

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 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.

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.

APPLIED LEARNING COURSES

FINANCIAL LITERACY

CREDITS REQUIRED FOR GRADUATION

1 credit is required for graduation from the Dubuque Community School District.

FINANCIAL LITERACY

BUS245

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, wealth-building 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.

APPLIED LEARNING

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.

BUSINESS EDUCATION

INTRODUCTION TO BUSINESS

BUS111

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

BUS311

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

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)*

ACCOUNTING II

BUS312

DURATION:	semester course
CREDITS:	1
OPEN TO:	sophomores, juniors, seniors
PREREQUISITE:	Accounting I

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)*

ENTREPRENEURSHIP

BUS335

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

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

BUS441

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

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 seniors

PREREQUISITE: successful completion of informative intake interview by the IJAG Specialist

IJAG 11-12 (Iowa Jobs for America's Graduates) is a career exploration and preparation course that provides a hands-on approach to exploring personal strengths and challenges as well as job attainment skills (cover letter, resume, job application, interviewing, etc.) and work place "survival" skills (interpersonal relations, team work, etc.). Students will work to build strengths in academic areas, time management, and communication.

Individual and team project work will help students come to an understanding of their personality and temperament and the relationship between personal actions and the consequences that follow. Students will make connections to their career interests, abilities, and aptitudes by determining their education and career goals through development of an Individual Career Development Plan.

This full-year, credited course involves individual assignments, team activities/projects, academic remediation support, service learning opportunities, guest speakers, field trips (including some state IJAG events such as the Leadership Development and Career Development conferences in Des Moines), and career exploration through job shadowing. Students will also participate in the IJAG Career Association in various activities focused on Career and Leadership Development, Service Learning, and Civic/Social Awareness.

COMMENT: IJAG is a multiyear commitment of support including one year of follow-up beyond high school.

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

IJAG 9-10 (Iowa Jobs for America's Graduates) is an introductory level course in career exploration and preparation that provides a hands-on approach to exploring personal strengths and challenges as well as job attainment skills (cover letter, resume, job application, interviewing, etc.) and work place "survival" skills (interpersonal relations, team work, etc.). Students will work to build strengths in academic areas, time management, and communication.

Individual and team project work will help students come to an understanding of personality and temperament and the relationship between personal actions and the consequences that follow. Students will make connections to their career interests, abilities, and aptitudes by determining their education and career goals through development of an Individual Career Development Plan.

This full-year, credited course involves individual assignments, team activities/projects, academic remediation support, service learning opportunities, guest speakers, field trips (including some state IJAG events such as the Leadership Development and IJAG national conferences in Des Moines), and career exploration through job shadowing. Students will also participate in the IJAG Career Association in various activities focused on Career and Leadership Development, Service Learning, and Civic/Social Awareness.

COMMENT: IJAG is a multiyear commitment of support including one year of follow-up beyond high school.

EMERGENCY MEDICAL TECHNICIAN

EMERGENCY MEDICAL TECHNICIAN

NICC CONCURRENT COLLEGE CLASS (EMS:200)

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.

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.
- 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.

ENGLISH

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.*

YEARBOOK

ENG371 (Sem 1), ENG372 (Sem 2)

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

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.

NEWSPAPER

ENG381 (Sem 1), ENG382 (Sem 2)

DURATION: year course

CREDITS: 2

OPEN TO: sophomores, juniors, seniors

PREREQUISITE: Journalism and Newspaper staff application acceptance

Students in this class will be responsible for planning, organizing, designing, and publishing a school newspaper.

Students are responsible for journalistic writing, editing, and photography. Desktop publishing and photo editing programs will be used to produce professional-looking publications. Students are 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, 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.

FAMILY AND CONSUMER SCIENCES

NUTRITION AND FOOD PREPARATION

FCS125

DURATION: semester course

CREDITS: 1

OPEN TO: all students

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)*

CHILD HEALTH, SAFETY & NUTRITION

NICC CONCURRENT COLLEGE CLASS (ECE:133)

FCS235

DURATION: semester course

CREDITS: 1

OPEN TO: sophomores, juniors, seniors

PREREQUISITE: none

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.

EARLY CHILDHOOD CURRICULUM I

NICC CONCURRENT COLLEGE CLASS (ECE:158)

FCS255

DURATION: semester course

CREDITS: 1

OPEN TO: sophomores, juniors, seniors

PREREQUISITE: none

This course focuses on the development, implementation, and assessment of age appropriate environments and curricula for young children ages 3-8 years. Learning activities will focus on developing appropriate learning opportunities, interactions and environments within the areas of dramatic play, art, music, and small and large muscle motor play. Students will be expected to demonstrate their understanding of 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 to attend for more information on the transferability of the credits.

