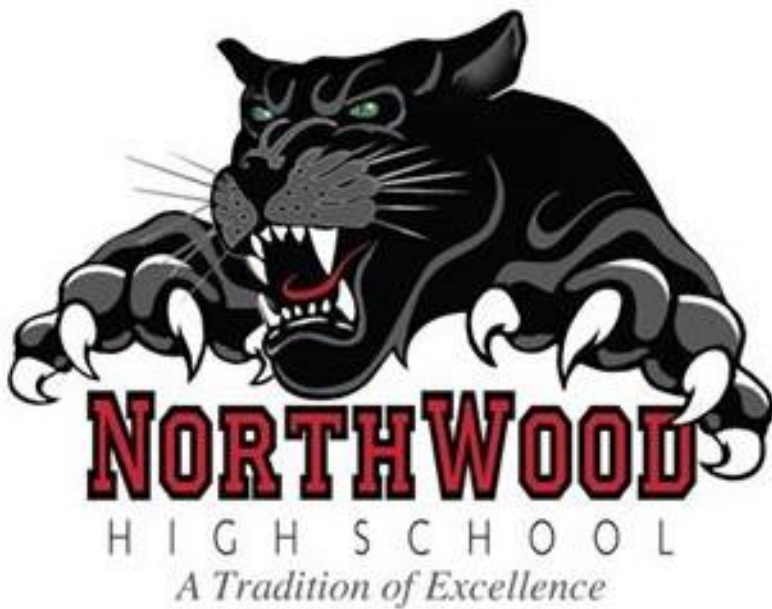


2019-2020

COURSE CATALOG



2101 North Main Street

Nappanee, IN 46550

P: 574.773.4127

F: 574.773.4099

W: www.wanee.org

INTRODUCTORY INFORMATION

ADMINISTRATIVE AND GUIDANCE STAFF

Principal: David Mangel

Vice Principal: Jay Olson

Dean of Secondary Education: Jade Sipic

Guidance Counselors: Karen Renner (Students with Last Name A-L)

Angie Clark (Students with Last Name M-Z)

Guidance Secretary & Registrar: Dawn Ziegler

GRADUATION REQUIREMENTS

Beginning with the Class of 2016, students must meet the Indiana Core 40 graduation requirements.

Course and Credit Requirements***	
English/Language Arts	8 Credits Including a balance of literature, composition and speech
Mathematics*	6 Credits (in grades 9-12) 2 credits: Algebra I 2 credits: Geometry 2 credits: Algebra II
Science	6 Credits 2 Credits: Biology I 2 Credits: Chemistry I or Physics I or Integrated Chemistry-Physics 2 Credits: Any Core 40 science course
Social Studies	6 Credits 2 Credits: US History 2 Credits: World History/Civilization 1 Credit: US Government 1 Credit: Economics
Directed Electives	5 Credits Career and Technical Education Fine Arts World Languages
Physical Education	2 Credits
Health & Wellness	1 Credit
Electives**	6 Credits
40 Total State Credits Required	

**Students must take a math course or quantitative reasoning course each year in high school. See Appendix C for a list of quantitative reasoning courses offered at NWHIS*

*** All students must participate in financial literacy education via the Preparing for College & Careers Course*

****ICAP courses may be made available if necessary*

GRADUATION QUALIFYING EXAM

Beginning in 2016-17, the ISTEP+ Grade 10 English/Language Arts and Mathematics tests replace the End of Course assessments in Algebra I and English 10 as the graduation requirement for the class of 2019 and 2020. Every Indiana student in the graduating class of 2019 and beyond must demonstrate mastery of the Indiana Academic Standards measured by the ISTEP+ Grade 10 English/Language Arts and Mathematics assessments. The ISTEP+ Grade 10 Math Assessment is based on standards adopted in 2014; the Grade 10 English Assessment is based on standards adopted in 2014.

Reading, writing and math are essential life skills, and students must demonstrate a basic understanding of English/language arts and mathematics as part of the requirements for graduation.

CORE 40 WITH ACADEMIC HONORS DIPLOMA

For the Core 40 with Academic Honors diploma, students must:

- Complete all requirements for Core 40
- Earn 2 additional Core 40 math credits
- Earn 6-8 Core 40 world language credits
 - Must earn 6 credits in one language or 4 credits each in two languages
- Earn 2 Core 40 fine arts credits
- Earn a grade of “C” or better in courses that will count toward the diploma
- Have a grade point average of 3.0 or better
- Complete one of the following:
 - Earn 4 credits in 2 or more AP courses and take corresponding AP exams
 - Earn 6 verifiable transcribed college credits in dual credit courses from the approved dual credit list
 - Earn both of the following:
 - A minimum of 3 verifiable transcribed college credits from the approved dual credit list
 - Two credits in AP courses and corresponding AP exams
 - Earn a composite score of 1250 or higher on the SAT and a minimum of 560 on math and 590 on the evidence-based reading and writing section
 - Earn an ACT composite score of 26 or higher and complete written section

CORE 40 WITH TECHNICAL HONORS

For the Core 40 with Technical Honors diploma, students must:

- Complete all requirements for Core 40
- Earn 6 credits in the college and career preparation courses in a state-approved College & Career Pathway and one of the following:
 - Pathway designated industry-based certification or credential, or
 - Pathway dual credits from the approved dual credit list resulting in 6 transcribed college credits
- Earn a grade of “C” or better in courses that will count toward the diploma
- Have a grade point average of 3.0 or better
- Complete one of the following:
 - Earn 4 credits in 2 or more AP courses and take corresponding AP exams
 - Earn 6 verifiable transcribed college credits in dual credit courses from the approved dual credit list
 - Earn both of the following:
 - A minimum of 3 verifiable transcribed college credits from the approved dual credit list
 - Two credits in AP courses and corresponding AP exams
 - Earn a composite score of 1250 or higher on the SAT and a minimum of 560 on math and 590 on the evidence-based reading and writing section
 - Earn an ACT composite score of 26 or higher and complete written section
 - Earn the following minimum scores on Accuplacer: Writing 80, Reading 90, Math 75

HEALTH & WELLNESS WAIVER

Students may waive the Health & Wellness graduation requirement by passing any three of the following courses:

- Preparing for College & Careers
- Interpersonal Relationships
- Nutrition and Wellness
- Child Development
- Adult Roles and Responsibilities

ATHLETIC ELIGIBILITY

You are eligible* if:

- You passed 80% of the full credit subjects or the equivalent that a student can take in your previous grading period. Trimester grades take precedence.
- You are currently enrolled in 80% of the full credit subjects or the equivalent that a student can take.

