COURSE DESCRIPTIONS

Courses are arranged numerically by the graduation requirement they fulfill.

ightarrow Refer to PAGE 4 of this course guide for graduation requirements.

21 ENGLISH

- 21 English
- 25 Speech

26 MATHEMATICS

30 SCIENCE

- 30 Physical Science
- 32 Life Science
- 32 Earth / Space Science

33 SOCIAL STUDIES

- 33 World History
- 35 U.S. History
- 36 Government
- 37 Behavioral Science

38 WELLNESS

41 FINANCIAL LITERACY

42 WORLD LANGUAGES

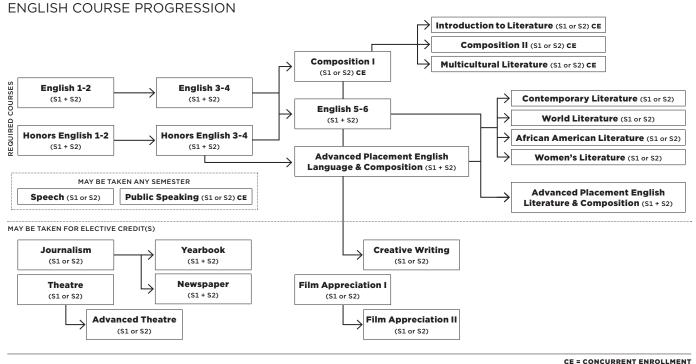
45 ELECTIVES

- 45 English
- 46 Science
- 48 Social Studies
- 49 Art
- 52 Business Education
- 54 Driver Education
- 55 Emergency Medical Technician
- 55 Family and Consumer Sciences
- 58 Freshman Seminar
- 58 Health
- 58 Health Sciences
- 59 Industrial Technology
- 64 Information Solutions
- 66 Music
- 70 Work-Based Learning
- 72 Special Programs

74 SPECIALIZED PROGRAMS

74 English Language Learners

ENGLISH COURSES



CE = CONCORRENT ENROLLMEN

ENGLISH

CREDITS REQUIRED FOR GRADUATION	7 credits are required for graduation from the Dubuque Community School District.
	Credits earned beyond the requirement are automatically counted as Elective credits.

ENGLISH 1-2

ENG121 (Sem 1), ENG122 (Sem 2)	Students will engage in thematic units covering a variety of genres including informational, literature, novels, poetry, and multimedia around a meaningful essential question. Students will analyze text, cite evidence, and respond critically about their learning. Additionally, reading, writing, language, speaking, and listening skills are taught throughout each semester. Students will work on grammar, vocabulary, sentence structure, and writing through a variety of writing modes.
DURATION: Year Course	
credits: 2	
орем то: freshmen	
NCAA: approved	
PREREQUISITE: NONE	 Alignment to the Iowa Core Curriculum: Instruction, learning, and assessment are built on the 9-10th grade-band expectations of the Iowa Core Reading, Writing, Listening, and Language Strands.

HONORS ENGLISH 1-2

ENG131 (Sem 1), ENG132 (Sem 2)		
DURATION:	year course	
CREDITS:	2	
OPEN TO:	freshmen	
NCAA:	approved	
PREREQUISITE:	placement based on 8th grade assessment and instructor recommendation	

Students will engage in thematic units covering a variety of genres including informational, literature, novels, poetry, and multimedia around a meaningful essential question. Students will analyze text, cite evidence, and respond critically about their learning. Additionally, reading, writing, language, speaking, and listening skills are taught throughout each semester. Students will work on grammar, vocabulary, sentence structure, and writing through a variety of writing modes. Pacing, independent work and supplemental readings will be utilized to provide a deeper analysis of the standards.

Alignment to the Iowa Core Curriculum: *Instruction, learning, and assessment are built on the 9-10th grade-band expectations of the Iowa Core Reading, Writing, Listening, Speaking, and Language Strands.*

ENGLISH 3-4

ENG221 (Sem 1), ENG222 (Sem 2)

DURATION:	year course
CREDITS:	2
OPEN TO:	sophomores
NCAA:	approved
PREREQUISITE:	English 1-2

HONORS ENGLISH 3-4

DURATION:	year course
CREDITS:	2
OPEN TO:	sophomores
NCAA:	approved
PREREQUISITE:	Honors English 1-2 or instructor recommendation

Students will engage in thematic units covering a variety of genres including informational, literature, novels, poetry, and multimedia around a meaningful essential question. Students will analyze text, cite evidence, and respond critically about their learning. Additionally, reading, writing, language, speaking, and listening skills are taught throughout each semester. Students will work on grammar, vocabulary, sentence structure, and writing through a variety of writing modes. Pacing, independent work and supplemental readings will be utilized to provide a deeper analysis of the standards.

Students will engage in thematic units covering a variety of genres including

structure, and writing through a variety of writing modes.

and Language Strands.

Language Strands.

informational, literature, novels, poetry, and multimedia around a meaningful essential question. Students will analyze text, cite evidence, and respond critically about their learning. Additionally, reading, writing, language, speaking, and listening skills are taught throughout each semester. Students will work on grammar, vocabulary, sentence

Alignment to the Iowa Core Curriculum: Instruction, learning, and assessment are built on the 9-10th grade-band expectations of the Iowa Core Reading, Writing, Listening, Speaking,

Alignment to the Iowa Core Curriculum: Instruction, learning, and assessment are built on the 9-10th grade-band expectations of the Iowa Core Reading, Writing, Listening, Speaking, and Language Strands.

informational, literature, novels, poetry, and multimedia around a meaningful essential question. Students will analyze text, cite evidence, and respond critically about their learning. Additionally, reading, writing, language, speaking, and listening skills are taught throughout each semester. Students will work on grammar, vocabulary, sentence

Alignment to the Iowa Core Curriculum: Instruction, learning, and assessment are built on the 9-10th grade-band expectations of the Iowa Core Reading, Writing, Listening, and

Students will engage in thematic units covering a variety of genres including

structure, and writing through a variety of writing modes.

ENGLISH 5-6

ENG321 (Sem 1), ENG322 (Sem 2)	
year course	
2	
juniors	
approved	
English 3-4	

CONTEMPORARY LITERATURE

ENG329 DURATION: semester course CREDITS: 1 seniors OPEN TO: approved NCAA: prerequisite: English 5-6

This one-semester course is designed for students interested in exploring mostly American literature based on contemporary issues and topics. Fiction, non-fiction, plays, film and poetry (including contemporary music lyrics) will be studied in depth. Students will use their skills as a reader to analyze, write and discuss the impact contemporary issues have on their lives and the lives of others.

Alignment to the lowa Core Curriculum: Instruction, learning, and assessment are built primarily on the 11-12th grade-band expectations of the Iowa Core Reading, Speaking and Listening Strands.

WORLD LITERATURE

	ENG337	
	DURATION:	semester course
	CREDITS:	1
	OPEN TO:	seniors
	NCAA:	approved
	PREREQUISITE:	English 5-6

This one-semester course is designed for students interested in exploring literature through various world cultures and time periods. Throughout the texts, students will examine how historical context, geographic location, and setting impacts literature. This course will examine world literature through novels, poetry, short stories, and plays.

Alignment to the Iowa Core Curriculum: Instruction, learning, and assessment are built primarily on the 11-12th grade-band expectations of the Iowa Core Reading, and Speaking and Listening Strands.

AFRICAN AMERICAN LITERATURE

ENG341	
DURATION:	semester course
CREDITS:	1
OPEN TO:	seniors
NCAA:	approved
PREREQUISITE:	English 5-6

This one-semester course is designed for students interested in exploring African American literature through historical chronology. The African American Literature course delivers a thematic-based survey exploring a broad range of (mostly) African American writers, poets, journalists, critics, filmmakers, lyricists, musicians, essayists, etc. encompassing fiction and nonfiction works. Targeted universal themes include identity (including the dual-self and communal), perceptions/images, voice, conflict, justice, and influence.

Alignment to the Iowa Core Curriculum: Instruction, learning, and assessment are built primarily on the 11-12th grade-band expectations of the Iowa Core Reading, and Speaking and Listening Strands.

WOMEN'S LITERATURE

ENG343

DURATION:	semester course
CREDITS:	1
OPEN TO:	seniors
NCAA:	approved
PREREQUISITE:	English 5-6

This one-semester course will recognize the changing roles women have experienced culturally, socially, and psychologically. Students will consider the ways in which women writers have responded to these historical issues. Although gender will serve as the foundation of the course, race, class, age, sexuality, nationality, and religion will also be examined in the relationship of women's writing to the rest of the world.

Alignment to the Iowa Core Curriculum: Instruction, learning, and assessment are built primarily on the 11-12th grade-band expectations of the Iowa Core Reading, and Speaking and Listening Strands.

ADVANCED PLACEMENT ENGLISH LANGUAGE & COMPOSITION

ENG351 (Sem 1), ENG352 (Sem 2)	
DURATION:	year course
CREDITS:	2
OPEN TO:	juniors
NCAA:	approved
PREREQUISITE:	Honors English 3-4 or instructor recommendation

Advanced Placement English Language and Composition will engage students in becoming skilled readers of rich prose written in a variety of periods, disciplines, and rhetorical contexts in a year-long class. Through application, students will become skilled writers who compose for a variety of purposes, thus satisfying the composition graduation requirement. Ultimately, this course will help the student prepare to take the AP English Language and Composition Exam and college reading and writing classes. Summer reading and writing will be required of students who enroll in AP English Language and Composition.

Alignment to the Iowa Core Curriculum: Instruction, learning, and assessment are built on the 11-12th grade-band expectations of the Iowa Core Reading, Writing, Listening and Speaking, and Language Strands.

ADVANCED PLACEMENT ENGLISH LITERATURE & COMPOSITION

ENG541 (Sem 1), ENG542 (Sem 2)		
DURATION:	year course	
CREDITS:	2	
OPEN TO:	seniors	
NCAA:	approved	
PREREQUISITE:	instructor and / or GT Facilitator recommendation	

Advanced Placement English Literature and Composition engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for the readers. As they read, students consider a work's structure, style, and themes as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone. The course provides students with the skills in analytical reading and expository writing necessary to prepare them for college-level reading and writing. Summer reading and writing will be required of students who enroll in AP English Literature and Composition.

Alignment to the Iowa Core Curriculum: Instruction, learning, and assessment are built primarily on the 11-12th grade-band expectations of the Iowa Core Reading, and Speaking and Listening Strands.

NICC CONCURRENT COLLEGE CLASS (ENG:105)

COMPOSITION I

ENG641	
DURATION:	semester course
CREDITS:	1
OPEN TO:	juniors and seniors (preference given to seniors)
PREREQUISITE:	must have one of the following: ACT English score of 18, Accuplacer/Writeplacer score of 5 or SAT score of 430 for Writing
RECOMMEND:	successful completion of English 1-2 and English 3-4

This is a writing course that prepares the student for the types of communication and thought essential to academic and working-world success. The course focuses on writing as a process and is intended to help students identify and refine their own personal writing. Students will:

- Write as a means of discovering and clarifying ideas.
- Write in many forms—such as essays, reports, articles, and letters.
- · Implement a process approach to writing of generating ideas, drafting, revising, and editina.
- Use appropriate writing strategies for varying purposes and audiences.
- · Develop an authentic, personal writing voice and tone appropriate for varying purposes and audiences.
- Organize essays which present logical progression and support through introduction, body, and conclusion.
- Polish individual writing style by using conventions of standard written English.
- Revise writings based on peer, instructor, and sometimes, NICC Writing Center responses.
- · Reflect on their own writing in order to make necessary revisions and improvements in content, style, and editing.

COMMENT: This is a concurrent enrollment course. In addition to high school credit, students will earn 3 college credits at NICC. Contact your school counselor and/or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.

INTRODUCTION TO LITERATURE

NICC CONCURRENT COLLEGE CLASS (LIT:101)

ENG642

DURATION:	semester course
CREDITS:	1
OPEN TO:	juniors and seniors (preference given to seniors)
PREREQUISITE:	Composition I with a minimum grade of C-

Introduction to Literature focuses on the art of fiction, drama, and poetry. Students closely examine literature that challenges and enlightens. Engagement with these works stimulate independent, analytical thinking that is shared through writing and discussion. Students will:

- · Effectively analyze literature from various genres.
- Demonstrate an understanding of literary genres and their many forms.
- Explain literature in its historical and cultural context.
- · Analyze fiction through the elements of character, setting, plot, point of view, symbols, and theme.
- Analyze drama by dissecting it into the elements of character, setting, plot, dialogue, theme, and staging.
- Analyze poetry through the poetic devices of form, sound, imagery, symbolism, tone, and theme.
- · Compare and contrast literature within and across genres.

COMMENT: This is a concurrent enrollment course. In addition to high school credit, students will earn 3 college credits at NICC. Contact your school counselor and/or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.

NICC CONCURRENT COLLEGE CLASS (ENG:106)

This research writing course analyzes writing as a process with emphasis on developing persuasive, evaluative, analytical, investigative, research, and documentation skills. Students will:

- Apply the principles of effective persuasion in writing.
- Develop a subject into an academic argument of appropriate scope.
- · Analyze and evaluate resources of the library, electronic databases, and other sources.
- Select appropriate strategies for taking notes by guoting directly, summarizing, and paraphrasing.
- Demonstrate understanding of the nature and consequences of plagiarism
- Employ acceptable MLA or APA style documentation.
- Revise for style and adherence to current standards of written English.
- Demonstrate effective application of course competencies through a reflective capstone project.

COMMENT: This is a concurrent enrollment course. In addition to high school credit, students will earn 3 college credits at NICC. Contact your school counselor and/or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.

MULTICULTURAL LITERATURE NICC CONCURRENT COLLEGE CLASS (LIT:134) Multicultural Literature explores, through a variety of genres, a wide range of cultural and ethnic voices. Students will read, discuss, and critique materials from authors who DURATION: semester course represent diverse ethnic, racial, and cultural populations. Emphasis centers on the 1 assessment and appreciation of the strengths and values that cultural diversity brings to our communities. juniors and seniors (preference given to seniors)

COMMENT: This is a concurrent enrollment course. In addition to high school credit, students will earn 3 college credits at NICC. Contact your school counselor and/or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.

PRACTICAL ENGLISH 1-2

XSM111	(Sem	1),	XSM112	(Sem 2)
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PREREQUISITE: Composition I with a

minimum grade of C-

DURATION:	year course
CREDITS:	2
OPEN TO:	freshmen
PREREQUISITE:	placement based on
	assessment and instructor
	recommendation

This course is for students who need additional academic assistance as determined by their Individual Education Plan (IEP). The instruction will develop, reinforce and refine specific reading objectives in comprehension and inferential thinking through the use of reading strategies. Units covered include short story, novel, poetry, mythology and drama. Students will also learn to use a variety of sentence types, write organized and concise paragraphs, and be introduced to five-paragraph writing.

Alignment to the Iowa Core Curriculum: Instruction, learning, and assessment are built on the 9-10th grade-band expectations of the Iowa Core.

COMPOSITION II

ENG644

ENG645

CREDITS:

OPEN TO:

DURATION:	semester course
CREDITS:	1
OPEN TO:	juniors and seniors (preference given to seniors)
PREREQUISITE:	Composition I with a

minimum grade of C-

PRACTICAL ENGLISH 3-4

XSM211 (Sem 1), XSM212 (Sem 2)

DURATION:	year course
CREDITS:	2
OPEN TO:	sophomores
PREREQUISITE:	Practical English 1-2 or instructor recommendation

This course is for students who need additional academic assistance as determined by their Individual Education Plan (IEP). This course follows a thematic approach to literary genres: short story, novel, drama, poetry, and nonfiction. Reading, writing, speaking, technology, and listening skills will be incorporated into each unit. Students will read and analyze literature from around the world. Students engage in expository, comparison/ contrast, persuasive, creative, and personal writing, as well as research and literary analysis. Class discussion is an integral part of the class. Vocabulary, grammar and usage, and other composition skills will be emphasized.

Alignment to the Iowa Core Curriculum: *Instruction, learning, and assessment are built on the 9-10th grade-band expectations of the Iowa Core.*

PRACTICAL ENGLISH 5-6

XSM311 (Se	em 1),	XSM312	(Sem	2)
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DURATION:	year course
CREDITS:	2
OPEN TO:	juniors
PREREQUISITE:	Practical English 3-4 or instructor recommendation

This course is for students who need additional academic assistance as determined by their Individual Education Plan (IEP). This course follows a thematic approach to literary genres: short story, novel, drama, poetry, and nonfiction. Reading, writing, speaking, technology, and listening skills will be incorporated into each unit. Students will read and analyze literature from around the world. Students engage in expository, comparison/ contrast, persuasive, creative, and personal writing, as well as research and literary analysis. Class discussion is an integral part of the class. Vocabulary, grammar and usage, and other composition skills will be emphasized.

Alignment to the Iowa Core Curriculum: *Instruction, learning, and assessment are built on the 10-11th grade-band expectations of the Iowa Core.*

XSM721 (Sem 1), XSM722 (Sem 2)		
DURATION:	year course	
CREDITS:	2	
OPEN TO:	all students	
PREREQUISITE:	placement based on assessment and instructor recommendation	

ESSENTIAL ELEMENTS OF ENGLISH

The instruction will develop, reinforce and refine specific reading objectives in comprehension, inferential thinking, engage in expository, and comparison/contrast. Units covered include: central idea of text, selecting details, determine logical connections, and determine meaning of words. Real world applications: current events through local resources, career information, cleaning supplies, clothing care, 1st aide and safety procedures, recipes, and job site safety information.

Alignment to the Iowa Core Curriculum: *Instruction, learning, and assessment are built on the 9-12th grade-band expectations of the Iowa Core and the Essential Elements.*

SPEECH

CREDITS REQUIRED FOR GRADUATION	1 credit is required for graduation from the Dubuque Community School District.
	Credits earned beyond the requirement are automatically counted as Elective credits.

SPEECH

ENG153 DURATION: semester course		Students will be given the opportunity to learn about and practice techniques used in	
		 interpersonal, group and public speaking settings. Students will actively participate in units such as listening, group communication, and interpersonal communication. 	
CREDITS:	1	Students will research, organize, outline, write, and present speeches. Students will lea how to apply technology to communication situations.	
OPEN TO:	all students		
NCAA:	approved	 Alignment to the Iowa Core Curriculum: Instruction, learning, and assessment are built primarily of the 9-10th grade-band expectations of the Iowa Core Reading, Writing, and 	
PREREQUISITE: NONE		Listening and Speaking Strands.	

PUBLIC SPEAKING

ENG643	
DURATION:	semester course
CREDITS:	1
OPEN TO:	sophomores, juniors, seniors (preference given to juniors and seniors)
PREREQUISITE:	none
RECOMMEND:	successful completion of high school Speech

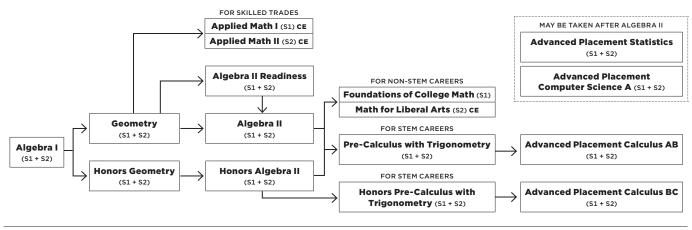
primarily of the 9-10th grade-band expectations of the Iowa Core Reading, Writing, and Listening and Speaking Strands. NICC CONCURRENT COLLEGE CLASS (SPC:112)

An introductory course designed to help students develop skills as speakers and critical listeners, increase understanding of the concepts and principles of verbal communication, and become more effective communicators in formal and informal speaking situations.

COMMENT: This is a concurrent enrollment course. In addition to high school credit, students will earn 3 college credits at NICC. Contact your school counselor and/or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits. This course will be offered at Hempstead High School during first hour and open to students at both high schools.

MATHEMATICS COURSES

MATHEMATICS COURSE PROGRESSION



Most 4-year colleges and universities require Algebra I, Geometry, and Algebra II for admission.

CE = CONCURRENT ENROLLMENT

MATHEMATICS	
CREDITS REQUIRED FOR GRADUATION	6 credits are required for graduation from the Dubuque Community School District.
	Credits earned beyond the requirement are automatically counted as Elective credits.

ALGEBRA I

MTH161 (Sem 1), MTH162 (Sem 2)	
DURATION:	year course
CREDITS:	2
OPEN TO:	all students
NCAA:	approved
PREREQUISITE:	instructor recommendation

In Algebra I, equations and inequalities will be interpreted by using tables and graphs and will be solved through algebraic transformations. Students will experience extensive work with linear equations, including systems of equations. Exponential and quadratic functions will be introduced. By being asked to apply algebraic methods to solve a variety of real world and mathematical problems, students will grow in their ability to use abstraction and symbolism. Scientific or graphing calculators will be used throughout the course and are necessary for homework completion. Successful completion leads to Geometry.

Alignment to the lowa Core Curriculum: *Relationships between quantities and reasoning with equations, linear and exponential relationships, descriptive statistics, expressions and equations, and quadratic functions and modeling.*

GEOMETRY

MTH171 (Sem 1), MTH172 (Sem 2)		Geometry usually follows Algebra I and precedes Algebra II. In Geometry, many of the
DURATION:	year course	 concepts from Algebra I are employed to present, develop and use concepts involving figures in a plane (such as triangles, squares and other polygons), in space (such as
CREDITS:	2	cubes, rectangular solids and prisms), and other solid figures. The entire course is a
OPEN TO:	all students	 development of a logical approach to reasoning and recognition of patterns that can be applied to daily life. Successful completion leads to Algebra II.
NCAA: approved	 Alignment to the lowa Core Curriculum: Congruence, proof, and constructions; similarity, 	
		proof, and trigonometry; extending to three dimensions; circles with and without coordinates;

and applications of probability.

HONORS GEOMETRY

MTH181 (Sem 1), MTH182 (Sem 2)

DURATION:	year course
CREDITS:	2
OPEN TO:	freshmen and sophomores
NCAA:	approved

PREREQUISITE: minimum grade of B- in 8th grade Algebra or instructor / GT facilitator recommendation Honors Geometry is intended primarily for students who have done well in Algebra I and enjoy the challenge of mathematics. It is designed to meet the needs of students desiring a strong mathematical background. Students will explore the topics of Geometry (MTH171/MTH172) at a greater depth, with some additional topics addressed. Successful completion leads to Honors Algebra II.

Alignment to the Iowa Core Curriculum: *Congruence, proof, and constructions; similarity, proof, and trigonometry; extending to three dimensions; circles with and without coordinates; and applications of probability.*

MTH271 (Sem 1), MTH272 (Sem 2)

DURATION:	year course
CREDITS:	2
OPEN TO:	sophomores, juniors, seniors
NCAA:	approved
PREREQUISITE:	minimum grade of C- in

Algebra I and Geometry or instructor recommendation

HONORS ALGEBRA II

MTH281 (Sem 1), MTH282 (Sem 2)

year course
2
all students
approved
Honors Geometry or Geometry with instructor recommendation

Trigonometry or Foundations of College Math. Alignment to the Iowa Core Curriculum: *Polynomial, rational and radical relationships; trigonometric functions; modeling with functions; and inferences and conclusions from data.*

Algebra II is a two-semester, two-credit course. Topics include graphing of equations and inequalities, systems, polynomials, quadratic systems, logarithms, trigonometry, and the application of these concepts to real-life. This course is needed to meet the entry requirements for many colleges. It is a prerequisite for many advanced math courses. A graphing calculator is necessary. Successful completion leads to Pre-calculus with

Honors Algebra II is a two-semester, two-credit course with topics similar to Algebra II. This course will cover topics in greater depth than Algebra II (MTH271) and with less time spent in review. It meets college entry requirements and successful completion leads to Pre-Calculus with Trigonometry. A graphing calculator is necessary.

Alignment to the lowa Core Curriculum: *Polynomial, rational and radical relationships; trigonometric functions; modeling with functions; and inferences and conclusions from data.*

Pre-Calculus with Trigonometry is a higher-level course for students taking AP Calculus in high school or Calculus as college freshmen. To be successful, students must have a very strong background in algebra and geometry. Topics include: functions, analytic geometry, trigonometry, parametric and polar equations and the introduction to calculus. The graphing calculator is used to provide a rich array of representation. Real world problem situations are used. A graphing calculator is necessary. Successful

Alignment to the lowa Core Curriculum: *Polynomial, rational and radical relationships; Trigonometric functions; Modeling with Functions; and Inferences and conclusions from data.*

PRE-CALCULUS WITH TRIGONOMETRY

MTH331 (Sem 1), MTH332 (Sem 2)		
DURATION:	year course	
CREDITS:	2	
OPEN TO:	sophomore, juniors, seniors	
NCAA:	approved	
PREREQUISITE:	Honors Algebra II or a minimum grade of C- in Algebra II and instructor recommendation	

ALGEBRA II READINESS

MTH341 (Sem 1), MTH342 (Sem 2)	Algebra II Readiness has been designed for students who have completed Algebra I and Geometry and would like additional math preparation before Algebra II. This course helps solidify students' understanding of Algebra I and Geometry concepts and
DURATION: Year COURSE	
CREDITS: 2	introduces Algebra II topics.
OPEN TO: juniors and seniors	Alignment to the Iowa Core Curriculum: Quadratics, Polynomial, rational and radical relationships; Trigonometric functions; Modeling with Functions; and Inferences and conclusions from data. COMMENT: This course may not fulfill admission requirement for four-year institutions.
prerequisite: Algebra I	
RECOMMEND: Geometry	
APPLIED MATH I	NICC CONCURRENT COLLEGE CLASS (MAT:772)
MTH351 (Sem 1)	Applied Math I is a course designed for students who want to build their mathematical
DURATION: SEMESTER COURSE	 skills for technical fields. Topics include fundamental operations with whole numbers, fractions, decimals, percentages; basic geometry; and measurement. This course has
credits: 1	college pacing and rigor. It will require work to be completed outside of class time.
OPEN TO: juniors and seniors	Alignment to Standards: This course is aligned with the unit objects of the NICC Applied Math

completion leads to AP Calculus.

PREREQUISITE: NONE

RECOMMEND: Algebra I and Geometry

Alignment to Standards: *This course is aligned with the unit objects of the NICC Applied Math Course.*

COMMENT: This is a concurrent enrollment course. In addition to high school credit, students will earn 3 NICC college credits. This course would count towards the following NICC programs: Auto Mechanics Diploma, Auto Technology AAS, Avionics Elect Tech diploma, Diesel Mechanics diploma, Gas Utility Diploma, Industrial Maintenance AAS, HVAC diploma, Renewable Energy diploma, Welding diploma. Applied Math is not a transferable course.