CHILD GROWTH & DEVELOPMENT

NICC CONCURRENT COLLEGE CLASS (ECE:170)

FCS275	
DURATION:	semester course
CREDITS:	1
OPEN TO:	sophomores, juniors, seniors
PREREQUISITE:	none

This course reviews typical and atypical development of children from conception to adolescence in all developmental domains. Interactions between child, family, and society with a variety of community and cultural contexts will be examined, as well as theories and evidence based practices associated with understanding and supporting young children.

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.

FOUNDATIONS IN EDUCATION

NICC CONCURRENT COLLEGE CLASS (EDU:210)

FCS301	
DURATION:	semester course
CREDITS:	1
OPEN TO:	sophomores, juniors, seniors
PREREQUISITE:	none

This course provides a basic historical, philosophical, and sociological orientation to the field of American education, including a study of contemporary issues and problems.

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 TEACHING

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

This course is for students exploring a career in education. Students learn first-hand elementary, middle school, or high school career expectations and experiences. This course will help prepare students for a career in education by reviewing topics such as professionalism, mandatory reporting, cultural responsiveness, etc. Students will have the opportunity to acquire extensive field experience through observations and possibly field trips. Students will work to develop leadership skills toward becoming agents of change in their schools and communities. This class provides a strong foundation and transition to the DCSD Education Pathway.

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

This course prepares students for a mature adult role. The coordination of personal, marriage, family and career goals will be explored as well as resources for adjusting to change and crisis. Students will analyze skills needed to establish positive relationships with others.

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

College is a new and different experience for many students. This course will convey expectations of the college culture to first-time college students. The course will provide an examination of the student's learning styles, familiarization with college resources and support services, review of important study and test taking skills, development of goal setting and decision making skills, and enhancement of personal skills that relate directly to success in college, and beyond.

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.

CAREERS IN HUMAN SERVICES

FCS307

DURATION: semester course

CREDITS: 1

OPEN TO: sophomores, juniors, seniors

PREREQUISITE: none

This course is for students interested in a career in the Human Services Career Cluster. Students will be introduced and exposed to career opportunities pertaining to the delivery of individual, family, personal, and consumer services for other human beings. Course topics include child development and services, counseling and mental health services, family and community services, personal care services, and consumer services. Careers pathways explored include Early Childhood Development & Services, Counseling & Mental Health Services, Family & Community Services, Personal Care Services, Consumer Services, Restaurant & Food/Beverage Services, Travel & Tourism, and Teaching/Training.

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

HEALTH

HEALTH I

HTH101

DURATION: semester course

CREDITS: 1

OPEN TO: all students

PREREQUISITE: none

Health I will provide students with knowledge in the areas of personal health, environmental health, consumer health, substance abuse and nonuse, human sexuality, emotional and social health, health resources, and prevention and control of diseases.

Alignment to the National Health Education Standards.

COMMENT: This course fulfills the Iowa Core mandate for health literacy.

HEALTH II

HTH102

DURATION: semester course

CREDITS: 1

OPEN TO: all students

PREREQUISITE: Health I

Health II will build upon the information provided in Health I and continue to develop knowledge in the areas of personal health, environmental health, consumer health, substance abuse and nonuse, human sexuality, emotional and social health, health resources, and prevention and control of diseases.

Alignment to the National Health Education Standards.

HEALTH SCIENCE

HEALTH OCCUPATIONS

HSC110

DURATION: semester course

CREDITS: 1

OPEN TO: juniors and seniors

PREREQUISITE: none

NICC CONCURRENT COLLEGE CLASS (HSC:110)

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 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 the admissions office of the postsecondary institution you plan to attend for more information on the transferability of the credits.

MEDICAL TERMINOLOGY

HSC114

DURATION: semester course

CREDITS: 1

OPEN TO: juniors and seniors

PREREQUISITE: none

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

HSC115

DURATION: semester course

CREDITS: 1

OPEN TO: juniors and seniors

PREREQUISITE: successful completion of ALEKS math testing with a minimum score of 15

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.

INTRODUCTION TO NUTRITION

NICC CONCURRENT COLLEGE CLASS (PNN:270)

HSC116

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

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.

CERTIFIED NURSE AIDE

NICC CONCURRENT COLLEGE CLASS (HSC:172)

HSC172

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

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 long-term 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.

AUTO CARE & MAINTENANCE

INT213

DURATION: semester course

CREDITS: 1

OPEN TO: sophomores, juniors, seniors

PREREQUISITE: none

Auto Care is a class designed for everyone who plans to drive and 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 making educated decisions concerning automotive problems are benefits derived from successful completion of this class.

Alignment to the Iowa 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.