**These are only the scholarship requirements of athletic eligibility. For a full list of requirements, please visit the IHSAA website.*

TRANSFERS

Students transferring from *non-accredited schools*, such as homeschools, will be evaluated on a per-student basis. Proof of coursework completed must be submitted. There may be a limit to the number of credits granted. Students transferring from an *accredited high school* will be enrolled under the Transfer Student policy provisions.

NEW GRADUATION REQUIREMENTS – CLASS OF 2023

Students in the graduating class of 2023 must satisfy all three of the following Graduation Pathway Requirements by completing one of the associated Pathway Options:

Graduation Pathway Requirements	Graduation Pathway Options
High School Diploma	Must complete the requirements for the Indiana high school diploma
Learn and Demonstrate Employability Skills	Learn employability skills standards through locally developed programs. Employability skills are demonstrated by one of the following: <ul style="list-style-type: none"> • Project-based learning experience <ul style="list-style-type: none"> ○ Complete a research project • Service-based learning experience <ul style="list-style-type: none"> ○ Participate in meaningful volunteer or civic engagement experience • Work-based learning experience <ul style="list-style-type: none"> ○ Complete a course capstone; ○ Complete an internship; ○ Obtain the Governor’s Work Ethic Certificate; or ○ Be employed outside of the school day
Postsecondary-Ready Competencies (Students must complete at least one of the options listed)	<ul style="list-style-type: none"> • Honors Diploma: Fulfill all requirements of either the Academic or Technical Honors diploma; • ACT: Meet college-ready benchmarks; <ul style="list-style-type: none"> ○ 2017 Scores: 18 English or 22 Reading AND 22 Math or 23 Science • SAT: Meet college-ready benchmarks; <ul style="list-style-type: none"> ○ 2017 Scores: 480 English; 530 Math • ASVAB: Earn at least a minimum AFQT score to qualify for placement into one of the branches of the US military; • State and Industry recognized credential or certification; • State and Industry recognized apprenticeship; • Career-Technical Education Concentrator: Must earn a C or higher in at least 6 high school credits in a career sequence*; or • AP/Dual Credit: Must earn a C or better in at least 3 courses

**See next page for career sequences offered at NorthWood. Other options available at Elkhart Area Career Center*

GRADUATION PATHWAYS OFFERED AT NORTHWOOD HIGH SCHOOL FOR CLASSES OF 2018 – 2022 (SEE APPENDIX D)

Agriculture: Agribusiness	<ul style="list-style-type: none"> •Introduction to Agriculture •Animal Science OR Animal Science/AGRI 102 IVY TECH •Agribusiness Management
Agriculture: Animal Science	<ul style="list-style-type: none"> •Introduction to Agriculture •Animal Science OR Animal Science/AGRI 102 IVY TECH •Advanced Life Science: Animals
Architecture & Construction: Architectural	<ul style="list-style-type: none"> •Introduction to Housing and Interior Design •Introduction to Engineering Design •Principles of Engineering
Architecture & Construction: Recreational Vehicle Construction	<ul style="list-style-type: none"> •Introduction to Construction •Building & Facilities Management I •Construction Trades: Electrical I
Business & Marketing: Accounting & Finance	<ul style="list-style-type: none"> •Digital Applications & Responsibility •Introduction to Business •Introduction to Accounting •Advanced Accounting •Banking & Investment Capstone •Business Law
Business & Marketing: Business Management Focus	<ul style="list-style-type: none"> •Digital Applications & Responsibility •Introduction to Business •Introduction to Accounting •Advanced Accounting •Business Law
Health Science: Nursing	<ul style="list-style-type: none"> •Nutrition & Wellness •Interpersonal Relationships •Child Development •Anatomy & Physiology
Hospitality & Human Services: Human & Social Services	<ul style="list-style-type: none"> •Nutrition & Wellness •Introduction to Business •Advanced Nutrition & Wellness •Child Development •Interpersonal Relationships •Adult Roles & Responsibilities
Information Technology: PC Support/IT Technology Support	<ul style="list-style-type: none"> •Digital Applications •Introduction to Computer Science •Computer Science I
Manufacturing & Logistics: Advanced Manufacturing	<ul style="list-style-type: none"> •Introduction to Advanced Manufacturing & Logistics •Advanced Manufacturing I •Advanced Manufacturing II •Principles of Engineering PLTW
STEM: Computer Science	<ul style="list-style-type: none"> •Introduction to Computer Science •Digital Applications & Responsibility •Computer Science I •Computer Science II: Programming
STEM: Engineering	<ul style="list-style-type: none"> •Introduction to Engineering Design PLTW •Principles of Engineering PLTW •Civil Engineering & Architecture OR Computer Integrated Manufacturing •Computer Science I

GRADUATION PATHWAYS OFFERED AT NORTHWOOD HIGH SCHOOL FOR ALL STUDENTS (SEE APPENDIX E)

**Agriculture:
Animal Systems**

- Introduction to Agriculture
- Animal Science
- Advanced Life Science: Animals/AGRI 107 IVY TECH
- Agribusiness Management/AGRI 102 IVY TECH

**Architecture &
Construction:
Recreational Vehicle
Construction**

- Introduction to Construction
- Building & Facilities Management I
- Construction Trades: Electrical I

**Business & Marketing:
Banking/ Finance**

- Introduction to Accounting
- Advanced Accounting
- Banking & Investment Capstone

**Manufacturing &
Logistics:
Advanced
Manufacturing**

- Introduction to Advanced Manufacturing & Logistics
- Advanced Manufacturing I/IVY TECH ADMF 101
- Advanced Manufacturing II/IVY TECH ADMF 102

**STEM/ Information
Tech:
Computer Science/
Programming**

- Introduction to Computer Science
- Computer Science I
- Computer Science II

STEM: Engineering

- Introduction to Engineering Design PLTW
- Principles of Engineering PLTW
- Civil Engineering non-PLTW/PLTW OR
Computer Integrated Manufacturing PLTW

GENERAL DIPLOMA

The Indiana Core 40 diploma is the default diploma for all students. If the parents and the student decide that a general diploma is needed, a conference with school personnel is required.