APPLIED MATH II

MTH352 (Sem 2)

DURATION:	semester course
CREDITS:	1
OPEN TO:	juniors and seniors
PREREQUISITE:	must have one of the

following: ALEKS Math score of 14, ACT Math score of 16, high school cumulative GPA of 2.0, or minimum grade of C- in Applied Math I

RECOMMEND: Algebra I and Geometry

FOUNDATIONS OF COLLEGE MATH

MTH361 (Sem 1)	
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DURATION:	semester course
CREDITS:	1
OPEN TO:	juniors and seniors
PREREQUISITE:	Algebra II

MATH FOR LIBERAL ARTS

MTH362 (Sem 2)	
DURATION:	semester course
CREDITS:	1
OPEN TO:	juniors and seniors
PREREQUISITE:	must have one of the following: ALEKS Math score of 30, ACT Math score of 19, high school cumulative GPA of 2.8, or minimum grade of C in Algebra I
RECOMMEND:	Algebra II and Foundations of College Math

Applied Math II is a course designed for students who want to build their algebra and trigonometry skills for technical fields. Topics include polynomials, equations and formulas, graphing linear equations, systems of linear equations, factoring quadratic equations and trigonometry. This course has college pacing and rigor. It will require work to be completed outside of class time.

Alignment to Standards: *This course is aligned with the unit objects of the NICC Applied Math Course.*

COMMENT: This is a concurrent enrollment course. In addition to high school credit, students will earn 3 NICC college credits. This course would count towards the following NICC programs: Auto Mechanics Diploma, Auto Technology AAS, Avionics Elect Tech diploma, Diesel Mechanics diploma, Gas Utility Diploma, Industrial Maintenance AAS, HVAC diploma, Renewable Energy diploma, Welding diploma. Applied Math is not a transferable course.

This course is intended to prepare college-bound students for further study in a non-STEM field. This course addresses a variety of topics which will engage students in mathematical decision making. This course will reinforce and expand on topics from prior math courses as well as introduce a variety of topics to prepare students for the Math for Liberal Arts course (MTH362).

Alignment to the lowa Core Curriculum: Understands and applies concepts of functions, quantities, and statistics and probability.

NICC CONCURRENT COLLEGE CLASS (MAT:110)

This course is intended for college-bound students who plan to pursue a non-STEM field. During this course, students will solve problems from many different topics of mathematics. Topics included are: set theory, logic, algebra, graphs, counting techniques, probability, statistics, personal finance, and number representations. The pace and content of this course are college level.

Alignment to Standards: *This course is aligned with the unit objects of the NICC Math for Liberal Arts course.*

COMMENT: This is a concurrent enrollment course. In addition to high school credit, students will earn 3 NICC college credits. Contact your school counselor and/or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.

HONORS PRE-CALCULUS WITH TRIGONOMETRY

MTH391 (Sem 1), MTH392 (Sem 2)

DURATION:	year course	
CREDITS:	2	
OPEN TO:	sophomores, juniors, seniors	
NCAA:	approved	
PREREQUISITE:	B- or higher in Honors Algebra II or instructor / GT facilitator recommendation	

ADVANCED PLACEMENT CALCULUS AB

MTH511 (Sem 1). MTH512 (Sem 2)

MTH511 (Sem 1), MTH512 (Sem 2)		
DURATION:	year course	
CREDITS:	2	
OPEN TO:	juniors and seniors	
NCAA:	approved	

PREREQUISITE: Pre-Calculus instructor recommendation; completion of, or simultaneously enrolled in, Physics or Honors Physics strongly recommended Students in Honors Pre-Calculus are taught in-depth Pre-Calculus topics with connections to physics concepts. Honors Pre-Calculus is a higher-level course for students taking AP Calculus in high school or Calculus as college freshmen. To be successful, students must have a very strong background in Algebra, Geometry, and Algebra 2. Topics include: functions, analytic geometry, trigonometry, parametric and polar equations and the introduction to calculus. The graphing calculator is used to provide a rich array of representation. Real world problem situations are used. A graphing calculator is necessary. Successful completion leads to AP Calculus.

Alignment to the lowa Core Curriculum: *Polynomial, rational and radical relationships; trigonometric functions; modeling with functions; and inferences and conclusions from data.*

AP Calculus AB is designed for students who have successfully completed three years of math including Honors Geometry and Honors Algebra II. This course reviews elementary functions with 90% of the instruction focused on differential and integral calculus and related applications. This course will prepare students to take the Advanced Placement Examination in May. Students may earn college credit depending on the results of the examination. A graphing calculator is necessary.

Alignment to the lowa Core Curriculum: Understands and applies concepts of algebra and trigonometric relationships.

NICC CONCURRENT COLLEGE CLASS (MAT:773)

ADVANCED PLACEMENT STATISTICS

MTH521 (Sem 1), MTH522 (Sem 2)

DURATION:	year course
CREDITS:	2
OPEN TO:	sophomores, juniors, seniors
NCAA:	approved
PREREQUISITE:	Algebra II with instructor recommendation

ADVANCED PLACEMENT CALCULUS BC

MTH541 (Sem 1), MTH542 (Sem 2)

DURATION:	year course
CREDITS:	2
OPEN TO:	juniors and seniors
NCAA:	approved
PREREQUISITE:	Honors Pre-Calculus or Pre-Calculus instructor recommendation; completion of, or simultaneously enrolled

in, Physics or Honors Physics

AP Calculus BC is the most advanced course in the mathematics curriculum offered in high school. It is a full-year course in the calculus of functions of a single variable and is comparable to calculus courses in colleges and universities. Topics include all Calculus AB topics plus additional topics such as series and parametric, polar and vector calculus. This course will prepare students to take the Advanced Placement Exam in May. Students may earn college credit depending on the results of the examination. The content is designed to qualify the student for placement and credit in a course that is one course beyond that granted for Calculus AB. A graphing calculator is necessary.

Statistics is required for many college majors. The major topics in this course include exploring data, planning a study, anticipating patterns, and statistical inference. The course offers the student the opportunity to take the Advanced Placement Examination with the chance to earn college credit depending on the results of the examination. A

Alignment to the Iowa Core Curriculum: Understands and applies concepts of statistics,

graphing calculator is necessary.

probability and systematic counting.

Alignment to the Iowa Core Curriculum: Understands and applies concepts of algebra and trigonometric relationships.

PRACTICAL MATH 1

XSM121 (Sem 1), XSM122 (Sem 2)	
DURATION:	year course
CREDITS:	2
OPEN TO:	all students
PREREQUISITE:	placement based on assessment and instructor recommendation

VCM101 (Came 1) VCM100 (Came 0)

PRACTICAL MATH 2

XSM221 (Sem 1), XSM222 (Sem 2)		
DURATION:	year course	
CREDITS:	2	
OPEN TO:	all students	
PREREQUISITE:	placement based on assessment and instructor recommendation	

This course is designed to teach the fundamental concepts of mathematics along algebra skills. Topics covered may include number theory, decimals and fractions, rational numbers, ratios, proportions, exponents, square roots, statistics and probability. The class will focus on math skills and practical applications as these skills relate to daily living situations

Alignment to the Iowa Core Curriculum: Understands and applies concepts of numbers and quantity, statistics and probability, and geometric properties.

This course is designed to teach the fundamentals of algebra. Topics covered may be linear equations with one variable, exponents and polynomials, data, statistics, and probability, irrational numbers and radical expressions. The class will focus on math skills and practical applications as these skills relate to daily living situations.

Alignment to the Iowa Core Curriculum: Understands and applies concepts of algebra, geometry, and statistics and probability.

PRACTICAL MATH 3

XSM321 (Sem 1), XSM322 (Sem	ı 2)

DURATION:	year course	
CREDITS:	2	
OPEN TO:	all students	
PREREQUISITE:	placement based on	
	assessment and instructor	
	recommendation	

This course is designed to teach the fundamentals concepts of geometry. Topics covered may be transversal, congruency, transformations, proportion, similarity, geometric figures/measurement, theorems, and proofs. The class will focus on math skills and practical applications as these skills relate to daily living situations.

Alignment to the Iowa Core Curriculum: Understands, applies and extends understanding of geometry.

PRACTICAL MATH 4

XSM421	(Sem	1)	XSM422	(Sem	2)
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DURATION:	year course	
CREDITS:	2	
OPEN TO:	all students	

PREREQUISITE: placement based on assessment and instructor recommendation

This course is an integrated mathematics course. Concepts are introduced incrementally and are continually practiced throughout the problem sets. Students continue to build upon concepts learned in Practical Math 2 and 3. The class will focus on math skills and practical applications as these skills relate to daily living situations.

Alignment to the Iowa Core Curriculum: Understands, applies and extends understanding of algebra, geometry, statistics and probability.

ESSENTIAL ELEMENTS OF MATH

XSM741 (Sem 1), XSM742 (Sem 2)

DURATION:	year course
CREDITS:	2
OPEN TO:	all students
PREREQUISITE:	placement based on assessment and instructor

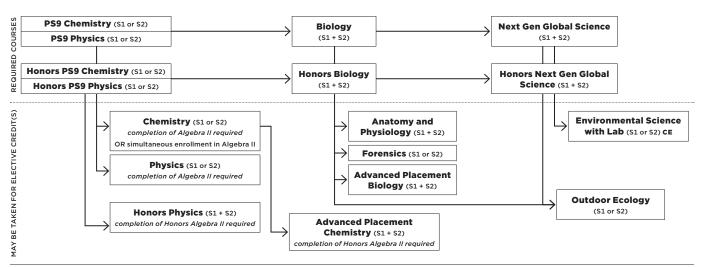
recommendation

The instruction will develop fundamental concepts of mathematics and concepts of operations and problem solving. Units covered include: operations with numbers, identify algebraic expressions, solve equations, use of graphs, measurement and solving real world problems. Real world applications: money concepts, comparative shopping, purchasing skills, budgets, measuring (cooking and home repair), reading and using graphs.

Alignment to the Iowa Core Curriculum: Instruction, learning, and assessment are built on the 9-12th grade-band expectations of the Iowa Core and the Essential Elements.

SCIENCE COURSES

SCIENCE COURSE PROGRESSION



Students planning to enroll in a 4-year college or university should take at least one additional semester of chemistry or physics as an elective.

CE = CONCURRENT ENROLLMENT

PHYSICAL SCIENCE		
CREDITS REQUIRED FOR GRADUATION	2 credits are required for graduation from the Dubuque Community School District.	
	Credits earned beyond the requirement are automatically counted as Elective credits.	

PS9 CHEMISTRY

SCI081		This physical science course is designed to provide a
DURATION:	semester course	components of chemistry. The course will focus on the matter at the molecular level with laboratory experie
CREDITS:	1	concepts to a macro level. Connections to students'
OPEN TO:	freshmen	course.
NCAA:	approved	Alignment to the Iowa Core Science Standards: HS-P. 1. HS-PS1-2. HS-PS1-3. HS-PS1-4. HS-PS1-5. HS-PS1-6. HS
PREREQUISITE: NONE		and Stability: Forces and Interactions (HS-PS2-6), HS-PS
		Engineering Design (HS-ETS1-1, HS-ETS1-2, HS-ETS1-3, H

a base understanding of the the structure and interaction of ences that will connect these lives will be woven throughout

PS1 Matter and its Interactions (HSPS1-S-PS1-7, HS-PS1-8), HS-PS2 Motion S3 Energy (HS-PS3-4), and HS-ETS HS-ETS1-4).

COMMENT: Students planning to enroll in a 4 year college or university will want to take at least one additional semester of elective chemistry or physics during their sophomore, junior, or senior year.

PS9 PHYSICS

DURATION:	semester course
CREDITS:	1
OPEN TO:	freshmen
NCAA:	approved
PREREQUISITE:	none

This physical science course is designed to provide a base understanding of the components of physics. The course will focus on how matter moves, how it is made to move, and the energies involved. Key concepts include: motion, forces, momentum, energy, Newton's Laws, waves, electricity/magnetism, and light. Inquiry-based labs and hands-on engineering are integrated in the course.

Alignment to the Iowa Core Science Standards: HS-PS2 Motion and Stability: Forces and Interactions (HS-PS2-1, HS-PS2-2, HS-PS2-3, HS-PS2-4, HS-PS2-5), HS-PS3 Energy (HS-PS3-1, HS-PS3-2, HS-PS3-3, HS-PS3-5), HS-PS-4 Waves and their Applications in Technologies for Information Transfer (HS-PS4-1, HS-PS4-2, HS-PS4-3, HS-PS4-4, HS-PS4-5) and HS-ETS Engineering Design (HS-ETS1-1, HS-ETS1-2, HS-ETS1-3, HS-ETS1-4).

COMMENT: Students planning to enroll in a 4 year college or university will want to take at least one additional semester of elective chemistry or physics during their sophomore, junior, or senior year.

HONORS PS9 CHEMISTRY

SCI091	
DURATION:	semester course
CREDITS:	1
OPEN TO:	freshmen
NCAA:	approved
PREREQUISITE:	none

This physical science course is for the academically advanced student seeking a rigorous path in chemistry. The course will focus on the structure and interaction of matter at the molecular level with laboratory experiences that will connect these concepts to a macro level. Pacing and breadth of concepts covered will be increased compared to the regular PS9 Chemistry course. This course will serve as a possible lead-in to AP Chemistry.

Alignment to the Iowa Core Science Standards: HS-PS1 Matter and its Interactions (HSPS1-1, HS-PS1-2, HS-PS1-3, HS-PS1-4, HS-PS1-5, HS-PS1-6, HS-PS1-7, HS-PS1-8), HS-PS2 Motion and Stability: Forces and Interactions (HS-PS2-6), HS-PS3 Energy (HS-PS3-4), and HS-ETS Engineering Design (HS-ETS1-1, HS-ETS1-2, HS-ETS1-3, HS-ETS1-4).

COMMENT: Students planning to enroll in a 4 year college or university will want to take at least one additional semester of elective chemistry or physics during their sophomore, junior, or senior year.

HONORS PS9 PHYSICS

SCI092	
DURATION:	semester course
CREDITS:	1
OPEN TO:	freshmen
NCAA:	approved
PREREQUISITE:	none

This physical science course is for the academically advanced student seeking a rigorous path in physics. This course is designed to provide a base understanding of the components of physics. The course will focus on how matter moves, how it is made to move, and the energies involved. Key concepts include: motion, forces, momentum, energy, Newton's Laws, waves, electricity/magnetism, and light. Inquiry-base labs and hands-on engineering are integrated in the course. Pacing and breadth of concepts covered will be increased compared to the regular PS9 Physics course.

Alignment to the Iowa Core Science Standards: *HS-PS2 Motion and Stability: Forces and Interactions (HS-PS2-1, HS-PS2-2, HS-PS2-3, HS-PS2-4, HS-PS2-5), HS-PS3 Energy (HS-PS3-1, HS-PS3-2, HS-PS3-3, HS-PS3-5), HS-PS-4 Waves and their Applications in Technologies for Information Transfer (HS-PS4-1, HS-PS4-2, HS-PS4-3, HS-PS4-4, HS-PS4-5) and HS-ETS Engineering Design (HS-ETS1-1, HS-ETS1-2, HS-ETS1-3, HS-ETS1-4). For more information, please visit www.nextgenscience.org for a full description of each standard.*

COMMENT: Students planning to enroll in a 4 year college or university will want to take at least one additional semester of elective chemistry or physics during their sophomore, junior, or senior year.

ESSENTIAL ELEMENTS OF SCIENCE

XSM731 (Sem 1), XSM732 (Sem 2)		
DURATION:	year course	
CREDITS:	2	
OPEN TO:	all students	
PREREQUISITE:	placement based on assessment and instructor recommendation	

The instruction will provide students the opportunity to discover and understand the role of physical, earth, and global sciences. Units covered include: apply aspects of chemistry through labs and activities, investigate aspects of science through scientific inquiry, problem solving and discussions. Real world applications: chemical properties, weather, catastrophic occurrences, recycling and making predictions.

Alignment to the Iowa Core Curriculum: *Instruction, learning, and assessment are built on the 9-12th grade-band expectations of the Iowa Core and the Essential Elements.*

CREDITS REQUIRED FOR GRADUATION	2 credits are required for graduation from the Dubuque Community School District.
	Credits earned beyond the requirement are automatically counted as Elective credits.

BIOLOGY

SCI131 (Sem 1), SCI132 (Sem 2)		
DURATION:	year course	
CREDITS:	2	
OPEN TO:	sophomores, juniors, seniors	
NCAA:	approved	
PREREQUISITE:	PS9 Chemistry, PS9 Physics	

This course is designed for those students who desire a thorough background in basic biology and a strong basis for further science study. The course of study in Biology includes all the major themes essential to understanding life. This is often achieved through problem solving, laboratory experiences, and group activities. Students will apply the foundational concepts of Biology to real-world scenarios.

Alignment to the Iowa Core Science Standards: *HS-LS1 From Molecules to Organisms: Structures and Processes (HS-LS1-1, HS-LS1-2, HS-LS1-3, HS-LS1-4, HS-LS1-5, HS-LS1-6, HS-LS1-7), HS-LS-2 Ecosystems: Interactions, Energy, and Dynamics (HS-LS2-3, HS-LS2-4, HS-LS2-8), HS-LS3 Heredity: Inheritance and Variation of Traits (HS-LS3-1, HS-LS3-2, HS-LS3-3), HS-PS4 Biological Evolution: Unity and Diversity (HS-PS4-1, HS-PS4-2, HS-PS4-3, HS-PS4-4, HS-PS4-5, HS-PS4-6) and HS-ETS Engineering Design (HS-ETS1-1, HS-ETS1-2, HS-ETS1-3, HS-ETS1-4).*

HONORS BIOLOGY

SCI141 (Sem 1), SCI142 (Sem 2)		
DURATION:	year course	
CREDITS:	2	
OPEN TO:	all students	
NCAA:	approved	

PREREQUISITE: for incoming freshmen, simultaneous enrollment in Honors PS9 Chemistry and Honors PS9 Physics with instructor approval; for sophomores, completion of PS9 Chemistry and PS9 Physics with instructor approval; for juniors and seniors, instructor approval

ESSENTIAL ELEMENTS OF SCIENCE

XSM731 (Sem 1), XSM732 (Sem 2)

DURATION:	year course
CREDITS:	2
OPEN TO:	all students
PREREQUISITE:	placement based on assessment and instructor recommendation

This course is designed for the academically advanced student who desires a comprehensive background in biology to assist in future science studies. The course of study in Honors Biology includes an in-depth, accelerated approach to all the major themes essential to understanding life. This is often achieved through problem solving, laboratory experiences, and group activities. The text material provides the factual foundation necessary to understanding the principles of life discussed in the course.

Alignment to the Iowa Core Science Standards: HS-LS1 From Molecules to Organisms: Structures and Processes (HS-LS1-1, HS-LS1-2, HS-LS1-3, HS-LS1-4, HS-LS1-5, HS-LS1-6, HS-LS1-7), HS-LS-2 Ecosystems: Interactions, Energy, and Dynamics (HS-LS2-3, HS-LS2-4, HS-LS2-8), HS-LS3 Heredity: Inheritance and Variation of Traits (HS-LS3-1, HS-LS3-2, HS-LS3-3), HS-PS4 Biological Evolution: Unity and Diversity (HS-PS4-1, HS-PS4-2, HS-PS4-3, HS-PS4-4, HS-PS4-5, HS-PS4-6) and HS-ETS Engineering Design (HS-ETS1-1, HS-ETS1-2, HS-ETS1-3, HS-ETS1-4).

The instruction will provide students the opportunity to discover and understand the role of physical, earth, and global sciences. Units covered include: apply aspects of chemistry through labs and activities, investigate aspects of science through scientific inquiry, problem solving and discussions. Real world applications: chemical properties, weather, catastrophic occurrences, recycling and making predictions.

Alignment to the Iowa Core Curriculum: *Instruction, learning, and assessment are built on the 9-12th grade-band expectations of the Iowa Core and the Essential Elements.*

EARTH / SPACE SCIENCE		
CREDITS REQUIRED FOR GRADUATION	2 credits are required for graduation from the Dubuque Community School District.	
	Credits earned beyond the requirement are automatically counted as Elective credits.	

HONORS NEXT GEN GLOBAL SCIENCE

SCI151 (Sem 1), SCI152 (Sem 2)		
DURATION:	year course	
CREDITS:	2	
OPEN TO:	sophomores, juniors, seniors	
NCAA:	approved	

PREREQUISITE: PS9 Chemistry (or Honors) and PS9 Physics (or Honors) with instructor approval, completion or simultaneous enrollment in Biology (or Honors) with instructor approval Honors Next Gen Global Science is a year-long course that will provide students with the opportunity to discover and expand connections between science, technology, and global societies. This study of natural connections will help students become stewards of the environment, more informed citizens, and better decision-makers. Students will investigate the various aspects of our Earth, the Solar System and the Universe through scientific inquiry, laboratory activities, problem solving, current events, discussions, and projects. Honors Next Gen will have a strong presence of mathematics in regards to some concepts, i.e. Kepler's Laws of Motion or Climate Modeling.

Alignment to the Iowa Core Science Standards: *HS-ESS2- Earth's Systems, HS-ESS3 Earth and Human Activity, and HS-LS2 Ecosystems: Interactions, Energy, and Dynamics. In addition, it includes concepts in HS-ESS1 Earth's Place in the Universe and HS-LS4 Biological Evolution: Unity and Diversity.*

NEXT GEN GLOBAL SCIENCE

SCI161 (Sem 1), SCI162 (Sem 2)

DURATION:	year course
CREDITS:	2
OPEN TO:	juniors and seniors
NCAA:	approved
PREREQUISITE:	PS9 Chemistry, PS9 Physics, Biology

Next Gen Global Science is a year-long course that will provide students with the opportunity to discover and expand connections between science, technology, and global societies. This study of natural connections will help students become stewards of the environment, more informed citizens, and better decision-makers. Students will investigate the various aspects of our Earth, the Solar System and the Universe through scientific inquiry, laboratory activities, problem solving, current events, discussions, and projects.

Alignment to the Iowa Core Science Standards: *HS-ESS2- Earth's Systems, HS-ESS3 Earth and Human Activity, and HS-LS2 Ecosystems: Interactions, Energy, and Dynamics. In addition, it includes concepts in HS-ESS1 Earth's Place in the Universe and HS-LS4 Biological Evolution: Unity and Diversity.*

ESSENTIAL ELEMENTS OF SCIENCE

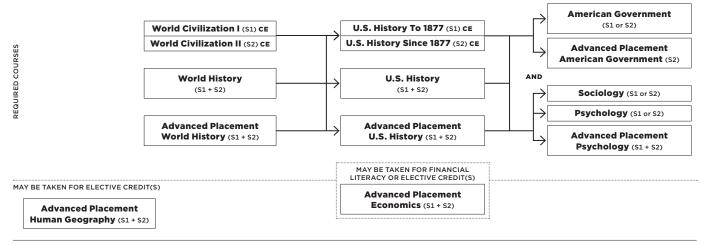
XSM731 (Sem 1), XSM732 (Sem 2)		
DURATION:	year course	
CREDITS:	2	
OPEN TO:	all students	
PREREQUISITE:	placement based on assessment and instructor recommendation	

The instruction will provide students the opportunity to discover and understand the role of physical, earth, and global sciences. Units covered include: apply aspects of chemistry through labs and activities, investigate aspects of science through scientific inquiry, problem solving and discussions. Real world applications: chemical properties, weather, catastrophic occurrences, recycling and making predictions.

Alignment to the lowa Core Curriculum: *Instruction, learning, and assessment are built on the 9-12th grade-band expectations of the lowa Core and the Essential Elements.*

SOCIAL STUDIES COURSES

SOCIAL STUDIES COURSE PROGRESSION



CE = CONCURRENT ENROLLMENT

WORLD HISTORY	
CREDITS REQUIRED FOR GRADUATION	2 credits are required for graduation from the Dubuque Community School District.
	Credits earned beyond the requirement are automatically counted as Elective credits.
	·

WORLD HISTORY

SOC221 (Sem 1), SOC222 (Sem 2)		
DURATION:	year course	
CREDITS:	2	
OPEN TO:	sophomores	
NCAA:	approved	
PREREQUISITE:	none	

World History is a year-long, two-credit course. The student will study in depth the societies, themes and issues that mark the interaction of the world and will focus on the diversity of the human experience. This course covers the ideas and institutions that have shaped our modern world. Students focus in depth on the world's history in both hemispheres from the Industrial Revolution to the present. Units of study will focus on interactive lessons dealing with Africa, Europe, Asia, the Middle East, and the Americas and their interconnectedness.

Emphasis in this course will be placed on content mastery, literacy skills, and inquirybased thinking. The general format of the class will include use of historical thinking skills and analysis of primary and secondary texts in addition to inquiry-based discussion and writing assessments.

Alignment to the Iowa Core Curriculum: *Instruction, learning, and assessment are built on the 9-12 Social Studies Inquiry Standards, 9-12 World History Standards, and the 9-10 Reading and Writing Standards for History/Social Studies.*

ADVANCED PLACEMENT WORLD HISTORY

SOC511 (Sem 1), SOC512 (Sem 2)

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DURATION:	year course
CREDITS:	2
OPEN TO:	sophomores
NCAA:	approved
PREREQUISITE:	Honors English 1-2 or instructor recommendation

Advanced Placement World History is a two credit, year-long course open to tenth grade students. This course will focus on the study of the histories of the world's civilizations. Through their studies, students will develop an appreciation for the civilizations of the world and the institutions that, over time, became embedded in each culture. In addition, students will be able to see the impact that each civilization had upon one another as contacts were made and relationships were established.

Students will learn strategies that will enhance their abilities to analyze various sources of historical information. Students will demonstrate their historical understanding through written and oral assessments. It will be necessary that all enrolled students exhibit high skill level in written and verbal expression. This two-semester course prepares students for intermediate and advanced college courses with instruction equivalent to a full-year introductory college course as well as preparing students to take the Advanced Placement World History exam in the month of May of each year. Students may earn college credit depending on the results of the examination.

Alignment to the Iowa Core Curriculum: *Instruction, learning, and assessment are built on the 9-12 Social Studies Inquiry Standards, 9-12 World History Standards, and the 9-10 Reading and Writing Standards for History/Social Studies.*

WORLD CIVILIZATION I

SOC603 (Sem 1)	
DURATION:	semester course
CREDITS:	1
OPEN TO:	sophomore, juniors, seniors (preference given to seniors)
PREREQUISITE:	none

WORLD CIVILIZATION II

SOC604 (Sem 2)

-	
DURATION:	semester course
CREDITS:	1
OPEN TO:	sophomore, juniors, seniors (preference given to seniors)
PREREQUISITE:	none

NICC CONCURRENT COLLEGE CLASS (HIS:131)

This is a survey course in World Civilization from pre-history to 1500. The class follows a "Big History" pedagogical approach as it examines six major civilizations: those in the Middle-East, India, China, Europe, Africa, and the Americas. Contexts, connections, changes, and comparisons between civilizations will be considered. Cultural components such as religion and art are integrated with political and economic history.

