jet cutting using G Code.

PUBLIC SAFETY

INTRODUCTION TO PUBLIC SAFETY 630

SCED 15001

OPEN TO: 9th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

Introduction to Public Safety enables students to explore the training, tasks, and job skills that are utilized in the Fire Services, Emergency Medical Services, and Law Enforcement careers. This is the first year course in the Public Safety Pathway that is designed to provide students with the knowledge and direction to ultimately prepare them for a career in the Public Services. Through readings, in-class and online coursework, guest speakers, lectures and activities, students will explore and experience various aspects of the many types of careers in Fire, EMS, and Law Enforcement. Students will begin creating their Public Service Pathway Portfolio

ADVANCED PUBLIC SAFETY 631

SCED 15002

OPEN TO: 10th-12th **DURATION:** 1 *trimester* **CREDITS:** 1 **PREREQUISITE:** Introduction to Public Safety.

In this course students will explore applications, procedures, and theories used in the careers of criminal justice, law enforcement, fire protection, emergency response services, and other related career areas. Students will learn about public safety careers through engagement in classroom and laboratory activities modeled after real-world work assignments, scenarios, and problems. Strong emphasis will be placed on written and verbal communication skills, mathematical applications, problem-solving, ethics, accountability, and cultural diversity. Students will be documenting experiences in their Public Service Pathway Portfolio.

CRIMINAL JUSTICE ESSENTIALS 632 SCED 15051

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This course is an in-depth study of crime in America, United States' courts in action, and law enforcement efforts to deal with crime. The course will look into victimization, due process, and Constitutional laws affecting law enforcement as well as a review of sentencing offenders, parole, and prison rehabilitation. There is a rigorous block of Constitutional Law during this course.

- Court Proceedings
- Criminal Investigations
- Custody Procedures
- Emergency Procedures
- Juvenile Justice System
- Patrol Procedures
- Police Operations
- Search and Seizure
- Theories of Criminal Behavior
- Traffic Control
- Use of Force

FORENSIC SCIENCE AND CRIMINAL INVESTIGATIONS 633 SCED 15055

OPEN TO: 11th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: Advanced Public Safety

Forensic Science and Criminal Investigations

Criminal Investigation and Forensic Science is a course that uses a structured and scientific approach to the investigation of crimes and the psychology of criminal behavior. Students will learn terminology and investigative methods related to crime scene investigation, questioning, criminal behavior characteristics, and scientific procedures used to solve crimes. Using scientific methods, students will collect and analyze evidence through case studies and simulated crime scenes such as fingerprint analysis, trace evidence collection, ballistics, body fluid collection, and blood spatter analysis. Students will learn the history, legal aspects, and career options available in forensic science.

WELDING

INTRODUCTION TO WELDING 664A

SCED 13207

OPEN TO: 10th-12th DURATION: 1 trimester CREDITS: 1 PREREQUISITE: None

This course will introduce students to the properties, uses, and applications of various metals. This welding course is designed to give students a very basic introduction to welding by providing experience in various processes used to join and cut metals. Processes learned in this class will include the three most commonly used in industry including oxyacetylene/ welding and cutting; shielded metal arc welding (ARC); and gas metal arc welding (MIG). PLASMA cutting will also be introduced.

INTERMEDIATE WELDING 664B 664C

SCED 13207

OPEN TO: 10th-12th DURATION: 2 trimester CREDITS: 2 PREREQUISITE: CAD I or IED

This course will introduce students to the properties, uses, and applications of various metals. This welding course provides experience in various processes used to join and cut metals. Processes used in this class will include oxyacetylene welding; shielded metal arc welding (SMAW); gas metal arc welding (GMAW), gas tungsten arc welding (GTAW) and PLASMA ARC design and cutting. Preference in this class will be given to SOPHOMORES and JUNIORS - can sign up.