Course and Credit Requirements	
English/Language Arts	8 Credits
	Credits must include literature, composition and speech
Mathematics*	4 Credits
	2 Credits: Algebra I
	2 Credits: Any Math Course
Science**	4 Credits
	2 Credits: Biology I
	2 Credits: Any Science Course
Social Studies	4 Credits
	2 Credits: US History
	1 Credit: US Government
	1 Credit: Any social studies course
Physical Education	2 Credits
Health and Wellness	1 Credit
College & Career Pathway Courses	6 Credits: Courses are selective in a deliberate manner to take full advantage of college and career exploration and preparation opportunities
Flex Credit	5 Credits: Flex Credits must come from addition electives in the college and career pathway, cooperative education or ICE courses, dual credit courses, or additional courses in English, Social Studies, Math, Science, World Language or Fine Arts
Electives***	6 Credits
40 Total Credits Required	

**Students are required to earn 2 credits in a Math or Quantitative Reasoning (QR) course during their junior or senior year. QR courses don't count as math credits.*

***At least one credit must be from a Physical Science course.*

**** All students must participate in financial literacy education via the Preparing for College & Careers Course*

SAMPLE 4-YEAR PLAN FOR CORE 40 DIPLOMA/VOCATIONAL SCHOOL PREPARATORY PLAN

FRESHMAN YEAR	SOPHOMORE YEAR	JUNIOR YEAR	SENIOR YEAR
English 9/Themes in Lit	English 10	English 11	English 12
Algebra I	Algebra II	Geometry	Trigonometry; Probability & Statistics
Biology	Integrated Chem/Physics	Science Elective	Government and Economics
Preparing for College & Careers	World History	US History	
Phys Ed I/II/Health	Career Electives	Career Electives or Elkhart Area Career Center	Career Electives or Elkhart Area Career Center

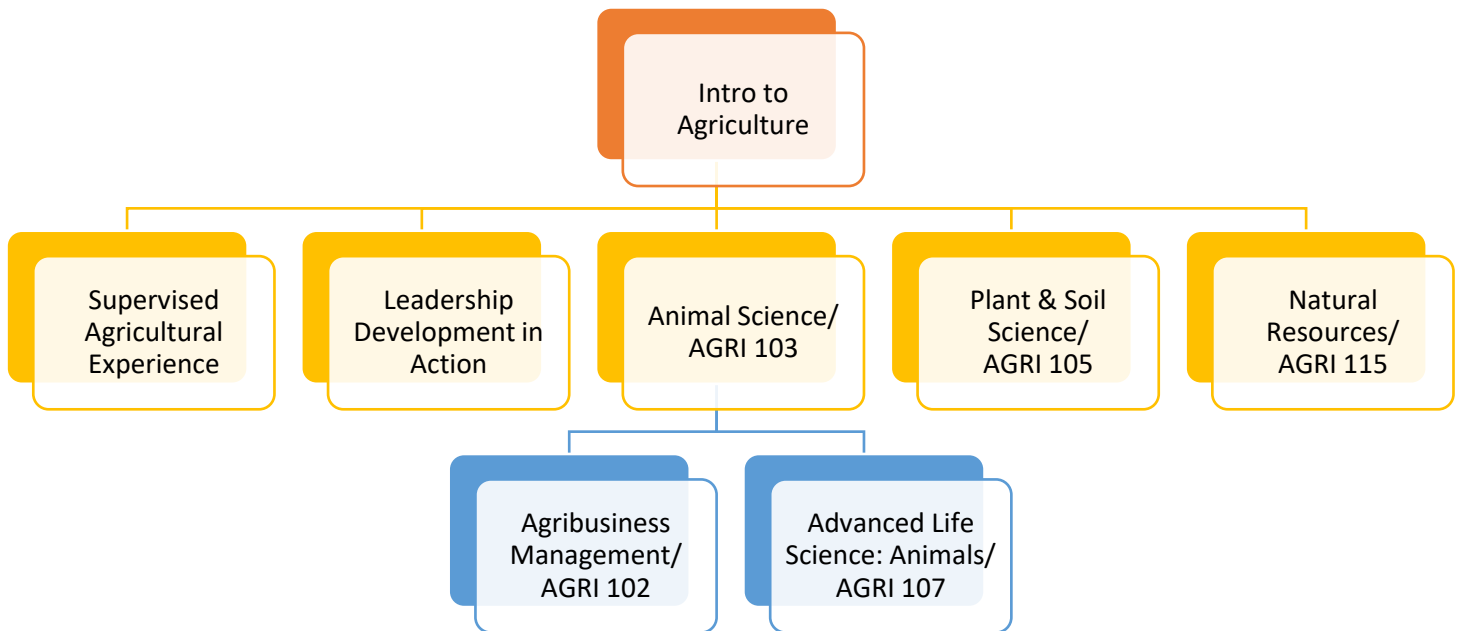
SAMPLE 4-YEAR PLAN FOR CORE 40 DIPLOMA/4-YEAR COLLEGE PREPARATORY PLAN

FRESHMAN YEAR	SOPHOMORE YEAR	JUNIOR YEAR	SENIOR YEAR
English 9/Themes in Lit	English 10	English 11	English 12 or Dual Credit English
Algebra I	Geometry	Algebra II	Trigonometry/Precalculus
Biology	Chemistry I	Science Elective	Science Elective
Preparing for College & Careers	World History	US History or Dual Credit US History	Government/Dual Credit Government and Economics/Dual Credit Economics
Phys Ed I/II/Health	Fine Arts or Career Electives	Fine Arts or Career Electives	Internship, Fine Arts or Career Electives