COMMENT: This is a concurrent enrollment course. In addition to high school credit, students will earn 3 college credits at NICC. Contact your school counselor and/or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.

NICC CONCURRENT COLLEGE CLASS (HIS:132)

This is a survey course in World Civilization from 1500 CE to present time. The class follows a "Big History" pedagogical approach as it examines the course of human history. Contexts, connections, changes, and comparisons between civilizations will be considered. Cultural components such as religion and art are integrated with political and economic history. The course is designed to focus on the emergence of modern civilization including the rise and global impact of Europe as well as the rise of modern cultures in Asia, Africa, and the Americas. The course also focuses on the rise of nationalism, industrialization, colonialism, liberalism, democracy, socialism, and the great changes brought about by the World Wars, the Great Depression, fascism, communism, the end of colonialism, and the Cold War's end.

COMMENT: This is a concurrent enrollment course. In addition to high school credit, students will earn 3 college credits at NICC. Contact your school counselor and/or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.

ESSENTIAL ELEMENTS OF SOCIAL STUDIES

XSM751 (Sem 1), XSM752 (Sem 2)	
DURATION:	year course
CREDITS:	2
OPEN TO:	all students
PREREQUISITE:	placement based on assessment and instructor recommendation

The instruction will allow students to experience and investigate key social studies concepts as it integrates the history, geography, and culture of other countries. Units covered include: study of societies, ideas, and issues. U.S. political system, rights, and current events. Real world applications: current events, tours of library and museums, Age of Majority, guardianship, tour of city hall, and use of city services.

Alignment to the lowa Core Curriculum: *Instruction, learning, and assessment are built on the 9-12th grade-band expectations of the lowa Core and the Essential Elements.*

S. HISTORY

CREDITS REQUIRED FOR GRADUATION	2 credits are required for graduation from the Dubuque Community School District.
	Credits earned beyond the requirement are automatically counted as Elective credits.

U.S. HISTORY

SOC321 (Sem 1), SOC322 (Sem 2)		
year course		
2		
juniors		
approved		
none		

United States History is a year-long, two-credit course. This course is intended to develop in students a deep appreciation and awareness of this country's history. A basic chronological order with thematic infusions will be used to cover the significant events that have shaped the country's development from the Civil War to present day.

Emphasis in this course will be placed on content mastery, literacy skills, and inquirybased thinking. The general format of the class will include use of historical thinking skills and analysis of primary and secondary texts in addition to inquiry-based discussion and writing assessments.

Alignment to the Iowa Core Curriculum: Instruction, learning, and assessment are built on the 9-12 Social Studies Inquiry Standards, 9-12 United States History Standards, and the 11-12 Reading and Writing Standards for History/Social Studies.

ADVANCED PLACEMENT U.S. HISTORY

SOC521 (Sem 1), SOC522 (Sem 2)		
DURATION:	year course	
CREDITS:	2	
OPEN TO:	juniors	
NCAA:	approved	
PREREQUISITE:	Advanced Placement World History or instructor recommendation	

Advanced Placement United States History is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in American history. This two-semester course prepares students for intermediate and advanced college courses with instruction equivalent to a full-year introductory college course, as well as preparing students to take the Advanced Placement United States History exam in the month of May of each year. Students may earn college credit depending on the results of the examination.

A basic chronological approach with an emphasis on dominant themes or strands which permeate the history of the United States will be employed to survey history of the United States from the colonial period to the present time period. Students will assess historical materials and develop interpretations and conclusions for presentation in essay form. The general format of the class will include lecture/discussion, seminar discussion and audio-visual items.

Alignment to the Iowa Core Curriculum: Instruction, learning, and assessment are built on the 9-12 Social Studies Inquiry Standards, 9-12 United States History Standards, and the 11-12 Reading and Writing Standards for History/Social Studies.

U.S. HISTORY TO 1877 NICC CONCURRENT COLLEGE CLASS (HIS:151) A survey of the emergence of the United States from the colonial era to 1877, including SOC601 (Sem 1) colonization, the Revolutionary period, the early Republic, the Jacksonian era, the Civil semester course DURATION War, and Reconstruction. Political, economic, and social themes will be considered. 1 CREDITS: COMMENT: This is a concurrent enrollment course. In addition to high school credit, OPEN TO: juniors and seniors students will earn 3 college credits at NICC. Contact your school counselor and/or (preference given to seniors) the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits. PREREQUISITE: NONE **U.S. HISTORY SINCE 1877** NICC CONCURRENT COLLEGE CLASS (HIS:152) A survey of life in the United States from 1877 to the present including the Age of SOC602 (Sem 2)

DURATION:	semester course
CREDITS:	1
OPEN TO:	juniors and seniors (preference given to seniors)
PREREQUISITE:	none

Industrialism, the Progressive Era, World War I, developments between the wars, World War II, and postwar foreign and domestic issues.

COMMENT: This is a concurrent enrollment course. In addition to high school credit, students will earn 3 college credits at NICC. Contact your school counselor and/or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.

ESSENTIAL ELEMENTS OF SOCIAL STUDIES

XSM751 (Sem 1), XSM752 (Sem 2)

DURATION:	year course	
CREDITS:	2	
OPEN TO:	all students	
PREREQUISITE:	placement based on	

assessment and instructor recommendation

The instruction will allow students to experience and investigate key social studies concepts as it integrates the history, geography, and culture of other countries. Units covered include: study of societies, ideas, and issues. U.S. political system, rights, and current events. Real world applications: current events, tours of library and museums, Age of Majority, guardianship, tour of city hall, and use of city services.

Alignment to the Iowa Core Curriculum: Instruction, learning, and assessment are built on the 9-12th grade-band expectations of the Iowa Core and the Essential Elements.

GOVERNMENT

CREDITS REQUIRED FOR GRADUATION	1 credit is required for graduation from the Dubuque Community School District.
	Credits earned beyond the requirement are automatically counted as Elective credits.

AMERICAN GOVERNMENT

SOC415	
DURATION:	semester course
CREDITS:	1
OPEN TO:	seniors
NCAA:	approved
PREREQUISITE:	none

American Government is a required, one-semester course designed for seniors. This course is designed to be a capstone for all students in preparation for active participation in local, state, and national civic life. Knowledge of the fundamentals and principles of the U.S. political system as well as the lowa political system prepares students for their future responsibilities as citizens of this state and country.

In this course, students study politics and the political processes which underlie United States democracy. Following this introduction, students explore each of the major branches of government - Executive, Legislative, and Judicial as they interact both in cooperative and, at times, adversarial ways. Emphasis in this course will be placed on content mastery, literacy skills, and inquiry-based thinking. The general format of the class will include use of critical thinking skills and analysis of primary and secondary sources in addition to inquiry-based discussion and writing assessments. Additionally, this course will explore local civic involvement and analysis of current events through data, maps, and media sources.

Alignment to the Iowa Core Curriculum: *Instruction, learning, and assessment are built on the 9-12 Social Studies Inquiry Standards, 9-12 Civics and Government Standards, and the 11-12 Reading and Writing Standards for History/Social Studies.*

ADVANCED PLACEMENT AMERICAN GOVERNMENT

SOC513		This course is designed to be a capstone for all students in preparation for active
DURATION:	semester course	 participation in local, state, and national civic life. In this course, students come to grips with the nature of politics and the political processes, which underlie United States democracy and the lowa political system.
CREDITS:	1	
OPEN TO:	seniors	This semester course prepares students for intermediate and advanced college courses with instruction equivalent to a one-semester college introductory course in U.S.
NCAA:	approved	
PREREQUISITE: Instructor recommendation		Advanced Placement U.S. Government and Politics Exam, which is offered in May every year. Students may earn college credit depending on the results of the examination.
		Emphasis in this course will be placed on content mastery, literacy skills, and inquiry- based thinking. The general format of the class will include use of critical thinking skills and analysis of primary and secondary sources in addition to inquiry-based discussion and writing assessments. Additionally, this course will explore local civic involvement

Alignment to the Iowa Core Curriculum: *Instruction, learning, and assessment are built on the 9-12 Social Studies Inquiry Standards, 9-12 Civics and Government Standards, and the 11-12 Reading and Writing Standards for History/Social Studies.*

and analysis of current events through data, maps, and media sources.

ESSENTIAL ELEMENTS OF SOCIAL STUDIES

XSM641		The instruction will allow students to experience and investigate key social studies
DURATION:	semester course	 concepts as it integrates the history, geography, and culture of other countries. Units covered include: study of societies, ideas, and issues. U.S. political system, rights, and current events. Real world applications: current events, tours of library and museums, Age of Majority, guardianship, tour of city hall, and use of city services.
CREDITS:	1	
OPEN TO:	all students	
PREREQUISITE: placement based on assessment and instructor recommendation		Alignment to the lowa Core Curriculum: <i>Instruction, learning, and assessment are built on the 9-12th grade-band expectations of the lowa Core and the Essential Elements.</i>

BEHAVIORAL SCIENCE	
CREDITS REQUIRED FOR GRADUATION	1 credit is required for graduation from the Dubuque Community School District.
	Credits earned beyond the requirement are automatically counted as Elective credits.

SOCIOLOGY

SOC433	
DURATION:	semester course
CREDITS:	1
OPEN TO:	seniors
NCAA:	approved
PREREQUISITE:	none

Sociology is a semester, one credit course available to seniors. Sociology is the study of human behavior and groups in society. The study of sociology helps answer the questions we have about our relationships with others. Sociology will help the student understand the issues and problems we face in our society today. Units of study include research methods, culture, socialization, group formation, social inequality, social institutions, and social change.

Emphasis in this course will be placed on content mastery, literacy skills, and inquirybased thinking. This course incorporates frequent discussions based on compelling topics to enhance critical thinking skills. In addition, to discussion, the course will include evaluation of media, data-analysis, argumentative writing, and steps to informed action.

Alignment to the Iowa Core Curriculum: Instruction, learning, and assessment are built on the 9-12 Social Studies Inquiry Standards, 9-12 Behavioral Science Standards from the Sociology Strand, and the 11-12 Reading and Writing Standards for History/Social Studies.

PSYCHOLOGY

SOC443	
DURATION:	semester course
CREDITS:	1
OPEN TO:	seniors
NCAA:	approved
PREREQUISITE:	none

Psychology is a semester, one credit course available to seniors. Through instruction in the course, the student will be introduced to the scientific study of behavior and mental processes needed to develop an understanding for the academic discipline of psychology, its theories and its practical application to everyday life. In addition, students will be able to eliminate common misconceptions about human behavior, demonstrate respect for divergent values and tolerance for individual differences, evaluate and critique psychological information and services. Emphasis will also be placed on what qualities constitute a healthy and balanced personality.

The course will include: the science of psychology, states of consciousness, memory and intelligence, human development, personality, motivation and emotions, gender differences, abnormal behavior, and therapies, stress and adjustment. Students will be expected to participate in discussions, class activities and complete all written and reading assignments.

Alignment to the Iowa Core Curriculum: Instruction, learning, and assessment are built on the 9-12 Social Studies Inquiry Standards, 9-12 Behavioral Science Standards from the Psychology Strand, and the 11-12 Reading and Writing Standards for History/Social Studies.

ADVANCED PLACEMENT PSYCHOLOGY

SOC541 (Sem 1), SOC542 (Sem 2)		
year course		
2		
seniors		
approved		
instructor recommendation		

The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with the major subfields within psychology. The AP Psychology course stresses critical thinking, reading and writing within the context of scientific methodology and questioning. A wide range of topics includes neuroscience, development, sensation/perception, consciousness, learning, memory, personality, thinking/intelligence, motivation/emotion, and psychological disorders/therapy.

This course prepares students for intermediate and advanced college courses. This course is ideal for anyone wanting to try an Advanced Placement course as well as those interested in possible careers in areas including (but not limited to): education, counseling/therapy, business, management/administration, health, and neuroscience. This course is also designed to prepare students to take the Advanced Placement Psychology exam which is offered in May every year. Students may earn college credit depending on the results of the examination.

Alignment to the Iowa Core Curriculum: Instruction, learning, and assessment are built on the 9-12 Social Studies Inquiry Standards, 9-12 Behavioral Science Standards from the Psychology Strand, and the 11-12 Reading and Writing Standards for History/Social Studies.

ESSENTIAL ELEMENTS OF SOCIAL STUDIES

XSM642	
DURATION:	semester course
CREDITS:	1
OPEN TO:	all students
PREREQUISITE:	placement based on assessment and instructor recommendation

The instruction will allow students to experience and investigate key social studies concepts as it integrates the history, geography, and culture of other countries. Units covered include: study of societies, ideas, and issues. U.S. political system, rights, and current events. Real world applications: current events, tours of library and museums, Age of Majority, guardianship, tour of city hall, and use of city services.

Alignment to the Iowa Core Curriculum: Instruction, learning, and assessment are built on the 9-12th grade-band expectations of the lowa Core and the Essential Elements.

WELLNESS COURSES

WELLNESS

CREDITS REQUIRED FOR GRADUATION	4 credits are required for graduation from the Dubuque Community School District.
	Credits earned beyond the requirement are automatically counted as Elective credits.
ADAPTED WELLNESS	
PED150	This is a physical education program that may be adapted or modified to address the individualized needs of students who have gross motor developmental delays. Units include general health education and fitness-based activities. Students may select this class also to act as peer helpers to work with adaptive fitness students. Classes incorporate a variety of fitness-based activities and will have the opportunity to use the Fitness Room.
DURATION: SEMESTER COURSE	
credits: 1	
орем то: all students	
PREREQUISITE: Instructor recommendation	Alignment to the Shape of America National Physical Education Standards.

COMMENT: Prior to graduation, all students must demonstrate competency in cardiopulmonary resuscitation as required by the State of Iowa.

HEALTH CLUB FITNESS

PED153	
DURATION:	semester course
CREDITS:	1
OPEN TO:	all students
PREREQUISITE:	none

This course is designed to practice and develop skills in fitness-based activities that will help students maintain fitness throughout their life. This class will be an active heart rate driven class. With effort, students can reach their personal target heart rate zones. Classes may explore units in kickboxing, stability ball workout, Pilates, yoga, circuit training, boot camp, walking, fitness games, or any new fitness trend to improve all areas of their personal fitness. Healthy lifestyle topics will also be included such as nutrition, sleep, and goal setting to improve social and emotional health. Assessments are based on SHAPE National Physical Education Standards and may include heart rate data, written work, and fitness testing.

Alignment to the Shape of America National Physical Education Standards.

COMMENT: Prior to graduation, all students must demonstrate competency in cardiopulmonary resuscitation as required by the Iowa Core.

WATER FITNESS & GAMES (HEMPSTEAD ONLY)

PED159	
DURATION:	semester course
CREDITS:	1
OPEN TO:	all students
PREREQUISITE:	must be able to swim comfortably in 6' or deeper water with or without floatation belt

ACTIVE GAMES & FITNESS CLASS

PED162	
DURATION:	semester course
CREDITS:	1
OPEN TO:	all students
PREREQUISITE:	none

Students will participate in fitness activities and games in the pool. This class will be an active heart rate driven class. Activities may include lap swimming, deep water jogging, deep-water aerobics, water-polo, water volleyball and active pool games. Class emphasis will be on water safety with students having the option to participate with flotation belts. Students will exhibit socially acceptable safe behavior in pool and locker room setting. Healthy lifestyle topics will also be included such as nutrition, sleep, and healthy habits. Students must provide their own shower products, swimsuit, and towel.

Alignment to the Shape of America National Physical Education Standards.

COMMENT: Prior to graduation, all students must demonstrate competency in cardiopulmonary resuscitation as required by the Iowa Core.

In this course, students will be introduced to activities designed to increase their likelihood of having an active lifestyle in the future. Students will have the opportunity to participate in a variety of fitness activities and games that include teamwork and strategizing. This class will be an active heart rate driven class. With effort, students can reach their personal target heart rate zones. This class will develop basic and intermediate skills of fitness- based workouts, cooperative games of challenge, individual-dual games, and team games and sports. Healthy lifestyle topics will also be included such as nutrition, sleep, and goal setting to improve social and emotional health. Assessments are based on SHAPE National Physical Education Standards and may include heart rate data, written work, and fitness testing.

Alignment to the Shape of America National Physical Education Standards.

COMMENT: Prior to graduation, all students must demonstrate competency in cardiopulmonary resuscitation as required by the Iowa Core.

PERFORMANCE PE

PED163	
DURATION:	semester course
CREDITS:	1
OPEN TO:	all students
PREREQUISITE:	none

This course is recommended for the serious fitness student. It will focus on knowledge of proper technique for lifts and safety in the weight room. Students will perform high intensity functional fitness that combines aerobic conditioning, strength training, core conditioning, and flexibility. Workouts will consist of a combination of strength training, plyometrics, speed & agility, flexibility as well as other fitness activities. Classroom work may focus on leadership activities, goal setting, nutrition, and other wellness topics. The emphasis is on creating a core fitness that can easily translate into daily activities and other sports. Assessments are based on SHAPE National Physical Education Standards and may include heart rate data, written work, and fitness testing.

Alignment to the Shape of America National Physical Education Standards.

COMMENT: Prior to graduation, all students must demonstrate competency in cardiopulmonary resuscitation as required by the Iowa Core.

ADVANCED PERFORMANCE PE

PED164	
DURATION:	semester course
CREDITS:	1
OPEN TO:	all students
PREREQUISITE:	successful completion of Performance PE and/or coach recommendation

This course is designed for serious athletes and fitness enthusiasts, offering a physically challenging experience. It requires knowledge and proper execution of lifting techniques, as well as adherence to weight room safety protocols. Students will engage in high-intensity, functional movements aimed at enhancing muscular strength, endurance, cardiorespiratory fitness, flexibility, and body composition. Classroom activities may cover leadership training, video analysis, sports nutrition, workout development, and maintaining a training log. The course emphasizes functional fitness and sport-specific training. Assessments are based on SHAPE National Physical Education Standards and may include heart rate data, written work, and fitness testing.

Alignment to the Shape of America National Physical Education Standards.

COMMENT: Prior to graduation, all students must demonstrate competency in cardiopulmonary resuscitation as required by the Iowa Core.

EARLY BIRD WELLNESS

PED171	
DURATION:	semester course
CREDITS:	1
OPEN TO:	all students
PREREQUISITE:	none

Students will perform functional fitness lessons that combine heart rate training, strength, and flexibility. This class will be an active heart rate driven class. With effort, students can reach their personal target heart rate zones. This class may consist of a combo of weight training, yoga, boot camp, kickboxing, fitness games or any activity taught in a health club setting. Healthy lifestyle topics will also be included such as nutrition, sleep, and healthy habits. Assessments are based on SHAPE National Physical Education Standards and may include heart rate data, written work, and fitness testing. Early Bird Wellness will be from 6:30-7:22 a.m., Monday through Thursday. Friday wellness will be journaling or lessons on canvas.

Alignment to the Shape of America National Physical Education Standards.

COMMENT: Prior to graduation, all students must demonstrate competency in cardiopulmonary resuscitation as required by the Iowa Core.

OFFICIATING I

PED180		
DURATION:	semester course	
CREDITS:	1	
OPEN TO:	all students	
PREREQUISITE: NONE		

In Officiating I, students will learn about rules, case studies and officiating mechanics of three high school sports including soccer, baseball and softball. Officiating uses webbased instructional modules, combined with interactives and activities to understand the mechanics and philosophy of officiating. Students will be exposed to patented point of view video scenarios allow learners to make the call and get instant feedback from their movements. Students then put what they learn into action by participating in practice/ scrimmage settings to hone mechanics and get a true feel for the game. Completion of the course, registering with the Iowa Girls High School Athletic Union (IGHSAU) for women's sports and the Iowa High School Athletic Association (IHSAA) for men's sports, and successful passing of the appropriate IGHSAU / IHSAA licensure exam allows for students to begin officiating middle and high school contests (sub-varsity contests only while a current HS student). This course is offered first semester.

Alignment to the Shape of America National Physical Education Standards.

COMMENT: Prior to graduation, all students must demonstrate competency in cardiopulmonary resuscitation as required by the Iowa Core.

OFFICIATING II

PED181	
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DURATION:	semester course
CREDITS:	1
OPEN TO:	all students
PREREQUISITE: NONE	

In Officiating II, students will learn about rules, case studies and officiating mechanics of three high school sports including football, basketball and volleyball. Officiating uses web-based instructional modules, combined with interactives and activities to understand the mechanics and philosophy of officiating. Students will be exposed to patented point of view video scenarios allow learners to make the call and get instant feedback from their movements. Students then put what they learn into action by participating in practice/scrimmage settings to hone mechanics and get a true feel for the game. Completion of the course, registering with the Iowa Girls High School Athletic Union (IGHSAU) for women's sports and the Iowa High School Athletic Association (IHSAA) for men's sports, and successful passing of the appropriate IGHSAU / IHSAA licensure exam allows for students to begin officiating middle and high school contests (sub-varsity contests only while a current HS student). This course is offered second semester.

Alignment to the Shape of America National Physical Education Standards.

COMMENT: Prior to graduation, all students must demonstrate competency in cardiopulmonary resuscitation as required by the Iowa Core.

ACADEMIC EXEMPTION

PED702		Students in G
CREDITS:	NO CREDIT	requirement periods for b
OPEN TO:	seniors with a full schedule in both semesters	In addition to academic exe
PREREQUISI	τε: parent signature and administrative approval	lf a student u

Students in Grade 12 are permitted an academic exemption from the physical education requirement if they have a full schedule of academic classes with no unscheduled periods for both semesters.

In addition to a full schedule, a written parent/guardian request is required for an academic exemption for all students.

If a student utilizes a physical education exemption and subsequently reduces his/her academic schedule, the student must make up the physical education requirement. Physical education exemptions must be requested by October 1 for the current school year.

COMMENT: Prior to graduation, all students must demonstrate competency in cardiopulmonary resuscitation as required by the State of Iowa. Students who are granted an academic exemption are NOT exempt from the CPR instruction requirement.

Students are permitted an athletic exemption from the physical education requirement if they have documented participation in two school sports. These sports include: men's or women's cross country, volleyball, football, women's swimming and diving,

ATHLETIC EXEMPTION

PED902	
CREDITS:	NO CREDIT
OPEN TO:	students with documented participation in two school sports
PREREQUISITE:	parent signature and administrative approval

men's or women's golf, fall cheerleading, men's or women's basketball, men's swimming, wrestling, winter cheerleading, men's or women's bowling, men's or women's track & field, men's or women's soccer, men's or women's tennis, baseball and softball. Summer sports must be completed prior to the school year to qualify a student for an exemption.

In addition to documented participation in school sports, a written parent/guardian request is required for an athletic exemption for all students.

If a student utilizes a physical education exemption and subsequently does not participate through the athletic season, the student must make up the physical education requirement. Physical education exemption paperwork must be completed by October 1 for the current school year.

COMMENT: Prior to graduation, all students must demonstrate competency in cardiopulmonary resuscitation as required by the Iowa Core. Students who are granted an athletic exemption are NOT exempt from the CPR instruction requirement.

FINANCIAL LITERACY COURSES

ct.	
credits.	
1 credit is required for graduation from the Dubuque Community School District.Credits earned beyond the requirement are automatically counted as Elective credits	

DURATION:	semester course
CREDITS:	1
OPEN TO:	juniors
PREREQUISITE	: none

Financial Literacy is a course designed for all students, whether going straight to work after high school or pursuing a degree. This course will allow students to actively explore timely financial topics personalized to their needs. Topics include: career decisions and income, savings, financial responsibility and money management, consumer awareness of the power of marketing on buying decisions, credit and debt, investments, wealthbuilding and post-secondary planning, insurance and risk-management, buying, selling, and renting advantages and disadvantages, and real-estate.

COMMENT: All students must take this course during their junior year. This is the only course that meets state requirements for Iowa Core Financial Literacy.

ADVANCED PLACEMENT ECONOMICS

SOC531 (Sem 1), SOC532 (Sem 2)		
DURATION:	year course	
CREDITS:	2	
OPEN TO:	juniors and seniors	
NCAA:	approved	
PREREQUISITE:	instructor recommendation	

Advanced Placement Economics is designed to acquaint students with the functions performed by the American economic system (Macroeconomics). An additional emphasis will be to prepare students to deal with the principles of economic decisionmaking by the individual and businesses (Microeconomic). This course is equivalent to an Introductory Principles of Economics course on the college/university level.

In addition, Advanced Placement Economics is designed to prepare students to take the Advanced Placement exams in Economics (Macroeconomics and Microeconomics) in the month of May of each year. Successful completion of these exams will result in college credits for the students. Students may earn college credit depending on the results of the examination.

A unit/thematic approach will be utilized in the teaching of Advanced Placement Economics. The general activities of the class will include lecture/discussion, reading assignments, the use of programmed instruction, doing research work from a variety of sources and appropriate audio-visual items. A seminar setting will be utilized as much as practical to enhance student understanding.

COMMENT: This course meets the state financial literacy requirement with completion of both semesters. When both semesters are taken students receive credit for Financial Literacy and an elective credit.

Alignment to the Iowa Core in Economics Grades 9-12: Understand how universal economic concepts present themselves in various types of economies throughout the world.

Alignment to the Iowa Core in Financial Literacy Grades 9-12: *The financial literacy* standards promote the goal of financial capability. The standards focus on setting goals, saving and spending, credit and debt, investing, and measuring financial risk.

WORLD LANGUAGE COURSES

World language courses count as elective credits toward high school graduation requirements. NOTE: All four-year colleges and universities have designated course requirements for admission, with many expecting two years of the same world language. Students who successfully complete four years of the same world language in high school may also meet a graduation requirement for some colleges and universities.

 \rightarrow Refer to PAGE 12 of this course guide for more information on college requirements.

FRENCH 1-2

WFR111 (Sem 1), WFR112 (Sem 2)

NCAA:	approved	
OPEN TO:	all students	
CREDITS:	2	
DURATION:	year course	

PREREQUISITE: NONE

(Due to the sequential nature of this course, students will be eligible for second semester if passing first semester.)

Beginning students study language that can be used in everyday communication. Students study French through a communicative approach. Students begin to communicate in the target language through interpersonal speaking and writing, presentational speaking and writing, and interpretive reading and listening. Students will expand their understanding of culture by studying various aspects of the Francophone world.