AUTO DIAGNOSTICS

INT215

DURATION: semester course

CREDITS: 1

OPEN TO: sophomores, juniors, seniors

PREREQUISITE: Auto Care & Maintenance

Auto Diagnostics is a course designed for students who are serious about understanding modern automobiles. Hands-on experiences with tools and equipment are incorporated into lab activities exploring various automobile systems, including fuel and emission systems, ignition and electrical. Students use diagnostic equipment and learn recommended repair replacement and adjustment techniques. Students will be able to understand and appreciate the complexity of modern automobiles. Students will be familiar with systems components and be experienced doing basic trouble shooting techniques.

Alignment to the Iowa 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.

AUTO CHASSIS & DRIVE TRAINS

INT217

DURATION: semester course

CREDITS: 1

OPEN TO: sophomores, juniors, seniors

PREREQUISITE: Auto Care & Maintenance

The chassis course is designed for all students who find a need to further their knowledge about the automobile and want to learn how the drive train components work together to help the car perform safely and as designed. The course is designed to help students diagnose repairs needed, and service a car's brake, steering, suspension and drive train systems. Lab activities will include: tire mounting and balancing, flat tire repair, disc and drum brakes service, shock absorber, spring, strut, and suspension parts replacement, and wheel alignment.

Alignment to the Iowa 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

DURATION: semester course

CREDITS: 1

OPEN TO: all students

PREREQUISITE: none

Small Engine Repair class deals with all facets of small engine application including lawn mowers, cycles, snowmobiles, outboards, and power saws. Hand and power tool use, as 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 concepts associated with class activities. Students enrolled in this course will also learn about careers as a diesel technician through a partnership with Truck Country.

Alignment to the Iowa 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.

ELECTRICITY / ELECTRONICS

INT323

DURATION: semester course

CREDITS: 1

OPEN TO: all students

PREREQUISITE: none

Knowledge of electricity is the foundation of understanding all modern personal 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 develop teamwork and communication methods and produce technical documentation.

Students will contrast analog electronics, where information is represented by 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: *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.

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
DURATION: semester course
CREDITS: 1
OPEN TO: sophomores, juniors, seniors
PREREQUISITE: Manufacturing or Metals with instructor approval

This course will increase the student's competency and proficiency in many aspects of welding. Students will have experience working with oxyacetylene, shielded metal arc welding (SMAW), gas metal arc welding (GMAW)-MIG and gas tungsten arc welding (GTAW)-TIG welding processes. Along with the bonding of metals, students will gain experience in cutting metals and with fabrication procedures.

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

Construction I provides students with the opportunity to explore a wide variety of construction techniques related to residential construction and related career opportunities. This course will teach proper safety and application of tools. Students will learn starting from the ground up: footers/foundations, walls, floor plans, wall framing, wall coverings, and related components. Mathematical components and equations will be applied to the construction process.

Alignment with the Common Career Technical Core: *Construction Career Pathway standards 1-9.*

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

CONSTRUCTION II

INT387
DURATION: semester course
CREDITS: 1
OPEN TO: all students
PREREQUISITE: Construction I

In this course, students will be learning the completion of the house which may include: exterior finishing, electrical, plumbing, heating, room layout, insulation, wall covering, floor covering and trim work. Mathematical components and equations will be applied to the construction process.

Alignment with the Common Career Technical Core: *Construction Career Pathway standards 10-18.*

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

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)*

ENGINEERING DRAFTING & DESIGN II

INT413

DURATION: semester course

CREDITS: 1

OPEN TO: all students

PREREQUISITE: Engineering Drafting & Design I

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

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.*

INTRODUCTION TO PROFESSIONAL WELDING

INT501 (Sem 1), INT502 (Sem 2)

DURATION:	year course
CREDITS:	4
OPEN TO:	sophomores, juniors, seniors
PREREQUISITE:	Welding or instructor 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**NICC CONCURRENT COLLEGE CLASS (DSL:632, AUT:321)****INT701 (Sem 1)**

DURATION: semester course

CREDITS: 2

OPEN TO: juniors and seniors

PREREQUISITE: completion of at least two of the following: Auto Care and Maintenance, Auto Diagnostics, Auto Chassis and Drive Trains and/or Small Engine Repair

RECOMMEND: Welding, Electricity/ Electronics

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.

DIESEL TECHNICIAN II**NICC CONCURRENT COLLEGE CLASS (DSL:533)****INT702 (Sem 2)**

DURATION: semester course

CREDITS: 2

OPEN TO: juniors and seniors

PREREQUISITE: INT701

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**

DURATION: semester course

CREDITS: 1

OPEN TO: all students

PREREQUISITE: none

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: none

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: 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)*

VIDEO PRODUCTION

ISS221
DURATION: semester course
CREDITS: 1
OPEN TO: all students
PREREQUISITE: none

The focus of this course lies in the three central areas of video production: planning, production, and editing. Students will develop a comprehensive plan, shoot video, and edit both audio and video to produce a finished project. Students will be creating various films with provided video equipment and software. Projects may include music videos, green screen videos, documentaries, studio work, and short films.