SAMPLE 4-YEAR PLAN FOR CORE 40 WITH ACADEMIC HONORS DIPLOMA

FRESHMAN YEAR	SOPHOMORE YEAR	JUNIOR YEAR	SENIOR YEAR
English 9/Themes in Lit	English 10	English 11	English 12 or Dual Credit English
Algebra I	Geometry	Algebra II	Trigonometry/Precalculus
Biology	Chemistry I	Science Elective	Science Elective
Preparing for College & Careers	World History	US History or Dual Credit US History	Government/Dual Credit Government and Economics/Dual Credit Economics
Phys Ed I/II/Health	World Language I	World Language II	World Language III
Fine Arts or Career Electives	Fine Arts or Career Electives	Fine Arts or Career Electives	Fine Arts or Career Electives

AGRICULTURE



INTRODUCTION TO AGRICULTURE, FOOD AND NATURAL RESOURCES

5056 (INT AGFNR)

- NWHS Course Code: 101, 102

Introduction to Agriculture, Food and Natural Resources is a two-trimester course that is a foundation for all other agricultural classes. The nature of this course is to provide students with an introduction to the fundamentals of agricultural science and business. Topics to be covered include: animal science, plant and soil science, food science, horticultural science, agricultural business management, landscape management, natural resources, agriculture power, structure and technology, leadership development, supervised agricultural experience and career opportunities in agriculture, food and natural resources.

- 2 trimesters, Grades 9-10
- Counts as a Directed Elective or Elective for all diplomas

NATURAL RESOURCES/AGRI 115 IVY TECH

5180 (NAT RSS)

- NWHS Course Code: 111, 112

Natural Resources is a two-trimester course that provides students with a foundation in natural resources. Hands-on learning activities in addition to leadership development, supervised agricultural experience and career exploration encourage students to investigate areas of environmental concern. Students are introduced to the following areas of natural resources: soils, the water cycle, air quality, outdoor recreation, forestry, rangelands, wetlands, animal wildlife, safety and processing.

- 2 trimesters, Grades 10-12
- OFFERED ALTERNATING YEARS (2020-21)
- This class is offered as a dual credit class through Ivy Tech. Fees may apply.
- Recommended Prerequisite: Introduction to Agriculture
- Counts as a Directed Elective or Elective for all diplomas

PLANT AND SOIL SCIENCE/AGRI 105 IVY TECH

5170 (PLT SL SCI)

- NWHS Course Code: 131, 132

Plant and Soil Science is a two-trimester course that provides students with opportunities to participate in a variety of activities which includes laboratory work. The following topics are found in this course: plant taxonomy, components and their functions; plant growth, reproduction and propagation; photosynthesis and respiration; environmental factors effecting plant growth, management of plant diseases and pests; biotechnology; the basic components and types of soil; calculation of fertilizer application rates and procedures for application; soil tillage and conservation; irrigation and drainage; land measurement, cropping systems, precision agriculture, principles and benefits of global positioning systems; and harvesting. Leadership development, supervised agricultural experience and career exploration opportunities in the field of plant and soil science are also included.

- 2 trimesters, Grades 10-12
- OFFERED ALTERNATING YEARS (2019-20)
- Recommended Prerequisite: Introduction to Agriculture or teacher approval
- This class is offered as a dual credit class through Ivy Tech. Fees may apply.
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Life Science or Physical Science requirement for the General Diploma only

LEADERSHIP DEVELOPMENT IN ACTION

5237 (LEAD DEV)

- NWHS Course Codes: 103, 104

Leadership Development in Action is a project-based course in which students integrate higher order thinking, communication, leadership, and management processes to conduct Career and Technical Student Organization (CTSO) leadership projects at the local, state, or national level. Each student will create a vision statement, establish standards and goals, design and implement an action plan and timeline, reflect on accomplishments, and evaluate results. Authentic, independent application through CTSO student-directed programs or projects, internship, community-based study, or in-depth laboratory experience is required. Research and development, interdisciplinary projects, and/or collaboration with post-secondary faculty, community agencies, or organizations are appropriate approaches. Instructor must be a current chapter advisor of an Indiana-recognized CTSO. State and national membership in an Indiana recognized CTSO is required of any student enrolled in this course. Service learning experiences are highly recommended. Achievement of applicable Career and Technical Education (CTE), academic, and employability standards will be documented through a required student portfolio.

- 2 trimesters, Grades 10 – 12
- Recommended Prerequisite: Introduction to Agriculture
- Counts as a Directed Elective or Elective for all diplomas

AGRIBUSINESS MANAGEMENT/AGRI 102 IVY TECH

5002 (AG BUS MGMT)

- NWHS Course Code: 151, 152

Agribusiness Management provides foundational concepts in agricultural business. It is a two-trimester course that introduces students to the principles of business organization and management from a local and global perspective while incorporating technology. Concepts covered in the course include food and fiber, forms of business, finance, marketing, management, sales, leadership development, supervised agricultural experience career opportunities in agribusiness management.

- 2 trimesters, Grades 10-12
- OFFERED ALTERNATING YEARS (2019-20)
- Recommended Prerequisite: Introduction to Agriculture
- This class is offered as a dual credit class through Ivy Tech. Fees may apply.
- Counts as an Elective or Directed Elective for all diplomas
- Qualifies as a quantitative reasoning course

ADVANCED LIFE SCIENCE: ANIMALS/AGRI 107 IVY TECH

5070 (ALS ANIML)

- NWHS Course Code: 161, 162

Advanced Life Science: Animals is a two-trimester course that provides students with opportunities to participate in a variety of activities including laboratory work. Students investigate concepts that enable them to understand animal life and animal science as it pertains to agriculture. Live animals will be used in class. Through instruction, including laboratory, fieldwork, leadership development, supervised agricultural experience and the exploration of career opportunities, they will recognize concepts associated with animal taxonomy, life at the cellular level, organ systems, genetics, and evolution, and ecology, historical and current issues in animal agriculture in advanced life science in animals.