Activities, including a variety of formative and summative assessments, are designed to help students meet district standards and ACTFL Standards of Language Learning.

FRENCH 3-4

WFR211 (Sem 1), WFR212 (Sem 2)

DURATION:	year course
CREDITS:	2
OPEN TO:	sophomores, juniors, seniors
NCAA:	approved
PREREQUISITE:	minimum grade of "C-" in French 1-2 or instructor recommendation (Due to the sequential nature

(Due to the sequential nature of this course, students will be eligible for second semester if passing first semester.)

Students will build on the basics learned in French 1-2. Students develop their communication in the target through interpersonal speaking and writing, presentational speaking and writing, and interpretive reading and listening. Students will be expected to use the language in class.

A variety of learning activities using formative and summative assessments are designed to help students meet district and ACTFL standards of language learning.

FRENCH 5-6

WFR311 (Sem 1), WFR312 (Sem 2)

DURATION: year course CREDITS: 2 OPEN TO: juniors and seniors NCAA: approved		
CREDITS: 2	NCAA:	approved
	OPEN TO:	juniors and seniors
DURATION: Year Course	CREDITS:	2
	DURATION:	year course

PREREQUISITE: minimum grade of "C-" in French 3-4 or instructor recommendation (Due to the sequential nature of this course, students will be eligible for second semester if passing first semester.) Students deepen their communication in the target language through interpersonal speaking and writing, presentational speaking and writing, and interpretive reading and listening. The curriculum will emphasize more challenging use of the language.

A variety of learning activities using formative and summative assessments are designed to help students meet district and ACTFL standards of language learning. This class starts preparing students for college entrance exams, i.e. college placement tests, or the CLEP test.

FRENCH 7-8

WFR411 (Sem 1), WFR412 (Sem 2)

DURATION:	year course
CREDITS:	2
OPEN TO:	seniors
NCAA:	approved

PREREQUISITE: minimum grade of "C-" in French 5-6 or instructor recommendation (Due to the sequential nature of this course, students will be eligible for second semester if passing first semester.) Students communicate in the target language through interpersonal speaking and writing, presentational speaking and writing, and interpretive reading and listening to explore cultural themes. News articles, short stories, poems etc. will provide resources for students to develop a more extensive vocabulary and to expand their knowledge of Francophone culture and history. Students will delve deeper into the target language and culture as they continue to make comparisons and connections between English and the American culture and French and the culture of the Francophone world.

A variety of learning activities using formative and summative assessments are designed to help students meet district and ACTFL standards of language learning. This class prepares students for college entrance exams, i.e. college placement tests, or the CLEP test.

GERMAN 1-2

WGE131 (Sem 1), WGE132 (Sem 2)

DURATION:	year course
CREDITS:	2
OPEN TO:	all students
NCAA:	approved

PREREQUISITE: NONE

(Due to the sequential nature of this course, students will be eligible for second semester if passing first semester.) speaking world.

be expected to use the language in class.

GERMAN 3-4

WGE231 (Sem 1), WGE232 (Sem 2)

DURATION:	year course
CREDITS:	2
OPEN TO:	sophomores, juniors, seniors
NCAA:	approved
PREREQUISITE	minimum grade of "C-" in

PREREQUISITE: MINIMUM grade of "C-" in German 1-2 or instructor recommendation (Due to the sequential nature of this course, students will be eligible for second semester if passing first semester.)

GERMAN 5-6

WGE331 (Sem 1), WGE332 (Sem 2)

DURATION:	year course
CREDITS:	2
OPEN TO:	juniors and seniors
NCAA:	approved
PREREQUISITE:	minimum grade of "C-" in German 3-4 or instructor recommendation (Due to the sequential nature of this course, students will be eligible for second semester if passing first semester.)

speaking and writing, presentational speaking and writing, and interpretive reading and listening. The curriculum will emphasize more challenging use of the language. A variety of learning activities using formative and summative assessments are designed

Students deepen their communication in the target language through interpersonal

Beginning students study language that can be used in everyday communication. Students study German through a communicative approach. Students begin to communicate in the target language through interpersonal speaking and writing, presentational speaking and writing, and interpretive reading and listening. Students will expand their understanding of culture by studying various aspects of the German

Activities, including a variety of formative and summative assessments, are designed to

A variety of learning activities using formative and summative assessments are designed

help students meet district standards and ACTFL Standards of Language Learning.

Students will build on the basics learned in German 1-2. Students develop their communication in the target language through interpersonal speaking and writing, presentational speaking and writing, and interpretive reading and listening. Students will

to help students meet district and ACTFL standards of language learning.

A variety of learning activities using formative and summative assessments are designed to help students meet district and ACTFL standards of language learning. This class starts preparing students for college entrance exams, i.e. college placement tests, or the CLEP test.

GERMAN 7-8

WGE431 (Sem 1), WGE432 (Sem 2)	
DURATION:	year course
CREDITS:	2
OPEN TO:	seniors
NCAA:	approved
PREREQUISITE:	minimum grade of "C-" in German 5-6 or instructor recommendation (Due to the sequential nature of this course, students will be eligible for second semester if passing first semester.)

Students communicate in the target language through interpersonal speaking and writing, presentational speaking and writing, and interpretive reading and listening to explore cultural themes. News articles, short stories, poems etc. will provide resources for students to develop a more extensive vocabulary and to expand their knowledge of German culture and history. Students will delve deeper into the target language and culture.

A variety of learning activities using formative and summative assessments are designed to help students meet district and ACTFL standards of language learning. This class prepares students for college entrance exams, i.e. college placement tests, or the CLEP test.

SPANISH 1-2

WSP181 (Sem 1), WSP182 (Sem 2)

DURATION:	year course
CREDITS:	2
OPEN TO:	all students
NCAA:	approved

PREREQUISITE: NONE

(Due to the sequential nature of this course, students will be eligible for second semester if passing first semester.)

SPANISH 3-4

WSP281 (Sem 1), WSP282 (Sem 2)

DURATION:	year course
CREDITS:	2
OPEN TO:	sophomores, juniors, seniors
NCAA:	approved
PREREQUISITE:	minimum grade of "C-" in

Spanish 1-2 or instructor recommendation (Due to the sequential nature of this course, students will be eligible for second semester if passing first semester.)

Beginning students study language that can be used in everyday communication. Students study Spanish through a communicative approach. Students begin to communicate in the target language through interpersonal speaking and writing, presentational speaking and writing, and interpretive reading and listening. Students will expand their understanding of culture by studying various aspects of the Spanishspeaking world.

Activities, including a variety of formative and summative assessments, are designed to help students meet district standards and ACTFL Standards of Language Learning.

Students will build on the basics learned in Spanish 1-2. Students develop their communication in the target language through interpersonal speaking and writing, presentational speaking and writing, and interpretive reading and listening. Students will be expected to use the language in class.

A variety of learning activities using formative and summative assessments are designed to help students meet district and ACTFL standards of language learning.

Students deepen their communication in the target language through interpersonal speaking and writing, presentational speaking and writing, and interpretive reading and

A variety of learning activities using formative and summative assessments are designed to help students meet district and ACTFL standards of language learning. This class starts preparing students for college entrance exams, i.e. college placement tests, or the

listening. The curriculum will emphasize more challenging use of the language.

SPANISH 5-6

WSP381 (Sem 1), WSP382 (Sem 2)

DURATION:	year course
CREDITS:	2
OPEN TO:	juniors and seniors
NCAA:	approved
PREREQUISITE:	minimum grade of "C-" in Spanish 3-4 or instructor recommendation (Due to the sequential nature of this course, students will be eligible for second semester in

eligible for second semester passing first semester.)

CLEP test.

SPANISH 7-8

WSP481 (Sem 1), WSP482 (Sem 2)

DURATION:	year course
CREDITS:	2
OPEN TO:	seniors
NCAA:	approved
PREREQUISITE:	minimum grade of "C-" in Spanish 5-6 or instructor recommendation (Due to the sequential nature of this course, students will be eligible for second semester if passing first semester.)

Students communicate in the target language through interpersonal speaking and writing, presentational speaking and writing, and interpretive reading and listening to explore cultural themes. News articles, short stories, poems etc. will provide resources for students to develop a more extensive vocabulary and to expand their knowledge of the Spanish speaking culture and history. Students will delve deeper into the target language and culture.

A variety of learning activities using formative and summative assessments are designed to help students meet district and ACTFL standards of language learning. This class prepares students for college entrance exams, i.e. college placement tests, or the CLEP test.

ELECTIVE COURSES

ELECTIVES

CREDITS REQUIRED FOR GRADUATION

13 credits are required for graduation from the Dubuque Community School District.

ENGLISH

THEATRE

ENG163		Students will have the opportunity to explore the world of theatre onstage and
DURATION:	semester course	backstage. The course is designed to introduce students to all aspects of the theatre through the study of acting, improvisation, technical theatre, design and theatrical conventions. By the end of the semester, students will be able to create and perform theatrical works, both scripted and unscripted.
CREDITS:	1	
OPEN TO:	all students	
PREREQUISITE: NONE		Instruction, learning targets and assessments are based on alignment to the 2014 —— National Core Arts Standards in Theatre: Creating, Performing, and Responding.

ADVANCED THEATRE

ENG164		Students will expand their understanding of the world of theatre, onstage and
DURATION:	semester course	 backstage. The course is designed to apply all aspects of theatre through the study of acting, technical theatre, design and theatrical conventions. By the end of the semester, students will write, direct and produce an original scripted performance for an audience. Instruction, learning targets and assessments are based on alignment to the 2014 National Core Arts Standards in Theatre: Creating, Performing, Responding, and Connecting.
CREDITS:	1	
OPEN TO:	all students	
	Theatre and instructor recommendation	

CREATIVE WRITING

ENG357		This course is for students who have mastered basic composition skills and wish to
DURATION:	semester course	 continue to stretch and challenge themselves as writers. Writing forms that may be explored include memoir, literary nonfiction, essay, poetry, and drama. All students w
CREDITS:	1	create a multi-genre research project.
OPEN TO:	juniors and seniors	 Alignment to the Iowa Core Curriculum: Instruction, learning, and assessment are built primarily on the 11-12th grade-band expectations of the Iowa Core Writing and Language Strands.
NCAA:	approved	
PREREQUISITE: SUCCESSFUL completion of English 3-4		– Stidiius.

JOURNALISM

ENG359	
DURATION:	semester course
CREDITS:	1
OPEN TO:	all students
NCAA:	approved
PREREQUISITE:	none

Journalism is designed for strong writers who are interested in writing for publications. Student journalists will be expected to enterprise original story ideas and write news, feature, editorial, and sports stories. The journalistic techniques of editing, interviewing, layout, design, and research will also be covered. Students will learn about press law and ethics and are expected to adhere to these standards. Because of the interviewing requirements, it is necessary that students are outgoing and confident in their interpersonal skills.

Alignment to the Iowa Core Curriculum: *Instruction, learning, and assessment are built primarily on the 11-12th grade-band expectations of the Iowa Core Writing and Language Strands.*

FILM APPRECIATION I

ENG365	
DURATION:	semester course
CREDITS:	1
OPEN TO:	juniors and seniors
PREREQUISITE:	none

Film Appreciation I is a combination of viewing, written analysis and oral discussion of a variety of films spanning all decades and genres. Students are given an appreciation of the language of film and how films function as communication, entertainment and art. Discussion and writing activities will stress analysis, evaluation and comparison/contrast. In addition, students will be expected to use film concepts and vocabulary as they explore their understanding of this art form.

Alignment to the Iowa Core Curriculum: *Instruction, learning, and assessment are built on a selection of the 11-12th grade band expectations from the Iowa Core Reading, Writing, Listening and Speaking, and Language Strands.*

FILM APPRECIATION II

ENG366

DURATION:	semester course
CREDITS:	1
OPEN TO:	juniors and seniors
PREREQUISITE:	Film I with a grade of C or higher

YEARBOOK

ENG371 (Sem 1), ENG372 (Sem 2)

DURATION:	year course
CREDITS:	2
OPEN TO:	sophomores, juniors, seniors
PREREQUISITE:	Journalism and Yearbook staff application acceptance

In this course students study the styles and classic works of famous directors. Other famous classics and the film noir genre will also be studied. The student will view and react more independently than in Film Appreciation I and must be capable of summarizing, analyzing and interpreting symbolism and thematic statements.

Alignment to the Iowa Core Curriculum: Instruction, learning, and assessment are built on a selection of the 11-12th grade band expectations from the Iowa Core Reading, Writing, Listening and Speaking, and Language Strands.

Students in this course will publish a yearbook that reflects the school community, acts as a public relations tool for the school district, and serves as an education vehicle for students. Students are responsible for planning, organizing, designing and publishing the school yearbook. Students are also responsible for journalistic writing, editing, and photography. Desktop publishing and photo editing programs will be used to produce a professional-looking publication. Students are also expected to approach the business community for advertising opportunities.

Students must apply for staff positions including completing an application, teacher recommendation, and portfolio. Students and parents must agree to a staff contract.

Because interviews must be conducted and photos taken outside of class time, yearbook staff members must be willing to devote time after school to these responsibilities.

Alignment to the Iowa Core Curriculum: *Instruction, learning, and assessment are built on a selection of the 11-12th grade band expectations from the Iowa Core Writing Strand.*

COMMENT: This course may be repeated.

ENG381 (Sem 1), ENG382 (Sem 2)		Students in this class will be responsible for planning, organizing, designing, and
DURATION:	year course	publishing a school newspaper. Students are responsible for journalistic writing, editing, and photography. Desktop publishing and photo editing programs will be used to
CREDITS:	2	produce professional-looking publications. Students are expected to approach the business community for advertising opportunities.
OPEN TO:	sophomores, juniors, seniors	
PREREQUISITE: Journalism and Newspaper staff application acceptance		Students must apply for staff positions including completing an application, teacher recommendation, and portfolio. Students and parents must agree to a staff contract.
		Because interviews must be conducted and photos taken outside of class time, Newspaper staff members must be willing to devote time after school to these responsibilities.
		Alignment to the Iowa Core Curriculum: Instruction, learning, and assessment are built on a selection of the 11-12th grade band expectations from the Iowa Core Writing Strand.

COMMENT: This course may be repeated.

SCIENCE

NEWSDADED

SEMESTER PHYSICS

SCI183	
DURATION:	semester course
CREDITS:	1
OPEN TO:	sophomores, juniors, seniors
NCAA:	approved
PREREQUISITE:	PS9 Physics (or Honors), completion of Algebra II

This course is designed for students who have completed the PS-9 Physics course and desire further study in physics. This will be a continuation of the material from PS-9 Physics. Students will further develop critical thinking skills and mathematical application in the context of physics. In this course, a conceptual and analytical approach is taken in investigating and explaining the laws of the physical world. Concepts include: kinematics, forces, vectors, waves, and energy. Students will study these laws through laboratory experiments, demonstrations, and problem solving. This coupled with the PS-9 Physics (9th grade) course will be recognized by Iowa's Regent (State) Universities as 1 year of physics.

Alignment to the Iowa Core Science Standards: *HS-PS1 Matter and Its Interactions, HS-PS2 Motion and Stability: Forces and Interactions, HS-PS3 Energy and HS-PS4 Waves and Their Applications in Technologies for Information Transfer.*

SEMESTER CHEMISTRY

DURATION:	semester course
CREDITS:	1
OPEN TO:	sophomores, juniors, seniors
NCAA:	approved
PREREQUISITE:	PS9 Chemistry (or Honors),

completion or simultaneous enrollment in Algebra II

ANATOMY & PHYSIOLOGY

SCI271 (Sem 1), SCI272 (Sem 2)

CREDITS: 2 OPEN TO: Sophomores, juniors,	
NCAA: approved	seniors
PREREQUISITE: Biology and instructor recommendation	or

This course is designed for students who have completed the PS-9 Chemistry course and desire further study in chemistry. This will be a continuation of the material from PS-9 Chemistry. The course of study is designed to cover concepts of chemistry on a descriptive and quantitative level. Laboratory activities will be used to illustrate the important concepts. This course is designed to equip students with the background to understand how chemistry fits into everyday living. This coupled with the PS-9 Chemistry (9th grade) course will be recognized by Iowa's Regent (State) Universities as 1 year of chemistry.

Alignment to the Iowa Core Science Standards: *HS-PS1 Matter and Its Interactions and HS-PS3 Energy.*

This course is designed as an advanced biology course. It is intended to provide an elective credit for those students going into health related areas of study.

This course provides students with an in-depth understanding of the structure and function of the human body. It confronts medical issues and promotes a healthy lifestyle. A foundation in anatomical terminology, laboratory techniques and utilization of reference materials are parts of the course of study. Required dissection of the fetal pig is a major part of the course work.

Alignment to NICC Anatomy Lab Standards: *Instruction and experimentation in microscopy and dissection, with emphasis on the atomic, cellular, tissue and organ system levels of organization focusing on the human physiology including neurophysiology, respiratory physiology, lymphatic and immune functions, digestive physiology, and cardiovascular physiology.*

HONORS PHYSICS

SCI331 (Sem 1), SCI332 (Sem 2)

DURATION:	year course
CREDITS:	2
OPEN TO:	sophomores, juniors, seniors
NCAA:	approved
PREREQUISITE:	B- or higher in Honors Algebra II or instructor / GT facilitator recommendation

ADVANCED PLACEMENT BIOLOGY

SCI531 (Sem 1), SCI532 (Sem 2)		
DURATION:	year course	
CREDITS:	2	
OPEN TO:	sophomores, juniors, seniors	
NCAA:	approved	
PREREQUISITE:	Biology, PS9 Chemistry, and instructor recommendation	

This course is designed for the academically advanced student who desires a comprehensive background in physics to assist in future science studies. In this course, students will investigate and interpret physical phenomenon of everyday life. Scientific investigations, demonstrations, and problem solving are some of the techniques involved in explaining the how and why of the world's operations. Concepts include: kinematics, forces, vectors, waves, and energy. Conceptual understanding will be important, but quantifying the concepts will be emphasized.

Alignment to the Iowa Core Science Standards: *HS-PS1 Matter and Its Interactions, HS-PS2 Motion and Stability: Forces and Interactions, HS-PS3 Energy and HS-PS4 Waves and Their Applications in Technologies for Information Transfer.*

This course is designed to be equivalent to a college introductory biology course usually taken by biology majors during their first year. The course of study provides the student with the conceptual framework, knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. The primary focus will be on the student's ability to explain, analyze, and interpret biological procedures and phenomena. Laboratory work will focus on the student's ability to make detailed observations, accurate reading, and data interpretations. This course will prepare students to successfully take the AP examination in May, which could earn the students college credit based upon their results on the exam.

Alignment to the Iowa Core Science Standards: HS-LS1 From Molecules to Organisms: Structures and Processes and HS-LS3 Heredity: Inheritance and Variation of Traits. In Addition, it includes concepts in HS-LS2 Ecosystems: Interactions, Energy, and Dynamics and HS-LS4 Biological Evolution: Unity and Diversity. In addition the class will cover the four Advanced Placement Biology Big Ideas and the seven Advanced Placement Science Practices.

ADVANCED PLACEMENT CHEMISTRY

SCI561 (Sem 1), SCI562 (Sem 2)		
DURATION:	year course	
CREDITS:	2	
OPEN TO:	sophomores, juniors, seniors	
NCAA:	approved	
PREREQUISITE:	Algebra II, Biology, Semester Chemistry, and instructor recommendation	

This course is designed to be equivalent to a college introductory chemistry course usually taken by science majors in their first year. The course of study expands the students' understanding of chemical principles and their abilities to analyze and solve problems. Laboratory experiments enhance these objectives through the use of new techniques and equipment, while written lab reports demand critical interpretation of data and use of mathematical and verbal skills. This course will prepare students to successfully take the AP examination in May, which could earn the students college credit based upon their results on the exam.

Alignment to the Iowa Core Science Standards: *HS-PS1 Matter and Its Interactions and HS-PS3 Energy. In addition the class will cover the six Advanced Placement Chemistry Big Ideas and the seven Advanced Placement Science Practices.*

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FORENSICS

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| SC1602        |                                                                               |
|---------------|-------------------------------------------------------------------------------|
| DURATION:     | semester course                                                               |
| CREDITS:      | 1                                                                             |
| OPEN TO:      | sophomores, juniors, seniors                                                  |
| PREREQUISITE: | PS9 Chemistry (or Honors),<br>PS9 Physics (or Honors),<br>Biology (or Honors) |
|               |                                                                               |

# **ENVIRONMENTAL SCIENCE WITH LAB**

| SCI603        | SCI603                                 |  |
|---------------|----------------------------------------|--|
| DURATION:     | semester course                        |  |
| CREDITS:      | 1                                      |  |
| OPEN TO:      | juniors and seniors                    |  |
| PREREQUISITE: | Next Gen Global Science (or<br>Honors) |  |

This course is designed as an advanced biology course. It is intended to provide an elective credit for students who are interested in going into biology related areas of study. Forensic Science is a one semester course that develops critical thinking and problem-solving skills through the use of case studies and experimentation. Topics of study may include fingerprint identification, hair analysis, trace evidence examination, as well as DNA analysis and heredity. This course is an applied science that is rich in lab work and allows for students to practice science as inquiry.

Alignment to the Iowa Core Science Standards: *HS-LS3 Heredity: Inheritance and Variation of Traits, HS-ETS1 Engineering Design.* 

#### NICC CONCURRENT COLLEGE CLASS (ENV:115, ENV:116)

This course is an advanced biology and earth science course which looks at the basis of environmental science through humans influence on Earth. Topics of study include humans and nature, ecology, air, water, and soil resources, living resources, energy and mineral resources. Emphasis will be on scientific principles, inter-relationships among resources, and human impact on the environment.

Alignment to Standards: This course is aligned with the unit objects of the NICC Environmental Science and Environmental Science Lab courses. It also aligns with Iowa Core Science Standards: HS-ESS2 Earth's Systems and HS-ESS3 Earth and Human Activity.

COMMENT: This is a concurrent enrollment course. In addition to high school credit, students will earn 4 NICC college credits.

# OUTDOOR ECOLOGY

| SCI651        |                                                                                                               |
|---------------|---------------------------------------------------------------------------------------------------------------|
| DURATION:     | semester course                                                                                               |
| CREDITS:      | 1                                                                                                             |
| OPEN TO:      | juniors and seniors                                                                                           |
| PREREQUISITE: | completion or simultaneous<br>enrollment in Biology (or<br>Honors) and Next Gen Global<br>Science (or Honors) |

# SOCIAL STUDIES

# **ADVANCED PLACEMENT HUMAN GEOGRAPHY**

| SOC121 (Sem 1), SOC122 (Sem 2) |                           |  |
|--------------------------------|---------------------------|--|
| DURATION:                      | year course               |  |
| CREDITS:                       | 2                         |  |
| OPEN TO:                       | all students              |  |
| NCAA:                          | approved                  |  |
| PREREQUISITE:                  | instructor recommendation |  |

This course is designed as an advanced science course. It is intended as an elective credit for students who have an interest in environmental conservation of land and water resources of the Midwest. Topics of study will include principles of ecology, how living organisms survive and interact in an ecosystem, human impact on land and water, and designing solutions to Midwest conservation issues. Other topics of study may include terrestrial and aquatic ecosystems, wildlife, fisheries, and nature preserves. Labs, research, mathematic modeling, and projects will be used to explore these topics.

Alignment to the Iowa Core Science Standards: *HS-LS2 Ecosystems: Interactions, Energy* and *Dynamics, HS-LS4 Biological Evolution: Unity and Diversity, HS-ESS2 Earth's Systems, HS-ESS3 Earth and Human Activity; HS-ETS1 Engineering Design.* 

AP Human Geography is an introductory geography course designed to introduce students to the systematic study of patterns and processes that have helped shaped human understanding, use, and alteration of Earth's surface. Students will use various geographic models to examine human social organization and its environmental consequences. In addition, students will experiment and evaluate the usage of modern day geographic tools, including GPS and GIS. Goals include: Map usage and analyzing spatial data, understanding and interpreting correlative relationships between people, phenomenon, and places, recognizing and interpreting scale differences in global patterns and processes, analyzing areas as "regions" and their significance, identifying the interconnectivity among places.

Alignment to the lowa Core in Geography Grades 9-12: *The geography standards emphasize the human and physical characteristics of geography.* 

# ADVANCED PLACEMENT ECONOMICS

# SOC531 (Sem 1), SOC532 (Sem 2)

| DURATION:     | year course               |
|---------------|---------------------------|
| CREDITS:      | 2                         |
| OPEN TO:      | juniors and seniors       |
| NCAA:         | approved                  |
| PREREQUISITE: | instructor recommendation |

Advanced Placement Economics is designed to acquaint students with the functions performed by the American economic system (Macroeconomics). An additional emphasis will be to prepare students to deal with the principles of economic decision-making by the individual and businesses (Microeconomic). This course is equivalent to an Introductory Principles of Economics course on the college/university level.

In addition, Advanced Placement Economics is designed to prepare students to take the Advanced Placement exams in Economics (Macroeconomics and Microeconomics) in the month of May of each year. Successful completion of these exams will result in college credits for the students. Students may earn college credit depending on the results of the examination.

A unit/thematic approach will be utilized in the teaching of Advanced Placement Economics. The general activities of the class will include lecture/discussion, reading assignments, the use of programmed instruction, doing research work from a variety of sources and appropriate audio-visual items. A seminar setting will be utilized as much as practical to enhance student understanding.

COMMENT: This course meets the state financial literacy requirement with completion of both semesters. When both semesters are taken students receive credit for Financial Literacy and an elective credit.

Alignment to the Iowa Core in Economics Grades 9-12: Understand how universal economic concepts present themselves in various types of economies throughout the world.

Alignment to the Iowa Core in Financial Literacy Grades 9-12: *The financial literacy* standards promote the goal of financial capability. The standards focus on setting goals, saving and spending, credit and debt, investing, and measuring financial risk.

ART

# **ART 2D: DRAWING & PAINTING**

| semester course |
|-----------------|
| 1               |
| all students    |
| none            |
|                 |

In this introductory course students will explore and learn how to use the elements of visual design, a variety of materials, processes and techniques. Drawing, painting, and printmaking are explored. Students should anticipate a studio-based art class which may include creative problem solving, sketchbook studies/activities, production of artwork, critiques and self-reflection. Also introduced in the class are historical and contemporary trends in art, which are explored through visual examples. This class will serve as a foundation for careers in the arts and design. It is highly recommended to enroll in Art 3D in addition to Art 2D to gain a more complete understanding of art concepts and skills needed to be successful in advanced art courses.