WELDING BLUEPRINT READING (SCC CREDIT) WEL111

SCED 13208c

OPEN TO: 10th-12th **DURATION:** 1 trimester **CREDITS:** 1 BHS, 3 SCC **PREREQUISITE:** CAD I or IED

A course concerned with basic fundamentals of interpreting drafting as applied in the welding trade. Emphasis is placed on developing the ability to interpret blueprints from which the welder must work. A thorough coverage of welding symbols is integrated within the course.

Recommended student taken Introduction or Intermediate Welding

Required Class for Welding Registered Apprenticeship

PRODUCTION WELDING 686D

SCED 13207G

OPEN TO: 10th-12th **DURATION:** 1 *trimester (repeatable)* **CREDITS:** 1 **PREREQUISITE:** Intro or Intermediate welding

Students will apply welding skills learned in Intro to Welding and/or Intermediate Welding to design and construct a project(s) of their choosing with instructor's approval. Students may compete in the Lincoln Electric National Welding contest by completing project construction along with required elements (plans, plan of procedure, and pictures) in the entry form. Students will also have an opportunity to compete in several local and state welding competitions, and/or complete assigned welding topics using assigned processes and advanced techniques. Students can repeat class each year.

SHIELDED METAL ARC WELDING - BASIC (SMAW) (Arc) (SCC CREDIT) WEL160 SCED 13208C

OPEN TO: 10th-12th DURATION: 2 trimesters CREDITS: 1.5 BHS, 5 SCC PREREQUISITE: None

The course is designed to provide a thorough technical understanding of shielded metal arc welding fundamentals, weld hazards and weld safety, power sources and electrode selection. Provides ample time and direction to develop skills necessary to make high quality welds on 16 gage to ¼ inch mild steel in all positions. Preference in this class will be given to SENIORS/JUNIORS - SOPHOMORES can sign up. No welding experience required.

Recommended student taken Introduction or Intermediate Welding

GAS METAL ARC WELDING - BASIC (GMAW) (Mig) (SCC CREDIT) WEL186 SCED 13208C

OPEN TO: 10th-12th DURATION: 2 trimesters CREDITS: 2 BHS, 4 SCC PREREQUISITE: None

The course is designed to provide a thorough technical understanding of weld safety, gas metal arc welding fundamentals, gas metal arc welding equipment and adjustments, metal transfer, and shielding gases to develop skills necessary to weld 1/16 inch through 3/8 inch mild steel in all positions. Preference in this class will be given to SENIORS/JUNIORS - SOPHOMORES can sign up. No welding experience required.

Recommended student taken Introduction or Intermediate Welding

GAS TUNGSTEN ARC WELDING (SCC CREDIT) WEL192 SCED 13208C

OPEN TO: 10th-12th DURATION: 2 trimesters CREDITS: 2 BHS, 4 SCC PREREQUISITE: None

Provides a thorough technical understanding of the TIG (Heliarc) process including metal characteristics, electrode, filler metals, and shielding gasses with emphasis on weld safety and procedures.

Recommended student taken Introduction or Intermediate Welding

iJAG

iJAG

OPEN TO: 9th-12th **DURATION:** 3 *trimesters* **CREDITS:** 3 BHS **PREREQUISITE:** None This course may be repeated.

The iJAG (lowa's Jobs for America's Graduates) elective course focuses on competencies necessary to get and maintain employment and competencies essential to planning and implementing a

career/education plan now and after high school. Lessons and activities are student-centered, using project-based learning (PBL) as the mode of instruction with a Trauma Informed Care Approach.

iJAG's interactive class offers a student-led Career Association, where students focus on careers, leadership, and social and civic responsibility. Students have the opportunity to participate in state-wide and national conferences, showcasing their talents in competitions involving careers and employment opportunities. iJAG students are guided through work-based learning experiences, such as job shadowing, internships, apprenticeships, and on-the-job training. The iJAG class provides a supportive environment that helps young leaders find their passion and purpose through individualized planning, and then connects them with the resources they need to transition into the workforce and thrive, providing reassurance to parents and educators about their students' future.