- 2 trimesters, Grades 11-12
- Recommended Prerequisite: Introduction to Agriculture
- This class is offered as a dual credit class through Ivy Tech. Fees may apply.
- Counts as an Elective or Directed Elective for all diplomas
- Fulfills a Core 40 Science requirement for all diplomas
- Qualifies as a quantitative reasoning course

ANIMAL SCIENCE/AGRI 103 IVY TECH

5008 (ANML SCI)

- NWHS Course Code: 148, 149

The major focus of this course is to expose students to agriculture, animal science, and related career options. Students participating this course will have experiences in various animal science concepts with exciting hands-on activities, projects, and problems. Students' experiences will involve the study of animal anatomy, physiology, behavior, nutrition, reproduction, health, selection, and marketing. For example, students will acquire skills in meeting the nutritional needs of animals while developing balanced, economical rations. Throughout the course, students will consider the perceptions and preferences of individuals within local, regional, and world markets.

Students will explore hands-on projects and activities to learn the characteristics of animal science and work on major projects and problems like those that animal science specialists, such as veterinarians, zoologists, livestock producers, and industry personnel face in their respective careers.

In addition, students will understand specific connections between animal science lessons and Supervised Agricultural Experience and FFA components that are important for the development of an informed agricultural education student. Students will investigate, experiment, and learn about documenting a project, solving problems, and communicating their solutions to their peers and members of the professional community. Topics of study include background and social issues of Animal Science, Anatomy and Physiology, Nutrition, Reproduction, Genetics, and Animal Health and Selection.

- 2 trimesters, Grades 10-12
- Recommended Prerequisite: Introduction to Agriculture
- This class is offered as a dual credit class through Ivy Tech. Fees may apply.
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Life Science or Physical Science requirement for the General Diploma

SUPERVISED AGRICULTURAL EXPERIENCE

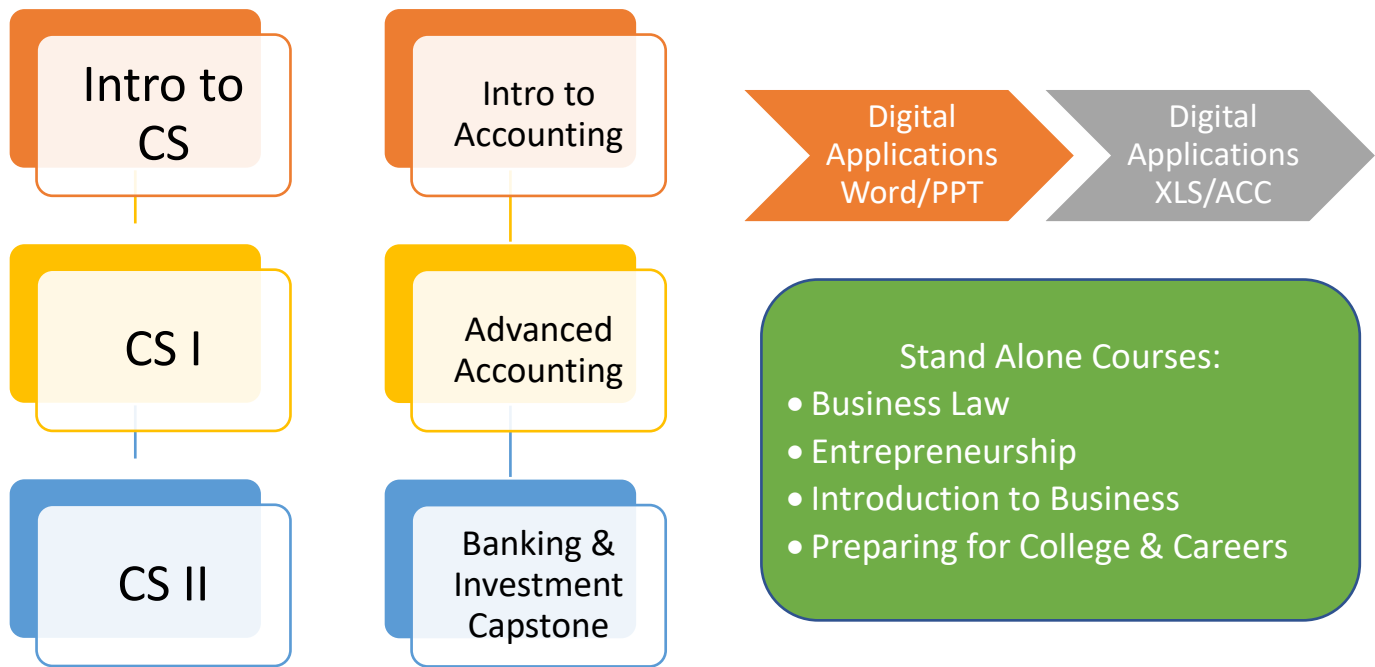
5228 (SAE)

- NWHS Course Code: 181, 182

Supervised Agricultural Experience (SAE) is designed to provide students with opportunities to gain experience in the agriculture field(s) in which they are interested. Students will experience and apply what is learned in the classroom, laboratory and training site to real-life situations with a standards-based plan for learning. Students work closely with their agriculture teacher(s), parents and/or employers to get the most out of their SAE program. This course can be offered each year as well as during the summer session. Curriculum content and competencies need to be varied so that school year and summer session experiences are not duplicative.

- 1 trimester, Grades 10 – 12
- Recommended Prerequisite: Introduction to Agriculture
- Required Prerequisite: Teacher Approval
- This course can be taken for more than one trimester or summer session

BUSINESS EDUCATION



INTRODUCTION TO BUSINESS

4518 (INTO BUSS)

- NWHS Course Codes: 313 (1st Tri), 303 (2nd Tri), 304 (3rd Tri)

Business Foundations, an introductory business course, provides the framework for future business courses. This core course acquaints students with economics, entrepreneurship, management, marketing, law, risk management, leadership development, and careers in business. The importance and application of business etiquette and ethics are included. Instructional strategies will include simulations and projects. This course is a prerequisite for many advanced business classes.