Alignment to the 2014 National Core Arts Standards for Visual Arts: Creating, Presenting, Responding, and Connecting.

| ART 114       |                 |  |
|---------------|-----------------|--|
| DURATION:     | semester course |  |
| CREDITS:      | 1               |  |
| OPEN TO:      | all students    |  |
| PREREQUISITE: | none            |  |

ART 3D: CERAMICS (CLAY) & SCULPTURE

In this introductory course students will become familiar with and learn how to use the elements of visual design, a variety of materials, processes and techniques. Ceramics (clay) and other sculpture materials are explored. Students should anticipate a studiobased art class which may include creative problem solving, production of artwork, critiques, self-reflection, and quizzes. Also introduced in the class are historical and contemporary trends in art, which are explored through visual examples. This class will serve as a foundation for careers in the arts and design. It is highly recommended to enroll in Art 2D in addition to Art 3D to gain a more complete understanding of art concepts and skills needed to be successful in the advanced art courses.

Alignment to the 2014 National Core Arts Standards for Visual Arts: *Creating, Presenting, Responding, and Connecting.* 

# **DIGITAL ART 1**

| ART 115       |                      |
|---------------|----------------------|
| DURATION:     | semester course      |
| CREDITS:      | 1                    |
| OPEN TO:      | all students         |
| PREREQUISITE: | none                 |
| RECOMMEND:    | Art 2D and/or Art 3D |

Do you want to create stunning digital art? Are you considering a career in Graphic Design, Animation, Video Game Design, or Commercial/Industrial Design? Look no further! Digital Art I is the perfect starting point for aspiring digital artists.

In this exciting course, students will dive into the world of digital art, exploring the essential tools, concepts, and techniques used by professionals. You will get handson experience with industry-standard software like Adobe Illustrator, Adobe Fresco, among others. Additionally, you'll learn to use cutting-edge technology and digital art equipment such as Microsoft Surface Studio Pro 2 Computers, Meta Quest 3 Virtual Reality Headsets, and Wacom drawing tablets.

In this course, you will also have the opportunity to learn, analyze, and apply digital design concepts. You will present, share, and evaluate your work and that of your peers. You will also relate knowledge and personal experiences to create meaningful digital works of art.

This course is designed to ignite your creativity and help you develop the skills needed to succeed in the digital art world.

Alignment to the 2014 National Core Arts Standards for Visual Arts: *Creating, Presenting, Responding, and Connecting.* 

# **ADVANCED ART 2D (2 DIMENSIONAL)**

| ART211 (Sem 1), ART212 (Sem 2) |             |  |
|--------------------------------|-------------|--|
| DURATION:                      | year course |  |
| CREDITS:                       | 2           |  |

| OPEN TO:      | sophomores, juniors, seniors |
|---------------|------------------------------|
| PREREQUISITE: | Art 2D                       |

Advanced Art 2D is a continuation and expansion of Art 2D. Emphasis is placed on indepth studies in visual design, observational studies, drawing, painting and printmaking. Units will continue to focus on concept development, and the elements and principles of design to generate original and meaningful artwork and designs. Use inquiry methods of observation, research, and experimentation to explore a variety of themes such as identity, natural forms, human forms, social/cultural issues and everyday spaces and/or objects. Historical and contemporary trends in art will continue to be explored. Students should anticipate a studio-based art class, which may include creative problem solving, sketchbook studies/activities, production of artwork, critiques, self-reflection, and research.

Alignment to the 2014 National Core Standards for Visual Arts: *Creating, Presenting, Responding, and Connecting.* 

COMMENT: This course is designed as a full year course. Students may opt to complete only one semester, however, first semester is a prerequisite for the second semester of the course.

# ART 2D: PORTFOLIO

| ART217 (Sem 1), ART218 (Sem 2)        |                                                                                                                                          | This course allows interested students to do in-depth exploration and study of                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DURATION:                             | year course                                                                                                                              | <ul> <li>two-dimensional concepts. Students will reflect and build upon previous concepts,</li> <li>techniques, and art history gained in Advanced Art 2D and propose innovative</li> <li>ideas to generate original/creative artwork. Focus will be on portfolio development.</li> <li>Students selecting this class should have a strong interest in and understanding of</li> <li>two dimensional concepts. Students will develop a diverse bedy of work for their two</li> </ul> |
| CREDITS:                              | 2                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| OPEN TO:                              | juniors and seniors                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| PREREQUISITE: Art 2D, Advanced Art 2D | <ul> <li>two-dimensional concepts. Students will develop a diverse body of work for their two-<br/>dimensional art portfolio.</li> </ul> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                                       |                                                                                                                                          | Alignment to the 2014 National Core Art Standards for Visual Arts: Creating Presenting                                                                                                                                                                                                                                                                                                                                                                                               |

Alignment to the 2014 National Core Art Standards for Visual Arts: *Creating, Presenting, Responding, and Connecting.* 

COMMENT: This course may be repeated with advanced learning goals in techniques, concepts and art history.

| ART221 (Sem 1), ART222 (Sem 2) |                              |  |
|--------------------------------|------------------------------|--|
| DURATION:                      | year course                  |  |
| CREDITS:                       | 2                            |  |
| OPEN TO:                       | sophomores, juniors, seniors |  |
| PREREQUISITE:                  | Art 3D (Art 2D recommended)  |  |

Advanced Art 3D is a continuation and expansion of Art 3D. Emphasis is placed on in- depth studies in: three-dimensional visual design, ceramics, and sculpture materials and processes. Units will continue to focus on the elements and principles of design to generate original compositions. Historical and contemporary trends in art will continue to be explored. Students should anticipate a studio-based art class which may include creative problem solving, production of artwork, readings, critiques, self-evaluation, research, note taking, tests and quizzes.

Alignment to the 2014 National Core Art Standards for Visual Arts: *Creating, Presenting, Responding, and Connecting.* 

COMMENT: This course is designed as a full year course. Students may opt to complete one semester only. It is highly recommended to enroll in Art 2D prior to taking Advanced Art 3D to gain a more complete understanding of art concepts and skills needed to be successful in the Advanced Art 3D course.

# ADVANCED ART 3D (3 DIMENSIONAL)

# **PHOTOGRAPHY 1: BASIC**

| <b>ART223</b> |
|---------------|
|---------------|

| DURATION:     | semester course |
|---------------|-----------------|
| CREDITS:      | 1               |
| OPEN TO:      | all students    |
| PREREQUISITE: | none            |

Do you like to take photographs and want to learn more? Interested in commercial, studio, fine art, or hobby photography? This class will also serve as a foundation for careers in the arts and design.

Students will experience photography in a studio-based setting through a series of activities and projects including construction and operation of a pinhole camera, discussion of features common to both film and digital techniques, hands-on experience with processing black and white negatives and prints, working with photo chemicals, camera operations, and darkroom processes.

Activities may include an introduction to the history of photography, photographic careers and post-secondary educational possibilities. Students should anticipate an introduction to photographic design elements/composition, and creative assignments resulting in the presentation of photographs. Camera work may be required to be completed outside of school.

Assessments will include self and teacher evaluations, critiques, quizzes, and tests. Class requires a high level of student self-direction regarding studio work time, readings, note taking and refinement of creative ideas.

Alignment to the 2014 National Core Art Standards for Visual Arts: Creating, Presenting, Responding, and Connecting.

# **PHOTOGRAPHY: DARKROOM & FILM DEVELOPMENT**

| ART224        |                              |
|---------------|------------------------------|
| DURATION:     | semester course              |
| CREDITS:      | 1                            |
| OPEN TO:      | sophomores, juniors, seniors |
| PREREQUISITE: | Photography 1: Basic         |

Join us in Photography: Darkroom & Film Development to enhance your artistic skills and explore exciting career opportunities in the visual arts. This course builds on the foundational skills from Photo 1. This course offers a deeper dive into Image creation using film cameras, development and darkroom work.

Students will explore and expand on photographic techniques, advanced printing, and presentation methods learned in Photography 1: Basic. Expect to engage in creative problem-solving, multiple image assignments, and a thorough study of photo history and notable photographers. The course emphasizes hands-on learning with film cameras and darkroom printing, fostering both darkroom proficiency and artistic expression. Camera work will be required to be completed outside of school.

Assessments include self-assessment, teacher evaluations, and critiques, ensuring a comprehensive understanding of the material. This course not only prepares students for higher education in photography and visual arts but also opens doors to careers in photography, graphic design, digital art, photojournalism, and multimedia. Class requires a high level of student self-direction regarding studio work time, note taking and refinement of creative ideas.

Alignment to the 2014 National Core Art Standards for Visual Arts: Creating, Presenting, Responding, and Connecting.

COMMENT: Camera work is required to be completed out of school.

# **PHOTOGRAPHY: DIGITAL & PHOTO EDITING**

| ART225        |                              |
|---------------|------------------------------|
| DURATION:     | semester course              |
| CREDITS:      | 1                            |
| OPEN TO:      | sophomores, juniors, seniors |
| PREREQUISITE: | Photography 1: Basic         |

This course builds on the foundational skills from Photo 1. This course offers a deeper dive into digital photography and photo editing software, adhering to the National Core Arts Standards for Visual Arts: Creating, Presenting, Responding, and Connecting.

Students will explore complex photographic techniques, advanced printing, and presentation methods. Expect to engage in creative problem-solving, multiple image assignments, and a thorough study of photo history and notable photographers. The course emphasizes hands-on learning with digital cameras and editing software, fostering both technical proficiency and artistic expression.

Assessments include self and teacher evaluations, critiques, and guizzes, ensuring a comprehensive understanding of the material. This course not only prepares students for higher education in visual arts but also opens doors to careers in photography, graphic design, digital art, photojournalism, and multimedia.

Join us in Photography: Digital & Photo Editing to enhance your artistic skills and explore exciting career opportunities in the visual arts.

Alignment to the 2014 National Core Art Standards for Visual Arts: Creating, Presenting, Responding, and Connecting.

COMMENT: Camera work is required to be completed out of school.

# **ART 3D: PORTFOLIO**

ART227 (Sem 1), ART228 (Sem 2)

| DURATION:     | year course             |
|---------------|-------------------------|
| CREDITS:      | 2                       |
| OPEN TO:      | juniors and seniors     |
| PREREQUISITE: | Art 3D, Advanced Art 3D |

This course allows interested students to do in-depth exploration and study of three-dimensional concepts. Students will reflect and build upon previous concepts, techniques, and art history gained in Advanced Art 3D and propose innovative ideas to generate original/creative artwork. Focus will be on portfolio development. Students selecting this class should have a strong interest and understanding of three-dimensional concepts. Students will develop a diverse body of work for their three-dimensional art portfolio.

Alignment to the 2014 National Core Art Standards for Visual Arts: *Creating, Presenting, Responding, and Connecting.* 

COMMENT: This course may be repeated with advanced learning goals in techniques, concepts and art history.

# **PHOTOGRAPHY 3: PORTFOLIO**

| ART623        |                                                                                                                                                         |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| DURATION:     | semester course                                                                                                                                         |
| CREDITS:      | 1                                                                                                                                                       |
| OPEN TO:      | juniors and seniors                                                                                                                                     |
| PREREQUISITE: | Photography 1: Basic,<br>Photography: Darkroom &<br>Film Development and/or<br>Photography: Digital & Photo<br>Editing and instructor<br>recommendation |

Photography 3: Portfolio is an elective, advanced semester of photography. This course allows interested students to do in-depth exploration and study in the area of photography. The class is based on traditional black and white photographic techniques, most of which readily transfer to digital photography. Emphasis is placed on extended projects, concept development as well as advanced photographic techniques. Students should anticipate hands-on projects, demonstrations, readings, writing, quizzes, portfolio development and class exhibitions. Students selecting this course should have a strong interest and abilities in photography and the ability to work independently.

Alignment to the 2014 National Core Art Standards for Visual Arts: *Creating, Presenting, Responding, and Connecting.* 

COMMENT: Camera work is required to be completed out of school. This course may be repeated with advanced learning goals in camera and darkroom techniques and art history and a focus on portfolio development and presentation.

# **BUSINESS EDUCATION**

# INTRODUCTION TO BUSINESS

| DOJITI |
|--------|
|--------|

| DURATION:     | semester course |
|---------------|-----------------|
| CREDITS:      | 1               |
| OPEN TO:      | all students    |
| PREREQUISITE: | none            |

This course will introduce students to the world of business. Well over half of all careers are in the field of business and this course will give students the background needed to enroll in other business courses. The major units covered in the course include: careers in business, owning and operating a business, marketing, advertising, economics, banking services and credit, accounting, the role of the consumer in the marketplace, technology in the marketplace, and international business.

Alignment to the Iowa Core 21st Century Skills: Communicate and work productively with others, incorporating different perspectives and cross cultural understanding, to increase innovation and the quality of work. (21.9-12.ES.1)

# **COMPUTER ESSENTIALS**

| BUS121        |                 |
|---------------|-----------------|
| DURATION:     | semester course |
| CREDITS:      | 1               |
| OPEN TO:      | all students    |
| PREREQUISITE: | none            |
|               |                 |

Computer Essentials provides students with essential technology literacy skills for current and future academic and career success. The course begins with an introduction to Microsoft Office 365--the most commonly used software in the business world--and its various applications.

The course then takes students into an in-depth exploration of Microsoft Office 365. Students will learn about various Office 365 tools such as Word, PowerPoint, Excel, OneNote, Mail, Calendar, OneDrive, Forms, and To Do. Throughout the course, students will learn what it means to be effective digital citizens, including digital footprint & reputation, privacy & security, information literacy, and Internet safety.

COMMENT: Students who participate in this course will have the opportunity to become Microsoft Word and/or Microsoft Excel certified by passing a supervised exam through Certiport. Passing the exam will certify the student as a Microsoft Office Specialist and better prepare students for college and careers.

Alignment to the Iowa Core 21st Century Skills: *Demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. (21.9-12.TL.1); Apply digital tools to gather, evaluate, and use information. (21.9-12.TL.3)* 

# ACCOUNTING I

**ACCOUNTING II** 

1

PREREQUISITE: Accounting I

**ENTREPRENEURSHIP** 

1

PREREQUISITE: NONE

BUS312

DURATION:

CREDITS:

OPEN TO:

BUS335

DURATION:

CREDITS:

OPEN TO:

BUS441

DURATION:

| DURATION:     | semester course              |
|---------------|------------------------------|
| CREDITS:      | 1                            |
| OPEN TO:      | sophomores, juniors, seniors |
| PREREQUISITE: | none                         |

semester course

semester course

sophomores, juniors, seniors

sophomores, juniors, seniors

Accounting is the language of business. Accounting helps people understand business in their careers and in their personal lives. Managers and owners use accounting information as the basis for making business decisions. Accurate accounting records and ethical practices contribute to the success of a business and help to avoid failure and bankruptcy. Accounting I is designed to give students a comprehensive understanding of business operations and provides the financial foundation necessary for employees in a variety of business occupations. Students will learn terminology, how to analyze, journalize and post entries to a general ledger, and how to prepare financial reports for three different forms of business ownership. A special feature of the course includes computerized simulations that are used to give students practical application of accounting concepts.

Alignment to the Iowa Core 21st Century Skills: Adapt to various roles and responsibilities and work flexibly in climates of ambiguity and changing priorities. (21.9-12.ES.2)

This course is a continuation of Accounting I. In Accounting II, students will learn a variety of methods used in adjustments, budgeting procedures, departmental accounting, cost accounting, and corporate and partnership financing. Financial decision-making will be incorporated throughout this course.

Alignment to the Iowa Core 21st Century Skills: Demonstrate initiative and self-direction through high achievement and lifelong learning while exploring the ways individual talents and skills can be used for productive outcomes in personal and professional life. (21.9-12.ES.4)

Being your own boss and owning your own business are the foundations of the American Dream. Entrepreneurship contains an overview of starting and operating your own business. Learn about the fascinating inner workings of owning and operating your own business. The units of study focus on organizing a business, buying an existing business, buying a franchise business, writing a business plan, managing the operations, marketing, and financing of a business. Students will learn the traits and characteristics of successful entrepreneurs and develop an entrepreneurial mindset. Students will apply appropriate business concepts to establish and run their own business.

Alignment to the Iowa Core 21st Century Skills: Demonstrate leadership skills, integrity, ethical behavior, and social responsibility while collaborating to achieve common goals. (21.9-12.ES.3); Demonstrate initiative and self-direction through high achievement and lifelong learning while exploring the ways individual talents and skills can be used for productive outcomes in personal and professional life. (21.9-12.ES.4)

**MARKETING & SALES/ADVERTISING** Marketing touches the lives of people on a daily basis as family members, consumers, and employees. Nike, Google, John Deere, and Apple are examples of companies that flourish in part because of their extremely successful marketing campaigns. This course will cover the following topics: careers in marketing, sales, and advertising, managing a marketing business, marketing research, economic systems, the sales process, psychology of the customer, building an advertising plan and budget, and developing commercials.

> Alignment to the Iowa Core 21st Century Skills: Communicate and work productively with others, incorporating different perspectives and cross cultural understanding, to increase innovation and the quality of work. (21.9-12.ES.1)

# IJAG 11-12 BUS501 (Sem 1), BUS502 (Sem 2)

| •             | • •                                              | •        | •       |
|---------------|--------------------------------------------------|----------|---------|
| DURATION:     | year course                                      |          |         |
| CREDITS:      | 2                                                |          |         |
| OPEN TO:      | juniors and s                                    | eniors   |         |
| PREREQUISITE: | successful co<br>informative in<br>by the IJAG S | ntake in | terview |

The iJAG (Iowa's Jobs for America's Graduates) elective course focuses on Seven Essential Constructs: Career Readiness, Character and Self Development, Communication and Technology, Critical Thinking and Productivity, Life Skills, Self-Advocacy & Conflict Resolution, and Work Based Learning. 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 has a student-led Career Association where students focus on careers, leadership, and social and civic responsibility. Students will participate in statewide conferences with an opportunity to attend national conferences showcasing their talents in competitions involving careers and employment opportunities. iJAG students are given the opportunity to experience work based learning through job shadowing, internships, apprenticeships and on-the-job-training. The iJAG class will support young leaders to find their passion and purpose through individualized planning and then connect them with the resources they need to move into the workforce and thrive.

COMMENT: Additionally, seniors will receive 12 months of school-to-work follow up services after high school.

# semester course

| CREDITS:      | 1                   |
|---------------|---------------------|
| OPEN TO:      | juniors and seniors |
| PREREQUISITE: | none                |
|               |                     |

# IJAG 9-10

# BUS503 (Sem 1), BUS504 (Sem 2)

| DURATION:     | year course                                           |
|---------------|-------------------------------------------------------|
| CREDITS:      | 2                                                     |
| OPEN TO:      | freshmen and sophomores                               |
| PREREQUISITE: | successful completion of informative intake interview |

by the IJAG Specialist

The iJAG (Iowa's Jobs for America's Graduates) elective course focuses on Seven Essential Constructs: Career Readiness, Character and Self Development, Communication and Technology, Critical Thinking and Productivity, Life Skills, Self-Advocacy & Conflict Resolution, and Work Based Learning. 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 has a student-led Career Association where students focus on careers, leadership, and social and civic responsibility. Students will participate in statewide conferences with an opportunity to attend national conferences showcasing their talents in competitions involving careers and employment opportunities. iJAG students are given the opportunity to experience work based learning through job shadowing, internships, apprenticeships and on-the-job-training. The iJAG class will support young leaders to find their passion and purpose through individualized planning and then connect them with the resources they need to move into the workforce and thrive.

COMMENT: Additionally, seniors will receive 12 months of school-to-work follow up services after high school.

# DRIVER EDUCATION

# **DRIVER EDUCATION** 1

CREDITS

Driver Education is offered and made available for students residing in the Dubuque Community School District. Dubuque Community School District contracts with Northeast Iowa Community College (NICC) to offer an approved driver education course before school, after school, on weekends, and during the summer at Hempstead, Dubuque Senior or the NICC Downtown Campus.

Students may register for the NICC course through NICC Driver Education - Northeast lowa Community College (nicc.edu). Students must complete a registration form, attach a photocopy of a current Iowa Driver's Permit, and enclose a non-refundable fee payment as determined by the Board of Education annually. Students who qualify for a fee waiver may have this fee adjusted. Registration is accepted on a first come-first served basis.

If you complete driver education through NICC or another private instructor, you are eligible to receive credit toward graduation. To earn credit students must turn in a certificate of completion from the Driver Education Instructor or have the driver education instructor complete a Verification of Driver Education Coursework for High School Credit form. Forms are available in the school counseling office. Completed forms should be returned to the Registrar Office.

# EMERGENCY MEDICAL TECHNICIAN

# EMT600 DURATION: SEMESTER COURSE CREDITS: 2 OPEN TO: SENIORS PREREQUISITE: SEE program admission

requirements listed in course description This 132-hour course prepares the Emergency Medical Technician (EMT) student to provide pre-hospital assessment and care for patients of all ages with a variety of medical conditions and traumatic injuries. Areas of study include an introduction to emergency medical services, roles and responsibilities of an EMT, anatomy and physiology, medical emergencies, trauma, special considerations for working in the prehospital setting, and providing patient transportation. Students who successfully complete this class will be eligible to take the National Registry of Emergency Medical Technicians for their EMT certification examination. Prior to the first class, a MANDATORY orientation will be scheduled.

NICC CONCURRENT COLLEGE CLASS (EMS:200)

This course is designed for students interested in exploring a career in the Emergency and Fire Management Services career pathway, in the Law, Public Safety, Corrections & Security career cluster, or in the Health Science career cluster. This includes but is not limited to the following occupations: Certified Nurse Aide (CNA), Emergency Medical Technicians, Emergency Medicine Physicians, Fire Inspectors and Investigators, Firefighters, Paramedics, Police and Sheriff's Patrol Officers, and Nurse Practitioners.

Learn more about career options at: www.dbqschools.org/career-exploration

Program Admission Requirements:

- Must be at least 17 years of age by the first day of class to enroll.
- Must have health insurance.
- CPR Certificate from either the American Heart Association Basic Life Support (BLS) or the American Red Cross CPR for Healthcare Providers. The card must be provided to the instructor prior to the first class. This certification must be valid for the duration of the course.
- Other admissions requirements apply, including but not limited to background checks, health records, and drug testing.

Students are responsible for required background check fee and TB skin test fees, uniform and supplies and the optional state licensure exam fee. Students are responsible for their own transportation to labs and clinicals.

COMMENT: This is a concurrent enrollment course. In addition to high school credit, students will earn 8 college credits at NICC. Due to college registration deadlines, late registrations will be scheduled into second semester if space is available. Contact your school counselor and/or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.

# FAMILY AND CONSUMER SCIENCES

# NUTRITION AND FOOD PREPARATION

| DURATION: SEMESTER COURSE |  |
|---------------------------|--|
| credits: 1                |  |
| OPEN TO: all students     |  |
| PREREQUISITE: NONE        |  |

# CHILD HEALTH, SAFETY & NUTRITION

| FCS235        |                              |
|---------------|------------------------------|
| DURATION:     | semester course              |
| CREDITS:      | 1                            |
| OPEN TO:      | sophomores, juniors, seniors |
| PREREQUISITE: | none                         |
|               |                              |

In this course, students will apply nutrition principles to personal diet planning; develop skills in the selection, care and preparation of a variety of food. Students will develop skills in meal management to meet individual and family food needs and understand principles of economics and ecology for cost savings. Labs are designed to help students learn safe food preparation techniques.

Alignment to the Iowa Core Curriculum: Adapt to various roles and responsibilities and work flexibly in climates of ambiguity and changing priorities. (21.9-12.ES.2)

# NICC CONCURRENT COLLEGE CLASS (ECE:133)

This course addresses the interrelationship of health, safety, and nutrition to the growth and development of young children (age 2-5) and their importance in developing early childhood educational experiences. Learning activities center around the conditions affecting children's health, management of acute and chronic illness, general safety principles in planning the young child's environment, nutrient composition of foods, and the relationship of nutrients to growth, motor cognitive and emotional development of the young child.

COMMENT: This course is credited towards a degree in early childhood education at NICC and their affiliated schools. This is a concurrent enrollment course in which the student will receive 3 college credits in addition to high school credit. Contact your school counselor and/or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.

#### **INFANT / TODDLER CARE & EDUCATION**

#### NICC CONCURRENT COLLEGE CLASS (ECE:221)

| FCS245        |                              |
|---------------|------------------------------|
| DURATION:     | semester course              |
| CREDITS:      | 1                            |
| OPEN TO:      | sophomores, juniors, seniors |
| PREREQUISITE: | none                         |

This course emphasizes the growth and development of infants and toddlers and issues critical to their care. Concentration is focused on their social, emotional, physical, and mental development. Age appropriate practices, curriculum, and environments will be studied and developed to enhance the preparation of the early childhood educator. You will be required to do 16 hours of field experience.