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

COMMENT: Course may be repeated as an independent study with instructor approval.

ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES

ISS231 (Sem 1), ISS232 (Sem 2)
DURATION: year course
CREDITS: 2
OPEN TO: all students
PREREQUISITE: none

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: customer-service strategies and 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

NICC CONCURRENT COLLEGE CLASS (NET:103)

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.

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 Algebra II and instructor recommendation

AP Computer Science A is designed to serve as a first course in computer science for students with no prior programming experience. The course is meant to be the equivalent of a first-semester college-level course in computer science. Student will focus on problem solving by developing computer programs or parts of programs that correctly solve a given problem. Students will explore and learn about design issues that make programs understandable, adaptable, and, when appropriate, reusable. In writing effective and useful programs, students will also develop and analyze algorithms, develop and use fundamental data structures, and learn about typical applications of standard algorithms. 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.*

FUNDAMENTALS OF WEB DESIGN

ISS701

DURATION: semester course

CREDITS: 1

OPEN TO: sophomores, juniors, seniors

PREREQUISITE: none

NICC CONCURRENT COLLEGE CLASS (CIS:197)

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)*

COMPUTER ETHICS

ISS702

DURATION: semester course

CREDITS: 1

OPEN TO: sophomores, juniors, seniors

PREREQUISITE: none

NICC CONCURRENT COLLEGE CLASS (CIS:101)

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.

WORK-BASED LEARNING

EMPLOYABILITY SKILLS WITH JOB SHADOWING

WBL300

DURATION: semester course

CREDITS: 1

OPEN TO: sophomores, juniors, seniors

PREREQUISITE: none

NICC CONCURRENT COLLEGE CLASS (WBL:110, WBL:150)

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. 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.
- Aligning career goals with future planning.

COMMENT: 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
DURATION: semester course
CREDITS: 1
OPEN TO: juniors and seniors
PREREQUISITE: successful completion of Employability Skills with Job Shadowing

Internship provides students the opportunity to learn and apply valuable skills related to their future education and career goals.

Students will learn about business careers of their interest, receive support in attaining employment, apply career skills, and reflect weekly in a classroom setting. Internship positions are either paid or non-paid, providing students the opportunity to \$earn\$ while they learn! Students will work with employers, parents, and the instructor to develop a training agreement that goes beyond the typical entry-based worker experience to provide students with an overview of all aspects of industry within the organization for which they are employed.

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

SPECIAL PROGRAMS

PRACTICAL WORK EXPLORATORY

XSM153
DURATION: semester course
CREDITS: 1
OPEN TO: all students
PREREQUISITE: placement based on assessment and instructor 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 assessment and instructor 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).

PRACTICAL CAREER SKILLS I

XSM551
DURATION: semester course
CREDITS: 1
OPEN TO: freshmen and sophomores
PREREQUISITE: placement based on assessment and instructor 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: 2
OPEN TO: juniors and seniors
PREREQUISITE: placement based on assessment and instructor 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 TRANSITION PLANNING

XSM558 (Sem 1), XSM559 (Sem 2)

DURATION: year course

CREDITS: 2

OPEN TO: juniors and seniors

PREREQUISITE: placement based on assessment and instructor recommendation

Practical Transition Planning is a year-long course designed to develop the competencies necessary for the student to develop the skills necessary to live as independently as possible. Instruction will be driven by the transition areas of living, learning, working as written in student's IEP's. Topics may include: housing options, financial planning, career readiness, basic money skills, insurance, investing, and self-determination skills. Skills will be generalized through community experiences to facilities such as: department of housing, utility offices, hospitals and banking.

FINE ARTS COURSES

FINE ARTS

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.

ART

ART 2D (2 DIMENSIONAL)

ART 113

DURATION: semester course

CREDITS: 1

OPEN TO: all students

PREREQUISITE: none

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. Drawing, painting, and printmaking are explored. Students should anticipate a studio-based art class which may include creative problem solving, sketchbook studies, production of artwork, critiques, self-evaluation, readings, note taking, tests, and quizzes. Also introduced in the class are historical and contemporary trends in art, which are explored through visual examples. 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 the advanced art courses.

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

ART 3D (3 DIMENSIONAL)

ART 114

DURATION: semester course

CREDITS: 1

OPEN TO: all students

PREREQUISITE: none

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 and other sculpture materials are explored. Students should anticipate a studio-based art class which may include creative problem solving, production of artwork, critiques, self-evaluation, readings, note taking, tests, and quizzes. Also introduced in the class are historical and contemporary trends in art, which are explored through visual examples. 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.*

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 in-depth 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 compositions and designs. Subject matter may include, but is not limited to, the human figure, organic forms, landscape, and everyday 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, production of artwork, critiques, self-evaluation, research, readings, note taking, tests, and quizzes.

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.