- 1 Trimester, Grades 9-12
- Counts as a Directed Elective or Elective for all diplomas

PREPARING FOR COLLEGE AND CAREERS

5394 (PREP CC)

- NWHS Course Codes: 317 (1st Tri), 318 (2nd Tri), 319 (3rd Tri)

Preparing for College and Careers addresses the knowledge, skills, and behaviors all students need to be prepared for success in college, career, and life. The focus of the course is the impact of today's choices on tomorrow's possibilities. Topics to be addressed include twenty-first century life and career skills; higher order thinking, communication, leadership, and management processes; exploration of personal aptitudes, interests, values, and goals; examining multiple life roles and responsibilities as individuals and family members; planning and building employability skills; transferring school skills to life and work; and managing personal resources. This course includes reviewing the 16 national career clusters and Indiana's College and Career Pathways, in-depth investigation of one or more pathways, reviewing graduation plans, developing career plans, and developing personal and career portfolios. A project-based approach, including computer and technology applications, cooperative ventures between school and community, simulations, and real-life experiences.

- 1 Trimester, Grade 9
- Qualifies as one of the FACS courses a student can take to waive the Health & Wellness graduation requirement. To qualify for a waiver, a student must take three of the approved courses.
- Counts as a Directed Elective or Elective for all diplomas

DIGITAL APPLICATIONS AND RESPONSIBILITY – WORD/PPT

4528 (DIG APPS RESP)

- NWHS Course Code: 325

Students integrate technology through mastery of the Microsoft Office Suite to arrange materials and solve problems efficiently as demonstrated by: Designing documents using complex features of the software; Developing advanced documents that are user-friendly; Creating a variety of multi-media presentations using appropriate design principles; and communicating in a professional manner. Qualified students will be given the opportunity to seek industry-recognized Microsoft Office Specialist Certification in Microsoft Word and PowerPoint. Certification tests will be given to qualified students.

- 1 trimester, Grades 9-12
- Counts as a Directed Elective or Elective for all diplomas

DIGITAL APPLICATIONS AND RESPONSIBILITY – XLS/ACC

4528 (DIG APPS RESP)

- NWHS Course Code: 326

Introduces students to the physical components and operation of computers. Technology is used to build students decision-making and problem-solving skills. Students will be given the opportunity to seek an industry-recognized digital literacy certification. Microsoft Office Excel and Access certification tests will be given to qualified students.

- 1 trimester, Grades 9-12
- Prerequisite: Digital Applications and Responsibility – Word/PPT
- Counts as a Directed Elective or Elective for all diplomas

INTRODUCTION TO COMPUTER SCIENCE

4803 (INTO CS)

- NWHS Course Code: 329 (1st Tri), 330 (2nd Tri), 340 (3rd Tri)

Introduction to Computer Science allows students to explore the world of computer science. Students will gain a broad understanding of the areas composing computer science. Additionally, there is a focus on the areas of computer programming, gaming/mobile development, and artificial intelligence/robotics.

- 1 trimester, Grades 9-12
- Counts as a Directed Elective or Elective for all diplomas

COMPUTER SCIENCE I

4801 (COM SCI I)

- NWHS Course Codes: 336, 337

Computer Science I introduces the structured techniques necessary for efficient solution of business-related computer programming logic problems and coding solutions into a high-level language. The fundamental concepts of programming are provided through explanations and effects of commands and hands-on utilization of lab equipment to produce accurate outputs. Topics include program flow-charting, pseudo coding, and hierarchy charts as a means of solving problems. The course covers creating file layouts, print charts, program narratives, user documentation, and system flowcharts for business problems; algorithm development and review, flowcharting, input/output techniques, looping, modules, selection structures, file handling, control breaks, and offers students an opportunity to apply skills in a laboratory environment.

- 2 trimesters, Grades 10-12
- Required Prerequisites: Introduction to Computer Science, pass Algebra I with a B and 3.0 GPA, or instructor approval
- Counts as a Directed Elective or Elective for all diplomas
- Qualifies as a quantitative reasoning course

COMPUTER SCIENCE II

5236 (CS II)

- NWHS Course Codes: 344, 345

Computer Science II: Programming explores and builds skills in programming and a basic understanding of the fundamentals of procedural program development using structured, modular concepts. Coursework emphasizes logical program design involving user-defined functions and standard structure elements. Discussions will include the role of data types, variables, structures, addressable memory locations, arrays and pointers, and data file access methods. An emphasis on logical program design using a modular approach, which involves task oriented program functions.

- 2 trimesters, Grades 11-12
- Required Prerequisites: Computer Science I
- Counts as a Directed Elective or Elective for all diplomas
- Qualifies as a quantitative reasoning course

BUSINESS LAW AND ETHICS

4560 (BUS LAW ETH)

- NWHS Course Code: 341

This course strives to provide an understanding of the basic principles of criminal, business and personal law. A greater appreciation of our American justice system and a better understanding of our legal system are major goals. Also stressed are the privileges and responsibilities of our justice system and the laws that affect our daily lives. This class is recommended for all students.

- 1 trimester, Grades 11-12
- Counts as a Directed Elective or Elective for all diplomas

INTRODUCTION TO ENTREPRENEURSHIP

5967 (INTO ENTR)

- NWHS Course Code: 342

Entrepreneurship/Marketing is a business course that provides a basic introduction to the scope and importance of marketing in the global economy. Emphasis is placed on oral and written communications, mathematical applications, problem solving, and critical thinking skills as they relate to advertising/promotion/selling, distribution, financing, marketing-information management, pricing, and product/service management. Instructional strategies may include a school-based enterprise, computer/technology applications, real and/or simulated occupational experiences, and projects focused on the marketing functions such as those available through the activities in BPA programs. Students will be asked to risk a fee to participate in a virtual business simulation.