COMMENT: This course is credited towards a degree in early childhood education at NICC and their affiliated schools. This is a concurrent enrollment course in which the student will receive 3 college credits in addition to high school credit. Contact your school counselor and/or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.

|                                                         | HILDHOOD CURRICULUM I        | NICC CONCURRENT COLLEGE CLASS (ECE:158)                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |
|---------------------------------------------------------|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| FCS255                                                  |                              | This course focuses on the development, implementation, and assessment of age                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| DURATION:                                               | semester course              | appropriate environments and curricula for young children ages 3-8 years. Learning activities will focus on developing appropriate learning opportunities, interactions                                                                                                                                                                                                                                                                                                             |  |
| CREDITS:                                                | 1                            | and environments within the areas of dramatic play, art, music, and small and large                                                                                                                                                                                                                                                                                                                                                                                                 |  |
| OPEN TO:                                                | sophomores, juniors, seniors | muscle motor play. Students will be expected to demonstrate their understanding of                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| PREREQUISIT                                             | re: none                     | children's developmental stages through the creation of age appropriate practices and/ or curriculum.                                                                                                                                                                                                                                                                                                                                                                               |  |
|                                                         |                              | COMMENT: This course is credited towards a degree in early childhood education at NICC and their affiliated schools. This is a concurrent enrollment course in which the student will receive 3 college credits in addition to high school credit. Contact your                                                                                                                                                                                                                     |  |
|                                                         |                              | school counselor and/or the admissions office of the postsecondary institution you plan<br>to attend for more information on the transferability of the credits.                                                                                                                                                                                                                                                                                                                    |  |
| CHILD G                                                 | ROWTH & DEVELOPMENT          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
|                                                         | ROWTH & DEVELOPMENT          | to attend for more information on the transferability of the credits.<br><b>NICC CONCURRENT COLLEGE CLASS (ECE:170)</b><br>This course reviews typical and atypical development of children from conception to                                                                                                                                                                                                                                                                      |  |
| FCS275                                                  | ROWTH & DEVELOPMENT          | to attend for more information on the transferability of the credits.<br><b>NICC CONCURRENT COLLEGE CLASS (ECE:170)</b><br>This course reviews typical and atypical development of children from conception to<br>adolescence in all developmental domains. Interactions between child, family, and                                                                                                                                                                                 |  |
| FCS275                                                  |                              | to attend for more information on the transferability of the credits.<br><b>NICC CONCURRENT COLLEGE CLASS (ECE:170)</b><br>This course reviews typical and atypical development of children from conception to<br>adolescence in all developmental domains. Interactions between child, family, and<br>society with a variety of community and cultural contexts will be examined, as well as<br>theories and evidence based practices associated with understanding and supporting |  |
| CHILD GF<br>FCS275<br>DURATION:<br>CREDITS:<br>OPEN TO: | semester course              | to attend for more information on the transferability of the credits.<br><b>NICC CONCURRENT COLLEGE CLASS (ECE:170)</b><br>This course reviews typical and atypical development of children from conception to<br>adolescence in all developmental domains. Interactions between child, family, and<br>society with a variety of community and cultural contexts will be examined, as well as                                                                                       |  |

| FCS301      |                              | NICC CONCURRENT COLLEGE CLASS (EDU:210)                                                                                                                                   |  |
|-------------|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|             |                              | This course provides a basic historical, philosophical, and sociological orientation to the                                                                               |  |
| DURATION:   | semester course              | field of American education, including a study of contemporary issues and problems.                                                                                       |  |
| CREDITS:    | 1                            | COMMENT: This is a concurrent enrollment course. In addition to high school credit,<br>students will earn 3 college credits at NICC. Contact your school counselor and/or |  |
| OPEN TO:    | sophomores, juniors, seniors | the admissions office of the postsecondary institution you plan to attend for more                                                                                        |  |
| PREREQUISIT | re: none                     | information on the transferability of the credits.                                                                                                                        |  |

#### **INTRODUCTION TO TEACHING**

| FCS303        |                 |  |
|---------------|-----------------|--|
| DURATION:     | semester course |  |
| CREDITS:      | 1               |  |
| OPEN TO:      | all students    |  |
| PREREQUISITE: | none            |  |

This course is designed for students who are interested in exploring a career in education. It's like getting your own personal coaching and mentoring to become a future teacher.

You'll get to experience what it's like to work with students in elementary, middle, or high school and learn all about the exciting world of teaching. We'll cover important topics like how to be a professional, how to help others, and how to be respectful to people from different backgrounds.

Not only that, but you'll also have the chance to go out into the real world and observe teachers in action. Think of it as on-the-job training! Plus, we'll help you develop leadership skills so you can become a positive force in your school and community.

This course is the perfect starting point on your journey to becoming a teacher in our school district. It's like having your very own personal trainer for your teaching career!.

Alignment to the Iowa Core Curriculum: *Demonstrate leadership skills, integrity, ethical behavior, and social responsibility while collaborating to achieve common goals. (21.9-12.ES.3)* 

# INTRODUCTION TO CHILD DEVELOPMENT

| FCS304        |                 |
|---------------|-----------------|
| DURATION:     | semester course |
| CREDITS:      | 1               |
| OPEN TO:      | all students    |
| PREREQUISITE: | none            |

This course evaluates how children grow, develop, and learn. Students learn how families plan and prepare for parenting, pregnancy, and childbirth and how to work with and care for children as they grow. Students evaluate the physical, intellectual, and social-emotional development of infants, toddlers, preschoolers, and school-age children.

Additional topics include parenting styles and techniques, child abuse, foster care, adoption, and real-life discussions with guest speakers from community health partners!

Alignment to the Iowa Core Curriculum: *Demonstrate initiative and self-direction through high achievement and lifelong learning while exploring the ways individual talents and skills can be used for productive outcomes in personal and professional life. (21.9-12.ES.4)* 

#### **INTERPERSONAL RELATIONSHIPS/STUDIES**

| FCS305        |                 |
|---------------|-----------------|
| DURATION:     | semester course |
| CREDITS:      | 1               |
| OPEN TO:      | all students    |
| PREREQUISITE: | none            |
|               |                 |

Welcome to Interpersonal Relationships/Studies! In this exciting course, you'll learn valuable skills that will help you navigate your journey into adulthood with confidence. We'll explore the art of effective communication, helping you build strong connections with others, whether it's with friends, family, or future colleagues.

Throughout the course, we'll delve into the exciting world of personal growth, marriage, family dynamics, and career aspirations. You'll discover how to balance these important aspects of life and learn how to adapt to changes and overcome challenges.

But that's not all! We'll also dive deep into the secrets of successful relationships, teaching you how to listen actively, express yourself clearly, and resolve conflicts peacefully. You'll gain the tools you need to create positive connections and handle both the ups and downs of life with skill and grace.

Alignment to the Iowa Core Curriculum: *Communicate and work productively with others, incorporating different perspectives and cross cultural understanding, to increase innovation and the quality of work. (21.9-12.ES.1)* 

| THE COLLEGE EXPERIENCE |                     | NICC CONCURRENT COLLEGE CLASS (SDV:179)                                                                                                                                                                                                                                                                                                |
|------------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FCS306                 |                     | College is a new and different experience for many students. This course will convey                                                                                                                                                                                                                                                   |
| DURATION:              | semester course     | <ul> <li>expectations of the college culture to first- time college students. The course will provide</li> <li>an examination of the student's learning styles, familiarization with college resources</li> </ul>                                                                                                                      |
| CREDITS:               | 1                   | and support services, review of important study and test taking skills, development of                                                                                                                                                                                                                                                 |
| OPEN TO:               | juniors and seniors | goal setting and decision making skills, and enhancement of personal skills that relate<br>directly to success in college, and beyond.                                                                                                                                                                                                 |
| PREREQUISITE: NONE     |                     | <ul> <li>COMMENT: This is a concurrent enrollment course in which the student will receive 3 college credits in addition to high school credit. Contact your school counselor and/ or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.</li> </ul> |

#### **CAREERS IN HUMAN SERVICES**

| FCS307        |                              |
|---------------|------------------------------|
| DURATION:     | semester course              |
| CREDITS:      | 1                            |
| OPEN TO:      | sophomores, juniors, seniors |
| PREREQUISITE: | none                         |

Welcome to an exciting adventure in the world of Human Services! This course is like a treasure map for students who are curious about helping people.

Get ready to discover a whole bunch of awesome career possibilities where you can make a real difference in people's lives. We'll explore everything from taking care of kids and helping with mental health to supporting families and even working in cool places like restaurants and travel destinations.

During our journey, we'll dive into exciting topics like child development, counseling, community support, personal care, and how to be a smart consumer. Think of it as unlocking the secrets to making the world a better place!

We'll explore paths like becoming a childcare expert, a superhero for mental health, a community champion, a personal care guru, a savvy shopper, a culinary artist, a travel guide, and even a future teacher or trainer.

So, get ready to embark on a fun and eye-opening journey in the Human Services Career Cluster. Who knows? You might just discover your dream job along the way!.

Alignment to the Iowa Core Curriculum: *Apply critical literacy/thinking skills related to personal, family and community wellness. (21.9-12.HL.3)* 

# FRESHMAN SEMINAR

#### **FRESHMAN SEMINAR**

| TSC100        |                 |
|---------------|-----------------|
| DURATION:     | semester course |
| CREDITS:      | 1               |
| OPEN TO:      | freshmen        |
| PREREQUISITE: | none            |

This course is designed to assist students with the transition to high school. This course will teach and reinforce skills needed to be successful in the high school environment. Topics covered include basic school information, technology in high school, graduation requirements and four year planning, successful academic behaviors and preparing for post-secondary.

Alignment to Iowa Core 21st Century Skills Standards

# HEALTH

#### HEALTH I

| HTH101                    | Health I will provide students with knowledge in the areas of personal health,                                                                                                |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DURATION: SEMESTER COURSE | environmental health, consumer health, substance abuse and nonuse, human sexuality,<br>emotional and social health, health resources, and prevention and control of diseases. |
| CREDITS: 1                | Alignment to the National Health Education Standards.                                                                                                                         |
| OPEN TO: all students     | COMMENT: This course fulfills the Iowa Core mandate for health literacy.                                                                                                      |
| PREREQUISITE: NONE        | COMPLAT. This course fulling the lower core mandate for health itteracy.                                                                                                      |

#### **HEALTH II**

| HTH102     |                 | Health II will build upon the information provided in Health I and continue to develop                                                                             |
|------------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DURATION:  | semester course | knowledge in the areas of personal health, environmental health, consumer health, substance abuse and nonuse, human sexuality, emotional and social health, health |
| CREDITS:   | 1               | resources, and prevention and control of diseases.                                                                                                                 |
| OPEN TO:   | all students    | Alignment to the National Health Education Standards.                                                                                                              |
| PREREQUISI | re: Health I    |                                                                                                                                                                    |
|            |                 |                                                                                                                                                                    |

# HEALTH SCIENCES

# HEALTH OCCUPATIONS NICC CONCURRENT COLLEGE CLASS (HSC:110) HSC110 This course is an orientation to the institutions that make up our health care system. Students explore the health care system and the ethical, legal, and safety issues

| DURATION:   | semester course     |  |
|-------------|---------------------|--|
| CREDITS:    | 1                   |  |
| OPEN TO:    | juniors and seniors |  |
| PREREQUISIT | E: NONE             |  |

influencing and regulating health practice and maintenance. The course explores health career pathways in therapeutic, diagnostic, health informatics, and support services. COMMENT: This is a concurrent enrollment course. In addition to high school credit, students will earn 3 college credits at NICC. Contact your school counselor and/or

students will earn 3 college credits at NICC. Contact your school counselor and/or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.

#### NICC CONCURRENT COLLEGE CLASS (HSC:114)

This course is the study of medical terminology as the language of medicine with emphasis on word analysis, construction of definitions, pronunciation and spelling of medical terms.

COMMENT: This is a concurrent enrollment course. In addition to high school credit, students will earn 3 college credits at NICC. Contact your school counselor and/or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.

#### DOSAGE CALCULATIONS

MEDICAL TERMINOLOGY

1

PREREQUISITE: NONE

HSC114

DURATION:

CREDITS:

OPEN TO:

| HSC115        |                                                                              |  |
|---------------|------------------------------------------------------------------------------|--|
| DURATION:     | semester course                                                              |  |
| CREDITS:      | 1                                                                            |  |
| OPEN TO:      | juniors and seniors                                                          |  |
| PREREQUISITE: | successful completion of<br>ALEKS math testing with a<br>minimum score of 15 |  |

semester course

iuniors and seniors

# NICC CONCURRENT COLLEGE CLASS (PNN:200)

This course includes a review of fractions and decimals, conversions of metric, apothecary and household units and computations of drug dosages. The classification of drugs affecting each body system will be an integral part of this course.

COMMENT: This is a concurrent enrollment course. In addition to high school credit, students will earn 1 college credit at NICC. Due to college registration deadlines, no late registrations will be scheduled. Contact your school counselor and/or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.

# NICC CONCURRENT COLLEGE CLASS (PNN:270)

≈

COURSE DESCRIPTIONS

### INTRODUCTION TO NUTRITION

#### HSC116

| DURATION:     | semester course     |
|---------------|---------------------|
| CREDITS:      | 1                   |
| OPEN TO:      | juniors and seniors |
| PREREQUISITE: | none                |
|               |                     |

#### **CERTIFIED NURSE AIDE**

#### HSC172

| 11001/1       |                                                                                                                                                                                                                                                           |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DURATION:     | semester course                                                                                                                                                                                                                                           |
| CREDITS:      | 1                                                                                                                                                                                                                                                         |
| OPEN TO:      | juniors and seniors                                                                                                                                                                                                                                       |
| PREREQUISITE: | must be 16 years of age by<br>the start of clinical work;<br>successful completion of<br>Accuplacer Reading testing<br>with a minimum score of<br>44 or ACT English minimum<br>score of 15; two negative TB<br>skin tests; successful<br>background check |

This course emphasizes a practical knowledge of good nutrition and some knowledge of diet therapy. It includes a background of adequate and accurate information on basic nutritional needs of the body.

COMMENT: This is a concurrent enrollment course. In addition to high school credit, students will earn 2 college credits at NICC. Contact your school counselor and/or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.

# NICC CONCURRENT COLLEGE CLASS (HSC:172)

The course is designed to provide the knowledge and practical skills necessary to provide care and service to residents in long-term care facilities by preparing individuals to become efficient, caring members of the health-care team. Thirty hours of theory will consist of classroom lecture regarding the cares provided by a Certified Nurse Aide. Fifteen hours in a laboratory setting outside of the school day will provide "hands on" experience of competencies prior to attending 35 hours in a clinical setting. The clinical experience provides students the opportunity to experience resident care in the longterm care environment. Upon successful completion of this course, students will be eligible for state licensing and can test out of skills.

Students are responsible for required background check fee and TB skin test fees, uniform and supplies and the optional state licensure exam fee. Students are responsible for their own transportation to labs and clinicals.

COMMENT: This is a concurrent enrollment course. In addition to high school credit, students will earn 3 college credits at NICC. Due to college registration deadlines, late registrations will be scheduled into second semester if space is available. Contact your school counselor and/or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.

# INDUSTRIAL TECHNOLOGY

#### **ENGINEERING DRAFTING & DESIGN I**

| INT115        |                 |
|---------------|-----------------|
| DURATION:     | semester course |
| CREDITS:      | 1               |
| OPEN TO:      | all students    |
| PREREQUISITE: | none            |
|               |                 |

Engineering Drafting and Design I is a semester-long class with two areas of emphasis. The first portion of the semester will be focused on engineering technical drafting done with a 3-D modeling engineering design program. Students will design 3-dimensional models on the computer using industry standard engineering design software. Students will design on the computer and print those designs on a 3-D printer. The second portion of the course will be focused on architectural drafting. Students design homes on the computer using industry standard residential architectural software. The students will conclude the course with the design of a home blueprint. This class serves as the prerequisite for Engineering Drafting and Design II.

Alignment to the Iowa Core 21st Century Skills: Demonstrate a sound understanding of technology concepts, systems and operations. (21.9-12.TL.6)

#### WOODWORKING

| INT117        |                 |
|---------------|-----------------|
| DURATION:     | semester course |
| CREDITS:      | 1               |
| OPEN TO:      | all students    |
| PREREQUISITE: | none            |

This is an introductory course in which students will be taught the basic skills of woodworking. Topics include: joinery, identifying the different types and species of woods, and the processes used to produce a project. Students will be instructed in the proper and safe operation of equipment and tools used in the laboratory. A large portion of the class is hands-on, where students will independently work on projects as directed by the instructor. This course is a prerequisite for Advanced Woodworking.

Alignment to the Iowa Core 21st Century Skills: Adapt to various roles and responsibilities and work flexibly in climates of ambiguity and changing priorities. (21.9-12.ES.2)

COMMENT: One pair of safety glasses will be provided. A fee may be assessed for material consumed.

#### MANUFACTURING

| INT123        |                 |
|---------------|-----------------|
| DURATION:     | semester course |
| CREDITS:      | 1               |
| OPEN TO:      | all students    |
| PREREQUISITE: | Metals          |

This course builds on skills learned in Metals class. Students will expand their understanding in the areas of the machining processes, math, measurement and problem solving skills that will be used throughout the course. CNC machining, Plasma Cam, design, and the introduction of welding processes will also be used to manufacture a variety of projects. This course gives student a solid background in the processes used in Metalworking and Manufacturing Industries.

Alignment to the Iowa Core 21st Century Skills: Demonstrate initiative and self-direction through high achievement and lifelong learning while exploring the ways individual talents and skills can be used for productive outcomes in personal and professional life. (21.9-12.ES.4)

COMMENT: One pair of safety glasses will be provided. A fee may be assessed for material consumed.

#### **AUTOS I - CARE & MAINTENANCE**

| AUTOST - CARE & MAINTENANCE                |                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| INT213                                     | Autos I - Care & Maintenance is a class designed for everyone who plans to drive and                                                                                                                                                                                                                                                          |
| DURATION: Semester course                  | own a vehicle. The class explores all facets of the automobile. Diagnostic and repair techniques are lab activities associated with this class. Dealing with emergencies and                                                                                                                                                                  |
| CREDITS: 1                                 | making educated decisions concerning automotive problems are benefits derived from                                                                                                                                                                                                                                                            |
| OPEN TO: Sophomores, juniors, seniors      | successful completion of this class.                                                                                                                                                                                                                                                                                                          |
| PREREQUISITE: NONE                         | Alignment to the lowa Core 21st Century Skills: Demonstrate a sound understanding of technology concepts, systems, and operations. (21.9-12.TL.6)                                                                                                                                                                                             |
|                                            | COMMENT: One pair of safety glasses will be provided. A fee may be assessed for material consumed.                                                                                                                                                                                                                                            |
| AUTOS II - DIAGNOSTICS                     |                                                                                                                                                                                                                                                                                                                                               |
| INT215                                     | Autos II - Diagnostics is a course designed for students who are serious about                                                                                                                                                                                                                                                                |
| DURATION: SEMESTER COURSE                  | understanding modern automobiles. Hands-on experiences with tools and equipment                                                                                                                                                                                                                                                               |
| CREDITS: 1                                 | are incorporated into lab activities exploring various automobile systems, including fuel<br>and emission systems, ignition and electrical. Students use diagnostic equipment and                                                                                                                                                             |
| OPEN TO: sophomores, juniors, seniors      | learn recommended repair replacement and adjustment techniques. Students will be                                                                                                                                                                                                                                                              |
| PREREQUISITE: Autos I - Care & Maintenance | able to understand and appreciate the complexity of modern automobiles. Students wil<br>be familiar with systems components and be experienced doing basic trouble shooting                                                                                                                                                                   |
|                                            | techniques.                                                                                                                                                                                                                                                                                                                                   |
|                                            | Alignment to the Iowa Core 21st Century Skills: <i>Demonstrate a sound understanding of technology concepts, systems, and operations. (21.9-12.TL.6)</i>                                                                                                                                                                                      |
|                                            | COMMENT: One pair of safety glasses will be provided. A fee may be assessed for material consumed.                                                                                                                                                                                                                                            |
| AUTOS III - CHASSIS & DRIVE TRAINS         |                                                                                                                                                                                                                                                                                                                                               |
| INT217                                     | The Autos III - Chassis & Drive Trains course is designed for all students who find a need                                                                                                                                                                                                                                                    |
| DURATION: SEMESTER COURSE                  | to further their knowledge about the automobile and want to learn how the drive train                                                                                                                                                                                                                                                         |
| CREDITS: 1                                 | components work together to help the car perform safely and as designed. The course designed to help students diagnose repairs needed, and service a car's brake, steering,                                                                                                                                                                   |
| OPEN TO: sophomores, juniors, seniors      | suspension and drive train systems. Lab activities will include: tire mounting and                                                                                                                                                                                                                                                            |
| PREREQUISITE: Autos II - Diagnostics       | balancing, flat tire repair, disc and drum brakes service, shock absorber, spring, strut, and suspension parts replacement, and wheel alignment.                                                                                                                                                                                              |
|                                            | Alignment to the lowa Core 21st Century Skills: Demonstrate a sound understanding of technology concepts, systems, and operations. (21.9-12.TL.6)                                                                                                                                                                                             |
|                                            | COMMENT: One pair of safety glasses will be provided. A fee may be assessed for material consumed.                                                                                                                                                                                                                                            |
| SMALL ENGINE REPAIR                        |                                                                                                                                                                                                                                                                                                                                               |
| INT223                                     | Small Engine Repair class deals with all facets of small engine application including lawr                                                                                                                                                                                                                                                    |
| DURATION: Semester course                  | mowers, cycles, snowmobiles, outboards, and power saws. Hand and power tool use, as                                                                                                                                                                                                                                                           |
| CREDITS: 1                                 | well as personal safety are skills associated with completion of this class. Small engine theory (two and four cycle), maintenance, tune-up, diagnostics and overhaul are all                                                                                                                                                                 |
| OPEN TO: all students                      | concepts associated with class activities. Students enrolled in this course will also lea                                                                                                                                                                                                                                                     |
| PREREQUISITE: NONE                         | about careers as a diesel technician through a partnership with Truck Country.                                                                                                                                                                                                                                                                |
|                                            | Alignment to the Iowa Core 21st Century Skills: <i>Demonstrate a sound understanding of</i><br>technology concepts, systems, and operations. (21.9-12.TL.6)                                                                                                                                                                                   |
|                                            | COMMENT: One pair of safety glasses will be provided. A fee may be assessed for material consumed.                                                                                                                                                                                                                                            |
| ELECTRICITY / ELECTRONICS                  |                                                                                                                                                                                                                                                                                                                                               |
| INT323                                     | Knowledge of electricity is the foundation of understanding all modern personal                                                                                                                                                                                                                                                               |
| DURATION: SEMESTER COURSE                  | electronic devices. The electricity units of this course will focus on both alternating and direct current. Students will learn the design process of developing circuitry. They will                                                                                                                                                         |
| CREDITS: 1                                 | direct current. Students will learn the design process of developing circuitry. They will develop teamwork and communication methods and produce technical documentation.                                                                                                                                                                     |
| орем то: all students                      | Students will contrast analog electronics, where information is represented by                                                                                                                                                                                                                                                                |
| PREREQUISITE: NONE                         | continuously varying voltage and digital electronics where signals are represented by two discreet voltages or logic levels. This distinction allows for greater understanding of signal speed and storage capabilities and has revolutionized the world of electronics. Students will analyze, design and build digital electronic circuits. |
|                                            | During the course of the semester, students will learn through research as well as activities the basics of solid state electronics.                                                                                                                                                                                                          |
|                                            | Alignment to the Iowa Core 21st Century Skills: <i>Demonstrate a sound understanding of technology concepts, systems and operations. (21.9-12.TL.6)</i>                                                                                                                                                                                       |
|                                            | COMMENT: One pair of active places will be previded. A feet move be accessed for                                                                                                                                                                                                                                                              |

COMMENT: One pair of safety glasses will be provided. A fee may be assessed for material consumed.

#### METALS

| INT332        |                 |
|---------------|-----------------|
| DURATION:     | semester course |
| CREDITS:      | 1               |
| OPEN TO:      | all students    |
| PREREQUISITE: | none            |

This course will cover basic processes in welding, sheet metal, bench metal, machining, foundry, and CNC. Students will do a variety of activities in the preceding areas with some leading to take-home projects and others offering opportunities to do maintenance and repair demonstrating their newly learned skills and knowledge. Students will learn processes for working with metals from raw materials to end, usable products.

Alignment to the Iowa Core 21st Century Skills: Demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. (21.9-12.TL.1)

COMMENT: One pair of safety glasses will be provided. A fee may be assessed for material consumed.

#### WELDING

| INT363                                                            |                              | This course will increase the student's competency and proficiency in many aspects of                                                                                          |
|-------------------------------------------------------------------|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DURATION:                                                         | semester course              | welding. Students will have experience working with oxyacetylene, shielded metal arc welding (SMAW), gas metal arc welding (GMAW)-MIG and gas tungsten arc welding             |
| CREDITS:                                                          | 1                            | (GTAW)-TIG welding processes. Along with the bonding of metals, students will gain                                                                                             |
| OPEN TO:                                                          | sophomores, juniors, seniors | experience in cutting metals and with fabrication procedures.                                                                                                                  |
| PREREQUISITE: Manufacturing or Metals with<br>instructor approval |                              | Alignment to the Iowa Core 21st Century Skills: Adapt to various roles and responsibilities and work flexibly in climates of ambiguity and changing priorities. (21.9-12.ES.2) |
|                                                                   |                              | COMMENT: One pair of safety glasses and other required safety apparel will be provided. A fee may be assessed for material consumed.                                           |

#### **ADVANCED WOODWORKING**

| INT383        |                                       |
|---------------|---------------------------------------|
| DURATION:     | semester course                       |
| CREDITS:      | 1                                     |
| OPEN TO:      | sophomores, juniors, seniors          |
| PREREQUISITE: | Woodworking or instructor<br>approval |
|               |                                       |

Advanced Woodworking is a one-semester course that is project based and activity oriented. The course focuses on advanced joinery and processes utilized in the woodworking industry. It is designed for all students interested in developing quality design, machining, construction, and finishing techniques. Excellence is the key factor stressed in project development and is evident as your project moves from an idea to the finished product. This class is intended to prepare the student for a variety of future life situations from consumerism to entering the workforce directly. Students will develop an appreciation for craftsmanship through the creation of their projects. Instruction, demonstrations and guidance as to the safe operation of all woodworking tools and equipment will be used during this course will be provided.

COMMENT: One pair of safety glasses will be provided. A fee may be assessed for material consumed.

#### **CONSTRUCTION I**

| INT385                    | Construction I provides students with the opportunity to explore a wide variety                                                                                                                                                                                         |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| duration: semester course | of construction techniques related to residential construction and related career opportunities. This course will teach proper safety and application of tools. Students will                                                                                           |
| CREDITS: 1                | learn starting from the ground up: footers/foundations, walls, floor plans, wall framing,                                                                                                                                                                               |
| орем то: all students     | <ul> <li>wall coverings, and related components. Mathematical components and equations will</li> <li>be applied to the construction process.</li> <li>Alignment with the Common Career Technical Core: <i>Construction Career Pathway</i><br/>standards 1-9.</li> </ul> |
| PREREQUISITE: NONE        |                                                                                                                                                                                                                                                                         |

COMMENT: One pair of safety glasses will be provided. A fee may be assessed for material consumed.

#### **CONSTRUCTION II**

| INT387      |                   | In this course, students will be learning the completion of the house which may include:                                                                                             |
|-------------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DURATION:   | semester course   | exterior finishing, electrical, plumbing, heating, room layout, insulation, wall covering,<br>floor covering and trim work. Mathematical components and equations will be applied to |
| CREDITS:    | 1                 | the construction process.                                                                                                                                                            |
| OPEN TO:    | all students      | Alignment with the Common Career Technical Core: Construction Career Pathway                                                                                                         |
| PREREQUISIT | E: Construction I | standards 10-18.                                                                                                                                                                     |
|             |                   | COMMENT: One pair of cafety glasses will be provided. A fee may be accessed for                                                                                                      |

COMMENT: One pair of safety glasses will be provided. A fee may be assessed for material consumed.

#### **ENGINEERING I**

| INT401        |                 |
|---------------|-----------------|
| DURATION:     | semester course |
| CREDITS:      | 1               |
| OPEN TO:      | all students    |
| PREREQUISITE: | none            |

In Engineering I, students will gain an understanding of engineering and scientific concepts through units based on various engineering fields such as aerospace engineering, mechanical engineering, civil engineering, and finding solutions of engineering design problems. The course exposes students to design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation. Engineering I gives students the opportunity to develop skills and understanding of course concepts through activity, project, and problem-based learning.

In addition, students utilize 3D solid modeling design software and various tools to help them design solutions to solve proposed problems. Students will develop problem solving skills and apply their knowledge of research and design to create solutions to various challenges that increase in difficulty throughout the course. Students will also learn how to document their work and communicate their solutions to their peers and members of the professional community.

Alignment to the Iowa Core 21st Century Skills: *Demonstrate critical thinking skills using appropriate tools and resources to plan and conduct research, manage projects, solve problems and make informed decisions. (21.9-12.TL.4)* 

#### **ENGINEERING II**

INT413

DURATION:

CREDITS:

OPEN TO:

| INT402        |                                      |
|---------------|--------------------------------------|
| DURATION:     | semester course                      |
| CREDITS:      | 1                                    |
| OPEN TO:      | all students                         |
| PREREQUISITE: | Engineering I or instructor approval |

Engineering II builds on principles learned in Engineering I to gain a deeper understanding of the design process, research and analysis, engineering concepts, and technical documentation. Students will encounter major themes and concepts brought up in post-secondary engineering and technical course studies.

Engineering II employs automation and robotics to allow students to apply skills gained in class to build physical prototypes and complete automated tasks using programmable technology. Students will develop a deeper understanding of engineering processes by building on modern manufacturing practices and theories such as Six Sigma, Just in Time, and Continuous Improvement. While producing projects, students will be able to use manufacturing practices and concepts to design for efficiency and manufacturability. Students will continue to grow in communication and documentation skills that will allow them to discuss technical solutions to problems with peers and professionals.

Alignment to the Iowa Core 21st Century Skills: *Demonstrate critical thinking skills using appropriate tools and resources to plan and conduct research, manage projects, solve problems and make informed decisions. (21.9-12.TL.4)* 

This course will teach students computer 2D, 3D, and solid modeling techniques used in mechanical drafting. It is also designed to take a closer look at the Engineering Design software. The design software is used by thousands of engineers who work in the industry today, and students in this class will have the opportunity to learn the same techniques as those engineers. Students in this class will be solving engineering problems through design, creating their own 3-D computer models, reverse engineering problem solving, and 3-D printer experiences.

Alignment to the Iowa Core 21st Century Skills: *Demonstrate a sound understanding of technology concepts, systems, and operations. Demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.* 

COMMENT: A fee may be assessed for materials consumed.

#### **ARCHITECTURAL DESIGN**

1

| INT433        |                 |
|---------------|-----------------|
| DURATION:     | semester course |
| CREDITS:      | 1               |
| OPEN TO:      | all students    |
| PREREQUISITE: | none            |

This course is intended for students who want to be an architect, designer/ builder, carpenter/contractor or an interior designer. It is designed to help students learn about the design of buildings, building layouts, structural and visual components, design processes, CAD software packages, career opportunities in architecture and construction, and more. During the course the student will design and draw his/her own single-family residence. This set of plans will include a floor plan, elevations, plot plans, presentation drawings, plus special details. Students will also be working on 3-D rendering of the inside and the outside of the house so students would be able to virtually walk through their house design.

Alignment to the Iowa Core 21st Century Skills: *Demonstrate a sound understanding of technology concepts, systems, and operations. Demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.* 

#### **ENGINEERING DRAFTING & DESIGN II**

semester course

all students

PREREQUISITE: Engineering Drafting &

Design I

#### INTRODUCTION TO PROFESSIONAL WELDING

| INT501 (Sem 1), INT502 (Sem 2) |                                   |
|--------------------------------|-----------------------------------|
| DURATION:                      | year course                       |
| CREDITS:                       | 4                                 |
| OPEN TO:                       | sophomores, juniors, seniors      |
| PREREQUISITE:                  | Welding or instructor<br>approval |

#### WELDING SAFETY

NICC Concurrent College Class (WEL:228) This portion of the Introduction to Professional Welding course provides students with an orientation to the welding profession and will cover the basics of safety and health within the welding profession. Students who participate in this course will have the opportunity to become OSHA 10 certified by enrolling in an online 10-hour training program and passing the OSHA 10 exam.

COMMENT: This is a concurrent enrollment course. In addition to high school credit, students will earn 1 college credit at NICC. One pair of safety glasses and other required safety apparel will be provided. A fee may be assessed for material consumed. Contact your school counselor and/or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.

#### WELDING BLUEPRINT READING

NICC Concurrent College Class (WEL:110)

This portion of the Introduction to Professional Welding course introduces students to the concept and practice of blueprint interpretation as needed by welders in an industrial setting. Emphasis is on the basics of interpretation and application in specific situations.

COMMENT: This is a concurrent enrollment course. In addition to high school credit, students will earn 2.0 college credits at NICC. One pair of safety glasses and other required safety apparel will be provided. A fee may be assessed for material consumed. Contact your school counselor and/or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.

#### **BASIC GAS METAL ARC WELDING**

NICC Concurrent College Class (WEL:433)

This portion of the Introduction to Professional Welding course provides students with an introductory study of short-circuit gas metal arc welding (GMAW) and other related processes. Students study process variation, welding in various positions, principles of operation, shielding gases, and wires. The course stresses safety and practical application of these welding processes.

COMMENT: This is a concurrent enrollment course. In addition to high school credit, students will earn 3.5 college credits at NICC. One pair of safety glasses and other required safety apparel will be provided. A fee may be assessed for material consumed. Contact your school counselor and/or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.

#### FLAME/PLASMA CUTTING FUNDAMENTALS NICC Concurrent College Class (WEL:434)

This portion of the Introduction to Professional Welding course is a study of the history and principles of material cutting, as well as the nomenclature of the equipment. Procedures such as positional welding, cutting, beveling plates, and scarfing plates are practiced.

COMMENT: This is a concurrent enrollment course. In addition to high school credit, students will earn 1.5 college credits at NICC. One pair of safety glasses and other required safety apparel will be provided. A fee may be assessed for material consumed. Contact your school counselor and/or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.

Alignment to the Iowa Core 21st Century Skills: Demonstrate productivity and accountability by meeting high expectations. (21.9-12.ES.5)

Students who are enrolled in this class are eligible for an apprenticeship with John Deere, Unison Solutions, Universal Tank and Fabrication, or a new partner business with the newly created Welding Registered Apprenticeship Program. Contact your instructor for further details.

#### **DIESEL TECHNICIAN I**

**DIESEL TECHNICIAN II** 

2

PREREQUISITE: INT701

semester course

juniors and seniors

INT702 (Sem 2)

DURATION:

CREDITS:

OPEN TO:

INT701 (Sem 1)

| DURATION:    | semester course     |
|--------------|---------------------|
| CREDITS:     | 2                   |
| OPEN TO:     | juniors and seniors |
| PREREQUISITE | : none              |

#### NICC CONCURRENT COLLEGE CLASS (DSL:632, AUT:321)

This course is intended for students who want to explore a career as a **Truck Mechanic** and Diesel Engine Technician. It is designed to help students learn how to diagnose, adjust, repair, or overhaul heavy duty trucks or maintain and repair any type of diesel engines. It includes in introduction to careers as mechanics and technicians primarily working with diesel engines, diesel exhaust systems, diesel transmissions, HVAC, and electronic systems.

Learn more about career options at: www.dbqschools.org/career-exploration

This course is designed to help students learn best practices for working safely in the industry. Students will learn about the basic functions of an air system, work with the fundamentals for air brakes and wheel ends. Finally students will learn about transmission, clutches, and drivetrains, including operations, gear flow, and functionality.

This Diesel Technician course will be offered at Truck Country's state-of-the-art technical Training Institute by highly-experienced trainers. The course will take place during the last two periods of each day. Students are responsible for their own transportation to the training institute.

COMMENT: This is a concurrent enrollment course. In addition to high school credit, students will earn 4 college credits at NICC. One pair of safety glasses and other required safety apparel will be provided. Contact your school counselor and/or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.

#### NICC CONCURRENT COLLEGE CLASS (DSL:533)

This course is intended for students who want to explore a career as a **Truck Mechanic** and **Diesel Engine Technician**. It is designed to help students learn how to diagnose, adjust, repair, or overhaul heavy duty trucks or maintain and repair any type of diesel engines. It includes in introduction to careers as mechanics and technicians primarily working with diesel engines, diesel exhaust systems, diesel transmissions, HVAC, and electronic systems.

Learn more about career options at: www.dbqschools.org/career-exploration

This course is designed to help students learn best practices for working safely in the industry. Students will continue to deepen their knowledge and understanding of careers as a diesel technician, including learning about start, charge, and electric systems, suspensions, kingpins, drivetrains, and power dividers.

This Diesel Technician course will be offered at Truck Country's state-of-the-art technical Training Institute by highly-experienced trainers. The course will take place during the last two periods of each day. Students are responsible for their own transportation to the training institute.

COMMENT: This is a concurrent enrollment course. In addition to high school credit, students will earn 4 college credits at NICC. One pair of safety glasses and other required safety apparel will be provided. Contact your school counselor and/or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.

# INFORMATION SOLUTIONS

#### MULTIMEDIA

| ISS121       |                 | In M         |
|--------------|-----------------|--------------|
| DURATION:    | semester course | vide<br>cent |
| CREDITS:     | 1               | acac         |
| OPEN TO:     | all students    | it me        |
| PREREQUISITE | none            | vide         |
|              |                 | 01-+         |

In Multimedia, students will explore photo editing, web design, audio/video editing and video game design. Multimedia introduces media platforms used throughout many 21st century careers. Students gain technology literacy skills necessary for current and future academic and career success. Using industry relevant software students will learn what it means to be effective digital citizens, including digital footprint & reputation, privacy & security, information literacy, and Internet safety. All photo editing, web design, audio/ video editing and video game design units are to help students choose and explore the 21st century technology that most aligns with future goals and current interests.

Alignment to the Iowa Core 21st Century Skills: *Demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. (21.9-12.TL.1)* 

#### **COMPUTER SCIENCE PRINCIPLES I**

......

| ISS131        |                                                                     |
|---------------|---------------------------------------------------------------------|
| DURATION:     | semester course                                                     |
| CREDITS:      | 1                                                                   |
| OPEN TO:      | all students                                                        |
| PREREQUISITE: | minimum grade of C- in<br>Algebra I or instructor<br>recommendation |

Computer Science Principles I introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. This course was designed with the goal of creating leaders in computer science fields and attracting and engaging those who are traditionally underrepresented with essential computing tools and multidisciplinary opportunities. Topics include: the internet, digital information, java script programming, and big data and privacy.

Alignment to the Iowa Core 21st Century Skills: Use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. (21.9-12.TL.2)

#### COMPUTER SCIENCE PRINCIPLES II

| ISS132        |                                                         |
|---------------|---------------------------------------------------------|
| DURATION:     | semester course                                         |
| CREDITS:      | 1                                                       |
| OPEN TO:      | all students                                            |
| PREREQUISITE: | minimum grade of C- in<br>Computer Science Principles I |

Computer Science Principles II builds upon the concepts from Computer Science Principles I, introducing new concepts and projects that include programming, big data and privacy, and building apps.

Alignment to the Iowa Core 21st Century Skills: Use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. (21.9-12.TL.2)

#### ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES

| ISS231 (Sem 1), ISS232 (Sem 2) |                                                                     |
|--------------------------------|---------------------------------------------------------------------|
| DURATION:                      | year course                                                         |
| CREDITS:                       | 2                                                                   |
| OPEN TO:                       | all students                                                        |
| PREREQUISITE:                  | minimum grade of C- in<br>Algebra I or instructor<br>recommendation |

AP Computer Science Principles is an introductory college-level computing course that introduces students to the breadth of the field of computer science. The course introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. This course was designed with the goal of creating leaders in computer science fields and attracting and engaging those who are traditionally underrepresented with essential computing tools and multidisciplinary opportunities. Topics include: the internet, digital information, java script programming, big data, privacy and building apps.

#### STUDENT RUN HELP DESK

| ISS311 (Sem 1), ISS312 (Sem 2) |                              |
|--------------------------------|------------------------------|
| DURATION:                      | year course                  |
| CREDITS:                       | 2                            |
| OPEN TO:                       | sophomores, juniors, seniors |
| PREREQUISITE:                  | application process          |

Want to earn credit while troubleshooting computer hardware and software problems? The Student Run Help Desk provides students opportunities to explore different careers in technology, learn hands-on skills, train students/staff, support computer hardware and software, and practice customers service skills.

Alignment to the Iowa Core 21st Century Skills: *Demonstrate critical thinking skills using appropriate tools and resources to plan and conduct research, manage projects, solve problems and make informed decisions. (21.9-12.TL.4)* 

COMMENT: Students will be selected based on an interview process with instructor. This course may be repeated.

#### TROUBLESHOOTING

| ISS411        |                 |
|---------------|-----------------|
| DURATION:     | semester course |
| CREDITS:      | 1               |
| OPEN TO:      | all students    |
| PREREQUISITE: | none            |

The course is designed to provide students with the knowledge of basic troubleshooting skills. These skills apply to the troubleshooting of microcomputer hardware and software.

NICC CONCURRENT COLLEGE CLASS (NET:103)

Alignment to the Iowa Core 21st Century Skills: Demonstrate a sound understanding of technology concepts, systems and operations. (21.9-12.TL.6)

COMMENT: This is a concurrent enrollment course. In addition to high school credit, students will earn 3 college credits at NICC. Contact your school counselor and/or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.

#### **ADVANCED PLACEMENT COMPUTER SCIENCE A**

#### ISS531 (Sem 1), ISS532 (Sem 2)

| DURATION:     | year course                                                                                         |
|---------------|-----------------------------------------------------------------------------------------------------|
| CREDITS:      | 2                                                                                                   |
| OPEN TO:      | sophomores, juniors, seniors                                                                        |
| NCAA:         | approved                                                                                            |
| PREREQUISITE: | minimum grade of C- in<br>Algebra II OR minimum grade<br>of C- in AP Computer Science<br>Principles |

This is a college-level introductory programming course for students with no prior programming experience. Students will learn programming fundamentals such as conditional statements, loops, and simple data structures using the Java language. Object-oriented design is stressed as students focus on developing computer programs or parts of programs that correctly solve a given problem. A focus is also given to reading and understanding code written by others. Successful students should have strong reading skills as well as logical thinking skills. This course will prepare students to take the Advanced Placement Examination in May. Students may earn college credit depending on the results of the examination.

Alignment to the Iowa Career and Technical Education Information Technology Standards: Understand the concept of design, development, implementation, and maintenance of computer software.

COMMENT: Students cannot take AP Computer Science Principles after completing this course.

## FUNDAMENTALS OF WEB DESIGN

| ISS701        |                              |
|---------------|------------------------------|
| DURATION:     | semester course              |
| CREDITS:      | 1                            |
| OPEN TO:      | sophomores, juniors, seniors |
| PREREQUISITE: | none                         |
|               |                              |

#### **COMPUTER ETHICS**

| ISS702        |                              |
|---------------|------------------------------|
| DURATION:     | semester course              |
| CREDITS:      | 1                            |
| OPEN TO:      | sophomores, juniors, seniors |
| PREREQUISITE: | none                         |
|               |                              |

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#### BAND

#### MUS111 (Sem 1), MUS112 (Sem 2)

| DURATION: | year course  |
|-----------|--------------|
| CREDITS:  | 2            |
| OPEN TO:  | all students |

PREREQUISITE: minimum of two years experience on a woodwind, brass or percussion instrument

Introduces the student to the basics of the creation and maintenance of Web pages. The hypertext markup language is used in the creation of Web pages. Good screen layout and design principles are stressed. The use of application software to create web pages is discussed. Enhancements and extensions of HTML as well as the incorporation of scripting in creating web pages will be explored.

Alignment to the Iowa Core 21st Century Skills: Demonstrate a sound understanding of technology concepts, systems, and operations. (21.9-12.TL.6)

#### NICC CONCURRENT COLLEGE CLASS (CIS:101)

NICC CONCURRENT COLLEGE CLASS (CIS:197)

This course provides a study of ethics and moral philosophy as a means for providing a framework for ethically grounded decision making in the information age. Students will study current regulation and practices pertaining to professional conduct and responsibility.

Alignment to the Iowa Core 21st Century Skills: Understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. (21.9-12.TL.5)

COMMENT: This is a concurrent enrollment course. In addition to high school credit, students will earn 3 college credits at NICC. Contact your school counselor and/or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.

Band is a two-semester, two-credit course that meets every day and provides students opportunities to study and perform within large and small instrumental ensembles and become lifelong learners of the arts. Students will participate in a variety of musical and aesthetic experiences through performance of music from a wide variety of styles, genres, cultures, and historical periods. Sectional and Chamber rehearsals take place as needed and guest artists are brought in to help teach in their area of expertise for large projects or advanced music. During the year, all students not currently taking private lessons outside of school will receive a private or small group twenty-minute lesson every two weeks. The following large ensembles make up the band program throughout the year:

#### Marching Band

This ensemble performs at all home football games (pre-game, pep-band, and halftime shows), as well as one parade and marching band competition throughout the fall. There will be additional marching band rehearsals during the pre-season summer camp and evenings throughout the fall.

#### Symphonic Band

This ensemble gives students the opportunity to expand the fundamentals of ensemble playing as well as developing an individual's responsibility within the ensemble. The Symphonic Band will perform several times during the year, including the Winter Concert, Spring Concert, Large Group Festival, as well as other opportunities throughout the year.

#### Pep Band

This group will perform at sports events and pep assemblies throughout the year as called by the director.

Alignment to the 2014 National Core Arts Standards for Music: Performing and Responding.

#### MUS121 (Sem 1), MUS122 (Sem 2)

| DURATION:     | year course                           |
|---------------|---------------------------------------|
| CREDITS:      | .8 (meets 2 days per week)            |
| OPEN TO:      | all students                          |
| PREREQUISITE: | audition or instructor recommendation |

The Jazz Studies Program provides students with a comprehensive jazz education. Particular emphasis is given to jazz styles, genres, listening, improvisation, expression, and interaction. Emphasis is also placed on comprehension, analysis, synthesis, and application so students can become lifelong learners and consumers of jazz. Traditionally the instrumentation of a jazz band includes saxophones, trumpets, trombones, and rhythm section (piano, bass, guitar, and drums).

If there are enough students interested in this course of study we will provide two big band ensembles. The Jazz Band will perform several times throughout the year, including performances at school, community, district and state events. The jazz combo will provide opportunities or those students interested in learning more about the jazz idiom and improvisational skills. The following ensembles make up the jazz program:

#### Jazz Band I

Jazz Band I is an auditioned group of students who have demonstrated proficiency at sight-reading, aural, rhythmic, and improvisation skills. Emphasis will be on listening, interaction, expression, and the further development of rhythmic, aural, improvisation, and ensemble skills as well as comprehension of jazz theory.

#### Jazz Band II

Jazz Band II is open to anyone who plays (or is willing to learn) a jazz instrument interested in playing in a jazz band. Emphasis will be on participation, listening, interaction, improvisation, and expression, as well as developing sight-reading, rhythmic, and aural skills.

#### · Combo

Combo is an ensemble for students interested in learning to develop their aural, improvisation, and expressive skills. Traditionally, a jazz combo is made of a rhythm section (piano, bass, drums, possibly guitar or vibes), and one - four horn players. Any wind instruments can be involved in combo playing and in any combination.

Alignment to the 2014 National Core Arts Standards for Music: Performing and Responding.

#### ORCHESTRA

| MUS131 (Sem 1), MUS132 (Sem 2) |                                                               |  |
|--------------------------------|---------------------------------------------------------------|--|
| DURATION:                      | year course                                                   |  |
| CREDITS:                       | 2                                                             |  |
| OPEN TO:                       | all students                                                  |  |
| PREREQUISITE:                  | previous experience on violin<br>viola, cello, or double bass |  |

Orchestra is a two-semester, two-credit course that meets every day and provides students opportunities to study and perform within large and small instrumental ensembles and become lifelong learners of the arts. Orchestra is offered all four years of high school. Students will participate in a variety of musical and aesthetic experiences through performance of music from a wide variety of styles, genres, cultures, and historical periods. Sectional and Chamber rehearsals take place as needed. Guest artists lend their expertise for large projects or advanced music. During the year, all students will receive a regular individual lesson.

Orchestra students will perform in a variety of settings for hundreds of people, learn teamwork, develop valuable work habits, exhibit pride in their accomplishments, and make new and lasting friends with other students who have similar interests and talents.

This ensemble gives students of all levels the opportunity to expand the fundamentals of ensemble playing as well as developing an individual's responsibility within the ensemble. This ensemble will perform several times during the year including major concerts and festivals. Winds, brass and/or percussion may be added at different points of the year following Marching band season. All ninth grade orchestra students begin in this ensemble. New or transferring students will start in this ensemble.

Alignment to the 2014 National Core Arts Standards for Music: Creating, Performing and Responding.

All band students who play percussion instruments register for Percussion, a graded course that will meet daily. Content for the course will closely parallel that of the Marching and Symphonic Bands. In addition, Percussion will explore, through careful study, preparation, and performance, music written exclusively for percussion as well as traditional and ethnic styles of music including Taiko, West African, and Latin. Particular emphasis will be given to performing the highest quality literature available, enabling students to become lifelong learners in music through conceptual teaching. The Percussion will perform several times during each academic year.

Particular emphasis is also given to the individual's responsibility in developing an excellent ensemble. Students are expected to practice parts individually in order to achieve a greater ensemble experience.

Alignment to the 2014 National Core Arts Standards for Music: Performing and Responding.

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COURSE DESCRIPTIONS

#### PERCUSSION

| MUS151 (Sem 1), MUS152 (Sem 2) |                                                   |  |
|--------------------------------|---------------------------------------------------|--|
| DURATION:                      | year course                                       |  |
| CREDITS:                       | 2                                                 |  |
| OPEN TO:                       | all students                                      |  |
| PREREQUISITE:                  | minimum of two years<br>experience on a woodwind. |  |

brass or percussion instrument

#### **COLOR GUARD**

#### MUS162

| DURATION:     | semester course                     |
|---------------|-------------------------------------|
| CREDITS:      | .5                                  |
| OPEN TO:      | all students                        |
| PREREQUISITE: | audition, instructor recommendation |

#### CHORALE

| MUS191   | (Sem    | 1)           | MUS192  | (Sem   | 21  |
|----------|---------|--------------|---------|--------|-----|
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| DURATION:     | year course                              |
|---------------|------------------------------------------|
| CREDITS:      | 2 (meets 5 days per week)                |
| OPEN TO:      | all students new to high<br>school choir |
| PREREQUISITE: | placement audition                       |
|               |                                          |

During the fall, the color guard is an auxiliary unit of the marching band. The color guard will learn to use flags, dance and other props to enhance the visual pageantry of the marching program. Daily rehearsal will occur during marching band rehearsals. There will be additional color guard /marching band rehearsals during the pre-season summer camp and evenings throughout the fall. The whole marching band and color guard will perform at all home football games, local parades, and a couple of weekend competitions in late September and early October.

This entry-level auditioned choir is designed to introduce novice and intermediate students to proper body alignment, breathing technique, rehearsal technique, rehearsal etiquette, audience etiquette, basic notation and rhythm reading skills, vocal health and maintenance. Students will learn to sing unison, 2-, 3- and 4- part harmony through a variety of musical styles. They will explore cultural and historical context and sing in a foreign language. In the second semester, students will have the opportunity to participate in the Iowa State Solo and Ensemble Festival. This course will teach students how to set up a performance resume and e-portfolio. Students are required to perform with the Chorale in public performances throughout the year and the school's graduation ceremony.

Alignment to the 2014 National Core Arts Standards for Music: *Creating, Performing, Responding, and Connecting.* 

#### **ADVANCED ORCHESTRA**

| MUS321 (Sem 1), MUS322 (Sem 2) |                                                                                              | Orchestra is a two-semester, two-credit course that meets every day and provides                                                                                                                                                                                                                                                                                                                                                                            |  |  |
|--------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| DURATION:                      | year course                                                                                  | students opportunities to study and perform within large and small instrumental<br>ensembles and become lifelong learners of the arts. Orchestra is offered all four yea                                                                                                                                                                                                                                                                                    |  |  |
| CREDITS:                       | 2                                                                                            | high school. Students will participate in a variety of musical and aesthetic experiences                                                                                                                                                                                                                                                                                                                                                                    |  |  |
| OPEN TO:                       | all students                                                                                 | through performance of music from a wide variety of styles, genres, cultures, and historical periods. Sectional and Chamber rehearsals take place as needed. Guest artists                                                                                                                                                                                                                                                                                  |  |  |
| PREREQUISIT                    | E: previous experience on violin,<br>viola, cello, or double bass<br>and instructor approval | lend their expertise for large projects or advanced music. During the year, all students will receive a regular individual lesson.                                                                                                                                                                                                                                                                                                                          |  |  |
|                                |                                                                                              | Orchestra students will perform in a variety of settings for hundreds of people, learn teamwork, develop valuable work habits, exhibit pride in their accomplishments, and make new and lasting friends with other students who have similar interests and talents.                                                                                                                                                                                         |  |  |
|                                |                                                                                              | This ensemble gives advanced students the opportunity to expand the fundamentals<br>of ensemble playing as well as developing an individual's responsibility within the<br>ensemble. This ensemble will perform several times during the year including major<br>concerts and festivals. Winds, brass, and/or percussion may be added to the Symphony<br>Orchestra following Marching Band Season. Entrance to this ensemble is per instructor<br>approval. |  |  |
|                                |                                                                                              | Alignment to the 2014 National Core Arts Standards for Music: <i>Creating, Performing and Responding.</i>                                                                                                                                                                                                                                                                                                                                                   |  |  |
| CONCERT CHOIR                  |                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |

| MUS341 (Sem 1), MUS342 (Sem 2) |                                                                           |  |
|--------------------------------|---------------------------------------------------------------------------|--|
| DURATION:                      | year course                                                               |  |
| CREDITS:                       | 2                                                                         |  |
| OPEN TO:                       | sophomores, juniors, seniors                                              |  |
| PREREQUISITE:                  | successful completion of<br>Chorale, or equivalent skill<br>demonstration |  |

Concert Choir is an auditioned 2-part, 3-part, or mixed chorus for intermediate, proficient and accomplished students. Repertoire is advanced choral literature encompassing styles from Renaissance to 21st Century. Students will refine rehearsal techniques, rehearsal etiquette, audience etiquette, intermediate music notation and rhythm reading skills. Students will continue exploring cultural and historical context and sing in foreign languages. They will have the opportunity to participate in the Iowa State Solo and Ensemble Festival and community performances.