- 1 trimester, Grades 11-12
- Counts as a Directed Elective or Elective for all diplomas

INTRODUCTION TO ACCOUNTING

4524 (INTO ACC)

- NWHS Course Codes: Intro Account A 351 (1st Tri)/353 (2nd Tri); Intro Account B 352 (2nd Tri)/354 (3rd Tri)

Accounting I is a business course that introduces the language of business using Generally Accepted Accounting Principles (GAAP) and procedures for proprietorships and partnerships using double-entry accounting. Emphasis is placed on accounting principles as they relate to both manual and automated financial systems. This course involves understanding, analyzing, and recording business transactions and preparing, analyzing, and interpreting financial reports as a basis for decision making. Instructional strategies should include the use of computers, projects, simulations, case studies, and business experiences requiring the application of accounting theories and principles. This course is strongly recommended for the student who plans to receive a degree in business or anyone who plans to operate a business.

- 2 trimesters, Grade 10-12
- Counts as a Directed Elective or Elective for the all diplomas

ADVANCED ACCOUNTING

4522 (ADV ACC)

- NWHS Course Codes: 361, 362

Accounting II, an advanced-level business course, builds upon the Generally Accepted Accounting Principles (GAAP) and procedures learned in Accounting I. Emphasis is placed on managerial decisions made in corporate accounting, including in-depth analysis of financial statements. Instructional strategies include the use of spreadsheets, word processing, and accounting software such as QuickBooks. Projects, simulations, case studies, and business experiences are used to apply accounting theories and produce appropriate financial reports.

- 2 trimesters, 1 credit per trimester
- Grades 11-12
- Prerequisite: Introduction to Accounting with a grade of “C” or higher
- Counts as a Directed Elective or Elective for all diplomas
- Qualifies as a quantitative reasoning course

BANKING AND INVESTMENT CAPSTONE

5258 (BANK INVEST)

- NWHS Course Codes: 379, 380

Building Wealth & Life-Long Financial Planning is a business course that gives you opportunity to research careers you are thinking about pursuing and analyze how those careers will affect your lives financially over the course of the next 40-50 years. Discovering ways to invest so that you can make those careers realistically work for you and your family will be the main goals of this class. We discuss and research your short-term and long-term goals for your life, the type of vocation(s) you are thinking of pursuing, the education each vocation requires, and the cost (and opportunity cost) of that education. Finally, we research what you can expect to have available to save and invest based on your chosen vocation and show you how to build a diversified yet successful investment portfolio that will help you reach your financial goals as adults.

To understand the investment portfolio portion, you will learn what different types of investments are available to you, the language of the investment and stock market crowd, and how to effectively evaluate the different types of investments and companies that are available. To learn about the stock market and how to make wise choices you will spend time on the Better Investing website learning how to do “Stock Studies” of companies and intelligently pick and choose “High Growth Companies” that give you a chance to reach your financial goals over a life-time. This class is way more about giving you the student a plan to be successful with whatever vocational path you choose in life than it is about getting a grade. If you are motivated towards planning a successful future, you will love this class!

- 2 trimesters, Grade 12
- Prerequisites: Advanced Accounting with a grade of “C” or better
- Counts as a Directed Elective or Elective for all diplomas
- Qualifies as a quantitative reasoning course

ELKHART AREA CAREER CENTER

- Each of these courses qualify as elective classes for Core 40, Academic, and Technical Honors Diplomas.
- The EACC courses are worth 2 credits each trimester. For athletic eligibility, students must pass at least 70% of their credits. So, for most EACC students, they would need to pass at least one NWHHS course in addition to the EACC course to remain eligible.
- NorthWood students typically attend the morning sessions at EACC. Transportation is provided for these sessions.
- Cosmetology students attend EACC an extra hour per day and must provide their own transportation.
- EACC courses are for the entire school year.
- In addition to the courses offered at EACC, students can also enroll in college-level academic classes. Students can earn free college credit in either College Algebra or College English. Students meet twice a week for 45 minutes during the entire school year.
 - College Algebra (MATH136)
 - Prerequisites: Must be attending the EACC as a student in one of the program courses, have completed Algebra II with a C or better, and have passed a standardized mathematics test. See the EACC booklet in the guidance office for more information.
 - College English (ENG111)
 - Prerequisites: Must be attending the EACC as a student in one of the program courses and have passed a standardized English test. See the EACC booklet in the guidance office for more information.
- For more information, visit the EACC website at www.myeacc.org

JUNIORS AND/OR SENIORS	JUNIORS ONLY	SENIORS ONLY
<ul style="list-style-type: none"> • Agriculture Mechanics • Audio/Video Production • Automation & Engineering Technology • Automotive Collision Repair* • Automotive Refinishing* • Automotive Service Technology* • Computer Aided Drafting • Commercial Photography • Computer Networking/PC Maintenance* • Construction Trades • CSI: Crime Scene Investigation* • Dental Health Careers • Diesel Service Technology* • Firefighting • Floral Design & Event Planning • Graphic Design • Landscape Management • Law Enforcement* • Machine Shop* • Medical Assisting • Motorcycle/Outdoor Power Technology • Pre-Nursing with CNA Concentration* • Veterinary Careers • Welding Technology* 	<ul style="list-style-type: none"> • Cardiology* • Cosmetology • Culinary Arts & Hospitality • Early Childhood Education* • Introduction to Health Careers 	<ul style="list-style-type: none"> • EMT: Emergency Medical Technician

** Identifies programs that offer the Early College Option*

ENGLISH

Freshman Year	Sophomore Year	Junior Year	Senior Year
<ul style="list-style-type: none">English 9 & Themes in LitOptional: Lang Arts Lab <p>*Course not offered until 2020 – 2021</p>	<ul style="list-style-type: none">English 10<u>Elective Options:</u><ul style="list-style-type: none">Contemp LiteratureJournalism/Stdnt MediaNovels*	<ul style="list-style-type: none">English 11<u>Elective Options:</u><ul style="list-style-type: none">Adv Speech/P155Biblical LiteratureCollege Entrance PrepCompositionContemp LiteratureCreative Writing*Novels*Student Media	<ul style="list-style-type: none"><u>Must take at least two:</u><ul style="list-style-type: none">English 12 AEnglish 12 BCompositionAdv Comp/W131English Literature/L202Adv Speech/P155Biblical LiteratureContemp LiteratureCreative Writing*Novels*<u>Elective Options:</u><ul style="list-style-type: none">College Entrance PrepStudent Media