This course will teach students how to update and maintain their performance resume and e-portfolio. They will learn teamwork, responsibility, and leadership. Seniors are encouraged to participate in college honor choirs and prepare for college choir auditions. Students are required to perform with the Concert Choir in public performances throughout the year and the school's graduation ceremony.

Alignment to the 2014 National Core Arts Standards for Music: *Creating, Performing, Responding, and Connecting.* 

#### MUSIC THEORY AND HARMONY

#### MUS361 (Sem 1), MUS362 (Sem 2)

| DURATION:     | year course                                                                                                                    |
|---------------|--------------------------------------------------------------------------------------------------------------------------------|
| CREDITS:      | 2                                                                                                                              |
| OPEN TO:      | sophomores, juniors, seniors                                                                                                   |
| PREREQUISITE: | minimum of one year in<br>band, choir, or orchestra;<br>minimum of one year piano<br>instruction; instructor<br>recommendation |

#### HONORS CHAMBER ORCHESTRA

#### MUS421 (Sem 1), MUS422 (Sem 2)

| DURATION:     | year course                                                                                                                                                               |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CREDITS:      | 2                                                                                                                                                                         |
| OPEN TO:      | all students                                                                                                                                                              |
| PREREQUISITE: | audition; previous experience<br>on violin, viola, cello, or<br>double bass and instructor<br>approval; woodwinds, brass<br>and percussion students<br>selected from Band |

In Music Theory, students will gain a deeper understanding of the fundamentals of the music they hear, play, and sing. Topics of study include but are not limited to history, scales, modes, intervals, transposition, chords, harmonic analysis, formal analysis, and composition.

This is a course designed for the most serious music students who plan to continue their study of music at the collegiate level or wish to pursue it as a major life activity.

Alignment to the 2014 National Core Arts Standards for Music: *Creating, Performing, Responding, and Connecting.* 

Honors Chamber Orchestra is a two-semester, two-credit course that meets every day and provides students opportunities to study and perform within large and small instrumental ensembles and become lifelong learners of the arts. Orchestra is offered all four years of high school. Students will participate in a variety of musical and aesthetic experiences through performance of music from a wide variety of styles, genres, cultures, and historical periods. Sectional and chamber music rehearsals take place as needed. Guest artists lend their expertise for large projects or advanced music. During the year, all students will receive a regular individual lesson. All levels of repertoire is programmed for this ensemble with the goal of reaching professional levels of string playing.

Orchestra students will perform in a variety of settings for hundreds of people, learn teamwork, develop valuable work habits, exhibit pride in their accomplishments, and make new and lasting friends with other students who have similar interests and talents.

This ensemble gives advanced students the opportunity to expand the fundamentals of ensemble playing as well as developing an individual's responsibility within the ensemble. This ensemble will perform several times during the year including major concerts and festivals. Winds, brass, and/or percussion may be added at different points of the year following Marching Band Season. Entrance to this ensemble is per instructor approval.

Alignment to the 2014 National Core Arts Standards for Music: *Creating, Performing and Responding.* 

#### AMBASSADOR SINGERS

| MUS571 (Sem 1), MUS572 (Sem 2) |                                                                                   |
|--------------------------------|-----------------------------------------------------------------------------------|
| DURATION:                      | year course                                                                       |
| CREDITS:                       | 2                                                                                 |
| OPEN TO:                       | all students                                                                      |
| PREREQUISITE:                  | audition and interview;<br>simultaneous enrollment in<br>Chorale or Concert Choir |
|                                |                                                                                   |

# The primary objective for this ensemble is to provide opportunities for leadership, responsibility, service, teamwork, community performances, and public relations. Ambassador Singers is an auditioned mixed choir. This class teaches a variety of chamber music from madrigal to jazz and popular, and may include choreography. Ambassador singer presentations may include: Madrigal, Singing Valentines, and various community performances including elementary and middle school audiences. Auditions are held in May.

Alignment to the 2014 National Core Arts Standards for Music: *Creating, Performing, Responding, and Connecting.* 

ADVANCED CHORAL MUSIC: PORTFOLIO

| M03001 (Selli 1), M03002 (Selli 2) |                                               |
|------------------------------------|-----------------------------------------------|
| DURATION:                          | year course                                   |
| CREDITS:                           | 2                                             |
| OPEN TO:                           | seniors                                       |
| PREREQUISITE:                      | recommendation of the director of vocal music |

The primary purpose of this advanced level course is to prepare senior music students for college auditions, applications, scholarships, and careers in music. Students are recommended based on their interest, participation and leadership in school music programs, and career aspirations. Students will prepare and maintain a performance portfolio and resume for college auditions and career planning. Students will have weekly voice lessons and meetings with their faculty advisor to monitor progress and meet college application deadlines. Students will prepare and audition for the Iowa All State Chorus. Students will perform at State Solo and Ensemble Festival. Students will participate in at least one college or university honor choir experience. Students will have opportunities to meet with and perform for various college music faculty. Students will present their final portfolio to music department faculty, their school counselor, an administrator, and invited guests.

Alignment to the 2014 National Core Arts Standards for Music: *Creating, Performing, Responding, and Connecting.* 

#### **MODERN BAND TECHNIQUE & TECH 1**

| MUS811        |                 |
|---------------|-----------------|
| DURATION:     | semester course |
| CREDITS:      | 1               |
| OPEN TO:      | all students    |
| PREREQUISITE: | none            |

In Modern Band Technique & Tech 1, the students will gain a basic grasp of playing instruments in the modern rock band: Guitar, bass, piano, and drums as well as basic vocal and music reading/writing skills. Students will learn basic techniques to be able to play these instruments in a classroom group and use their knowledge to be able to set up and perform as a class ensemble.

This class is open to any student who wants to gain a basic understanding of the instruments in a modern band and develop basic songwriting/arranging skills.

Alignment to the 2014 National Core Arts Standards for Music: *Creating, Performing, Responding, and Connecting.* 

#### **MODERN BAND TECHNIQUE & TECH 2**

| MUS812        |                                   |
|---------------|-----------------------------------|
| DURATION:     | semester course                   |
| CREDITS:      | 1                                 |
| OPEN TO:      | all students                      |
| PREREQUISITE: | Modern Band Technique &<br>Tech 1 |
|               |                                   |

This is an expansion of Modern Band Technique & Tech 1. This class focuses on the Live and recording audio as well as the business side of being a self-sufficient musician.

This class will focus on the basic of sound physics, microphone use and placement, Home digital audio workstations, live sound mixers, and proper techniques in recording through hands on experiences.

We will also explore the business side of the music industry, working on writing a contract for a potential job opportunity, building a production rider, and culminating the class experience with a set up and execution of recording a track and performing a live show.

Alignment to the 2014 National Core Arts Standards for Music: *Creating, Performing, Responding, and Connecting.* 

# WORK-BASED LEARNING

#### EMPLOYABILITY SKILLS WITH JOB SHADOWING NICC CONCURRENT COLLEGE CLASS (WBL:110, WBL:150)

| WBL300        |                     |
|---------------|---------------------|
| DURATION:     | semester course     |
| CREDITS:      | 1                   |
| OPEN TO:      | juniors and seniors |
| PREREQUISITE: | none                |

This course provides students with the skills necessary to obtain a career. Students will complete career exploration, team-building, leadership, and workplace problem-solving strategies.

Students will visit workplaces of interest to learn about specific jobs and professional requirements. They will also have opportunities to attend field trips to learn more about specific careers. Networking with local employers and learning about employment opportunities through job shadows is a crucial course component. Additional key outcomes include:

- Practicing professionalism and the skills and attitudes required for job success.
- Understanding the interviewing process.
- Creating a resume.

which they are employed.

· Aligning career goals with future planning.

COMMENT: The course will be offered in both the fall and spring semester. Students must provide their own transportation to their job shadows. This is a concurrent enrollment course. In addition to high school credit, students will earn 4 college credits at NICC. Contact your school counselor and/or the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.

INTERNSHIP

| WBL401                                                                                         |                     | Internship provides students the opportunity to learn and apply valuable skills related to                                                                                                                                                                              |
|------------------------------------------------------------------------------------------------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DURATION:                                                                                      | semester course     | their future education and career goals.                                                                                                                                                                                                                                |
| CREDITS:                                                                                       | 1                   | Students will learn about business careers of their interest, receive support in attaining                                                                                                                                                                              |
| OPEN TO:                                                                                       | juniors and seniors | employment, apply career skills, and reflect weekly in a classroom setting. Internship<br>positions are either paid or non-paid, providing students the opportunity to \$earn\$ while                                                                                   |
| PREREQUISITE: SUCCESSFUL COMPLETION OF<br>Employability Skills with Job<br>Shadowing or VERTEX |                     | they learn! Students will work with employers, parents, and the instructor to develop<br>a training agreement that goes beyond the typical entry-based worker experience to<br>provide students with an overview of all aspects of industry within the organization for |

Employability Skills with Job Shadowing or VERTEX Career Coach and instructor approval

COMMENT: Internship will meet once per week. Must provide own transportation to work-site. This course will be offered in the spring semester.

#### WELDING APPRENTICESHIP

#### WBL121 (Sem 1), WBL122 (Sem 2)

| DURATION: | year course |
|-----------|-------------|
| CREDITS:  | 2           |
| OPEN TO:  | seniors     |
| -         |             |

PREREQUISITE: SUCCESSful completion of Employability Skills with Job Shadowing and Introduction to Professional Welding

Prepare for a rewarding career in welding through our Welding Apprenticeship program designed exclusively for high school students. This comprehensive program integrates key components, including metals and manufacturing courses, followed by high school welding and culminating in professional welding. It provides you with the expertise and hands-on experience needed to excel in the welding profession.

#### Program Highlights:

- · Metals and Manufacturing Courses: Dive into the world of metals and manufacturing, gaining in-depth knowledge of materials and processes essential to welding
- Employability Skills: Develop vital employability skills, including teamwork, leadership, and problem-solving, which are crucial for success in any career.
- · High School Welding: Build a strong foundation in welding, acquiring essential skills and expertise in the field.
- · Professional Welding: This advanced phase of the program takes your skills to the next level. You'll have multiple opportunities to engage with employers through classroom projects and visits to employers. Here, you'll deepen your understanding of welding processes, techniques, and equipment, all while maintaining a focus on safetv.
- On-The-Job Training: As a key component of this apprenticeship, you'll have the opportunity to apply your skills in real-world settings. Starting in the summer after your 11th-grade year, you can apply for positions with industry-leading partners such as John Deere, Unison Solutions, Rite-Hite, Advance Pump, Universal Tank and Fabrication, or other new business partners. This on-the-job training will provide invaluable experience and allow you to further hone your welding expertise.
- Networking Opportunities: Networking with local employers and professionals in the field is a fundamental aspect of this apprenticeship. By connecting with industry experts, you'll gain insights into potential career paths and employment opportunities.

Embark on a journey to become a skilled welder, equipped with the knowledge, handson experience, and industry connections needed to succeed in this dynamic field. Take the first step towards your welding career with our Welding Apprenticeship program.

COMMENT: Must provide own transportation to work-site. Students may take either semester or both semesters. First semester is not a prerequisite for the second semester of the course.

# **DIESEL TECHNICIAN APPRENTICESHIP**

| WBL131 (Sem 1), WBL132 (Sem 2) |                                                                                                                                                                                                                                                        |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DURATION:                      | year course                                                                                                                                                                                                                                            |
| CREDITS:                       | 2                                                                                                                                                                                                                                                      |
| OPEN TO:                       | seniors                                                                                                                                                                                                                                                |
| PREREQUISITE:                  | successful completion of<br>Small Engine Repair,<br>Autos I - Care & Maintenance,<br>Autos II - Diagnostics,<br>Autos III - Chassis & Drive<br>Trains, Diesel Technician I,<br>Diesel Technician II, and<br>Employability Skills with Job<br>Shadowing |

Launch a career in diesel technology through our Diesel Technician Registered Apprenticeship, crafted specifically for high school students. This comprehensive program covers essential diesel systems and hands-on skills, beginning with foundational courses and culminating in real-world training at a leading technical institute. Through coursework and on-the-job training, students gain valuable experience needed to excel in the diesel technology field.

#### Program Highlights:

· Foundational Courses: Develop technical knowledge in small engine repair, vehicle diagnostics, and chassis systems. Diesel Technician Training: Specialized instruction in diesel systems, HVAC, electrical systems, suspensions, and drivetrains, taught by experienced trainers at Truck Country's technical institute. On-the-Job Training: Following Grade 11, eligible students begin full-time training, transitioning to part-time during Grade 12 with industry partners like Brown NationaLease, Dubuque Community Schools, Hirschbach, Thompson Truck & Trailer, Truck Country, and Tucker Freight. Networking Opportunities: Work alongside local professionals, gain insights into diesel technology careers, and build industry connections. • Post-Graduation Pathways: After completing high school, students can continue the Registered Apprenticeship, enroll in NICC's Diesel Tech Program with transferable

Embark on a pathway to becoming a skilled Diesel Technician, equipped with technical expertise, industry certifications, and real-world experience. Take the first step toward a rewarding career in diesel technology with our Diesel Technician Apprenticeship.

credits, or join an 18+ program with their employer.

COMMENT: Must provide own transportation to work-site. Students may take either semester or both semesters. First semester is not a prerequisite for the second semester of the course.

#### PRACTICAL WORK EXPLORATORY

| XSM153        |                                                                   |
|---------------|-------------------------------------------------------------------|
| DURATION:     | semester course                                                   |
| CREDITS:      | 1                                                                 |
| OPEN TO:      | all students                                                      |
| PREREQUISITE: | placement based on<br>assessment and instructor<br>recommendation |

Practical Work Exploratory is a semester long course designed for students that are placed on a non-paid part-time job in school or out in the community for a minimum of 4 hours per week. This course will assist students with exploring their potential career interest areas while at the same time, helping to develop the required soft skills necessary for any type of employment. The Work Experience Coordinator will visit the job sites monthly for evaluation of student performance in accordance with the training agreement. During the evaluation meeting, they will develop the competencies necessary for the student to survive and prosper in the work environment. The goal will be to identify and describe ways to develop the student's personal/social/occupational competencies and to allow the student to explore interest areas. Units of study will include employment skills, customer service skills, decision-making skills, labor laws for minors under 18, occupational safety training, how to properly leave a job, and career exploration. This course may be repeated for additional credit(s).

#### PRACTICAL WORK EXPERIENCE

| XSM154        |                                                                   |
|---------------|-------------------------------------------------------------------|
| DURATION:     | semester course                                                   |
| CREDITS:      | 1                                                                 |
| OPEN TO:      | all students                                                      |
| PREREQUISITE: | placement based on<br>assessment and instructor<br>recommendation |

Practical Work Experience is a semester long course designed for students that are placed on a paid part-time job in school or out in the community for a minimum of 10 hours per week. This course will assist students in gaining access to competitive employment by offering training in job skills and providing a flexible learning environment suited to student needs. The Work Experience Coordinator will visit the job sites monthly for evaluation of student performance in accordance with the training agreement. During the evaluation meeting, they will develop the competencies necessary for the student with special needs to survive and prosper in the work environment. The goal will be to identify and describe ways to develop the student's personal/social/occupational competencies. Units of study will include employment skills, customer service skills, decision-making skills, payroll deductions/stubs, labor laws for minors under 18, occupational safety training, income taxes training, how to properly leave a job, and career exploration. This course may be repeated for additional credit(s).

#### **GRAD (GRADUATION, REALITY AND DECISION-MAKING)**

| XSM411 (Sem 1), XSM412 (Sem 2) |                                                                   |
|--------------------------------|-------------------------------------------------------------------|
| DURATION:                      | year course                                                       |
| CREDITS:                       | 2                                                                 |
| OPEN TO:                       | all students                                                      |
| PREREQUISITE:                  | placement based on<br>assessment and instructor<br>recommendation |

This course is for students that need a specific behavior support. Best practices in classroom and behavior management will be presented, included organizing time, materials, transitions, strategies for managing individual and large group student behaviors. Students will be taught the social skills needed for independent functioning within the community. Topics may include self-regulation, self-control, problem-solving, crime and punishment, anger control, decision-making, interacting with others, and maintaining relationships. This course may be repeated for additional credit(s).

#### PRACTICAL CAREER SKILLS I

| XSM551        |                                                                   |
|---------------|-------------------------------------------------------------------|
| DURATION:     | semester course                                                   |
| CREDITS:      | 1                                                                 |
| OPEN TO:      | freshmen and sophomores                                           |
| PREREQUISITE: | placement based on<br>assessment and instructor<br>recommendation |
|               |                                                                   |

Career Skills I is a semester long course designed to develop the competencies necessary for the student with special needs to survive and prosper in the work environment. The goal will be to identify and describe ways to develop the student's personal/social/occupational competencies. Units of study will include communication skills, decision making skills, setting & achieving goals, conflict resolution, problem solving, organization and time management.

#### PRACTICAL CAREER SKILLS II

#### XSM552

| DURATION:     | semester course                                                   |
|---------------|-------------------------------------------------------------------|
| CREDITS:      | 1                                                                 |
| OPEN TO:      | juniors and seniors                                               |
| PREREQUISITE: | placement based on<br>assessment and instructor<br>recommendation |

Career Skills II is a semester long course designed to develop the competencies necessary for the student with special needs to survive and prosper in the work environment. In Career Skills II, students identify and develop individual short term and long term career planning goals. Units of study will include planning for higher education, job research, networking, job applications, interviewing, communicating on the job, work ethic, job advancement and managing your finances. The course will end with a student planned service learning project.

#### **PRACTICAL READING 1-2**

#### XSM811 (Sem 1), XSM812 (Sem 2)

| DURATION:     | year course        |
|---------------|--------------------|
| CREDITS:      | 2                  |
| OPEN TO:      | all students       |
| PREREQUISITE: | placement based on |

assessment and instructor recommendation

#### **PRACTICAL READING 3-4**

| XSM911 (Sem 1), XSM912 (Sem 2) |             |  |
|--------------------------------|-------------|--|
| DURATION:                      | year course |  |

| CREDITS:      | 2                                                                 |
|---------------|-------------------------------------------------------------------|
| OPEN TO:      | all students                                                      |
| PREREQUISITE: | placement based on<br>assessment and instructor<br>recommendation |

This course is for students who require special education services as indicated by their Individual Education Plan (IEP). This course addresses strategies used to improve student decoding skills, vocabulary knowledge, and comprehension skills as determined by the individual IEP. Reading skills in content areas are also emphasized.

Alignment to the Iowa Core Curriculum: *Instruction, learning, and assessment are built primarily on the 9-10th grade-band expectations of the Iowa Core Reading, and Speaking and Listening Strands.* 

This course is for students who require special education services as indicated by their Individual Education Plan (IEP). This course addresses strategies used to improve student decoding skills, vocabulary knowledge, and comprehension skills as determined by the individual IEP. Reading skills in content areas are also emphasized.

Alignment to the Iowa Core Curriculum: *Instruction, learning, and assessment are built primarily on the 9-10th grade-band expectations of the Iowa Core Reading, and Speaking and Listening Strands.* 

#### **RESOURCE 9**

#### XSR101 (Sem 1), XSR102 (Sem 2)

| DURATION:     | year course                                                       |
|---------------|-------------------------------------------------------------------|
| CREDITS:      | 2                                                                 |
| OPEN TO:      | freshmen                                                          |
| PREREQUISITE: | placement based on<br>assessment and instructor<br>recommendation |
|               |                                                                   |

This year-long, two-credit course is intended for students entitled to special education services who need additional instruction designed to support them in the general education curriculum. Students learn reading strategies they can use with text typically encountered in ninth grade courses such as English 1-2 and Science. Students learn strategies to support their success in writing tasks required in ninth grade as well as strategies for tackling math concepts encountered in ninth grade. Students are instructed in notetaking, organization, and test-taking strategies. Students receive instruction in orientation to high school, time management, accessing resources, using learning management systems, social skills for high school, self-advocacy, and mapping out a plan for graduation. Also included is instruction specifically designed to meet their Individual Educational Plan goals.

#### **RESOURCE 10**

# XSR201 (Sem 1), XSR202 (Sem 2)

| DURATION:     | year course                                                       |
|---------------|-------------------------------------------------------------------|
| CREDITS:      | 2                                                                 |
| OPEN TO:      | sophomores                                                        |
| PREREQUISITE: | placement based on<br>assessment and instructor<br>recommendation |

**RESOURCE 11** 

| XSR301 (Sem 1), XSR302 (Sem 2) |                                                                   |  |
|--------------------------------|-------------------------------------------------------------------|--|
| DURATION:                      | year course                                                       |  |
| CREDITS:                       | 2                                                                 |  |
| OPEN TO:                       | juniors                                                           |  |
| PREREQUISITE:                  | placement based on<br>assessment and instructor<br>recommendation |  |

This year-long, two-credit course is intended for students entitled to special education services who need additional instruction designed to support them in the general education curriculum. Students learn reading strategies they can use with text typically encountered in tenth grade courses such as English 3-4, World History and Biology. Students learn strategies to support their success in writing tasks required in tenth grade as well as strategies for tackling math concepts encountered in tenth grade. Students are instructed in notetaking, organization, and test-taking strategies. Students receive instruction in responsible use of technology, working collaboratively, developing leadership skills, ethical behavior, time management, stress management, accessing resources, social responsibility, self-advocacy, and individual plans for graduation.

This year-long, two-credit course is intended for students entitled to special education services who need additional instruction designed to support them in the general education curriculum. Students learn reading strategies they can use with text typically encountered in eleventh grade courses such as literature, U.S. History, and 11th grade Science. Students learn strategies to support their success in writing tasks required in eleventh grade as well as strategies for tackling math concepts encountered in eleventh grade. Students are instructed in test-taking strategies designed to support them as they prepare for post-secondary education. Students continue instruction in responsible use of technology, working collaboratively, leadership development, ethical behavior, time management, stress management, accessing school and community resources, social responsibility, self-advocacy, and individual plans for graduation and transition to life after high school. Also included is instruction specifically designed to meet their Individual Educational Plan goals.

#### **RESOURCE 12**

XSR401 (Sem 1), XSR402 (Sem 2)

| DURATION:     | year course        |
|---------------|--------------------|
| CREDITS:      | 2                  |
| OPEN TO:      | seniors            |
| PREREQUISITE: | placement based on |

assessment and instructor recommendation

This year-long, two-credit course is intended for students entitled to special education services who need additional instruction designed to support them in the general education curriculum. Students learn reading strategies they can use with text typically encountered in twelfth grade courses such as literature, American Government, and human/society study courses. Students learn strategies to support their success in writing tasks required in twelfth grade as well as strategies for tackling math concepts encountered in twelfth grade. Students are instructed in test-taking strategies designed to support them as they prepare for post-secondary education. Students continue instruction in responsible use of technology, working collaboratively, leadership, ethical behavior, time management, stress management, accessing school and community resources, civic and social responsibility, self-advocacy, and individual plans for transition to life after high school. Also included is instruction specifically designed to meet their Individual Educational Plan goals.

# SPECIALIZED PROGRAM COURSES

# ENGLISH LANGUAGE LEARNER

#### MULTILINGUAL NEWCOMER

| ELM101 (Sem 1), ELM102 (Sem 2) |                               |
|--------------------------------|-------------------------------|
| DURATION:                      | year course                   |
| CREDITS:                       | 2                             |
| OPEN TO:                       | all students                  |
| PREREQUISITE:                  | English proficiency screening |

This is an English class for students who are new to the United States and for whom English is a new language. The focus of this class is on beginning development of listening, speaking, reading, and writing. Vocabulary and grammar development, as well as basic reading and writing skills, are emphasized. Students in the Multilingual Newcomer course also learn about American school, American culture, and social skills for the American classroom and culture.

COMMENT: ELM courses may count toward a variety of graduation requirements. This course may be repeated if the student has not demonstrated necessary growth in English proficiency based on ELPA21 scores.

#### **MULTILINGUAL BEGINNER**

| ELM201 (Sem 1), ELM202 (Sem 2) |                               |
|--------------------------------|-------------------------------|
| DURATION:                      | year course                   |
| CREDITS:                       | 2                             |
| OPEN TO:                       | all students                  |
| PREREQUISITE:                  | English proficiency screening |

This is an English course for students who have completed Multilingual Newcomer or who have a comparable level of English language proficiency. It focuses on further development of vocabulary and grammar along with reading and writing skills.

COMMENT: ELM courses may count toward a variety of graduation requirements. This course may be repeated if the student has not demonstrated necessary growth in English proficiency based on ELPA21 scores.

#### **MULTILINGUAL INTERMEDIATE**

| ELM301 (Sem 1), ELM302 (Sem 2) |                               |  |
|--------------------------------|-------------------------------|--|
| DURATION:                      | year course                   |  |
| CREDITS:                       | 2                             |  |
| OPEN TO:                       | all students                  |  |
| PREREQUISITE:                  | English proficiency screening |  |

The English Language Learner course is for students who have been identified as non-English language proficient because English is not their home or native language. In this course, instruction is for the purpose of developing conversational and academic English proficiency. To attain this goal, reading, writing, speaking, and listening are the major instructional elements. Vocabulary development, conversation and academic English are intensive, required elements of instruction. Students in an ELM course also learn about American schooling, American culture, and social skills for the American classroom and culture.

COMMENT: ELM courses may count toward a variety of graduation requirements. This course may be repeated if the student has not demonstrated necessary growth in English proficiency based on ELPA21 scores.

#### **MULTILINGUAL ADVANCED**

|  | ELM401 (Sem 1), ELM402 (Sem 2) |                               |
|--|--------------------------------|-------------------------------|
|  | DURATION:                      | year course                   |
|  | CREDITS:                       | 2                             |
|  | OPEN TO:                       | all students                  |
|  | PREREQUISITE:                  | English proficiency screening |

The English Language Learner course is for students who have been identified as non-English language proficient because English is not their home or native language. In this course, instruction continues from Multilingual Intermediate for the purpose of increasing conversational and academic English proficiency. Reading, writing, speaking, and listening are the major instructional elements. Vocabulary development of survival, conversation and academic English are intensive, required elements of instruction. Students in an ELM course also learn about American schooling, American culture, and social skills for the American classroom and culture.

COMMENT: ELM courses may count toward a variety of graduation requirements. This course may be repeated if the student has not demonstrated necessary growth in English proficiency based on ELPA21 scores.