ENGLISH 9 & THEMES IN LITERATURE

1002 (ENG 9)

1048 (THEMES LIT)

- NWHS Course Codes: 402, 403 and 427

This three-trimester course offers integrated study of language, literature, writing, and oral communications. English 9 further develops students' use of language as a tool for learning and thinking and as a source of pleasure. Literature includes the study of a variety of genres and requires students to develop strategies for making critical evaluations of literature, such as identifying literary conventions and determining authors' purposes and perspectives. Composition requires students to write for various audiences and purposes, while strengthening skills in paragraph and multi-paragraph writing using a process that includes: (1) prewriting, (2) drafting, (3) peer sharing, (4) revising, (5) editing, and (6) producing a final product. Formal study of grammar, usage, spelling and language mechanics is integrated into the study of writing. This course will teach strategies for collecting and transforming data for use in writing and using criteria to evaluate and revise writing. Students will develop a functional understanding of language and a common vocabulary for discussing writing. Oral communication emphasizes effective listening and speaking techniques.

- 3 trimesters, Grade 9
- Fulfills an English/Language Arts requirement for all diplomas

LANGUAGE ARTS LAB

1010 (LANG LAB)

- NWHS Course Codes: 408, 409

Language Arts Lab is a supplemental course that provides students with individualized or small group instruction designed to support success in completing course work aligned with the Indiana Academic Standards for English Language/Arts focusing on the writing standards. All students should be concurrently enrolled in an English course in which class work will address all the Indiana Academic Standards.

- 2 trimesters, Grade 9
- Counts as an Elective for all diplomas

ENGLISH 10

1004 (ENG 10)

- NWHS Course Codes: English 10A 421 1st Tri/437 2nd Tri; English 10B 422 1st Tri/449 2nd Tri

Through the integrated study of language, literature, composition, and oral communication, English 10 continues to develop all skills as outlined in English 9. English 10 also provides a variety of reading materials, representing different genres, cultures, times, authors, themes, and forms. A specific body of literature such as dramatic or world literature may be emphasized. In addition, English 10 incorporates the development of research and library media skills in conjunction with writing and speaking.

- 2 trimesters each, Grade 10
- Recommended Prerequisite: Pass English 9 & Themes in Literature
- Fulfills an English/Language Arts requirement for all diplomas

CONTEMPORARY LITERATURE

1054 (CONTEM LIT)

- NWHS Course Code: 433

Contemporary Literature will include reading selections revolving around contemporary and historical sports-related events and athletes. The class will study different literary and writing techniques used in various forms of sports literature. It will involve reading newspaper and magazine articles, autobiographies, biographies, and various stories having sports-related themes. The class will incorporate interviewing techniques, individual research/study of sports-related stories, daily discussion, and formatted debate pertaining to sport related topics.

- 1 trimester, Grades 10 – 12
- Offered alternating years (2019-2020)
- Fulfills an English/Language Arts requirement for all diplomas

NOVELS

1042 (NOVELS)

- NWHS Course Code: 434

An advanced study of the novel as a literary form, as well as the elements, techniques, and conventions that distinguish the novel from other literary genres, provides the focus of this course. Students will read and analyze three novels through discussion and writing.

- 1 trimester, Grades 10-12
- Offered alternating years (2020 – 2021)
- Fulfills an English/Language Arts requirement for all diplomas

BIBLICAL LITERATURE

1022 (BIBLE LIT)

- NWHS Course Code: 435

Biblical Literature surveys the Bible as a source of a wide variety of literary patterns, themes, and conventions. This course provides a basis for understanding Biblical references (allusions) in both classical and modern literature. Related literature is included as it pertains to Biblical themes. Writing and discussion opportunities are included in the context of this course.

- 1 trimester, Grades 11-12
- Offered alternating years (2019-2020)
- Fulfills an English/Language Arts requirement for all diplomas

CREATIVE WRITING

1092 (CREAT WRIT)

- NWHS Course Code 436

Creative Writing provides students with ample opportunities to combine literary creativity with the discipline of written discourse. The concept of the manipulation of language to convey ideas, feelings, moods, and visual images will be the basis of the course. Students become familiar with standard literary elements through the reading and study of published prose and poetry and are taught to use those elements in their own writing. Poetry, short stories, and drama units form the basis of this course.

- 1 trimester, Grades 11-12
- Offered alternating years (2020 – 2021)
- Fulfills an English/Language Arts requirement for all diplomas

COLLEGE-ENTRANCE PREPARATION (ENGLISH)

0532 (COL-ENT PREP)

- NWHS Course Code: Prep – Juniors 440 (Tri 2); Prep – Seniors 447 (Tri 1)

With increasing value placed on SAT scores by colleges and universities, we highly recommend that all college-bound students take this course during the second trimester of their junior year. The course will assist students in analyzing the English portion of the SAT. Focus will be on critical reading and analysis, SAT vocabulary, and SAT essay responses. Students will gain test-taking strategies and have ample practice opportunities.

- 1 trimester, Grade 11-12
- Course may only be taken once
- Counts as an elective credit for all diplomas

ENGLISH 11

1006 (ENG 11)

- NWHS Course Codes: English 11A 445 1st Tri/458 2nd Tri; English 11B 446 2nd Tri/464 3rd Tri

Through the integrated study of language, literature, composition, and oral communication, English 11 continues to develop all skills as outlined in English 9 and 10. The specific body of literature to be emphasized, however, is American Literature. English 11 literature study develops an understanding of the relationship between literature and culture as well as an awareness of the individual's identity within that culture. English composition increases emphasis on technical writing, personal and business correspondence.

- 1 trimester each, Grade 11
- Recommended Prerequisite: Passed English 10
- Fulfills an English/Language Arts requirement for all diplomas

COMPOSITION

1090 (COMP)

- NWHS Course Code: 450

Composition further develops and refines writing skills introduced in other English courses. This course provides students frequent opportunities to write for different audiences and purposes, using a process that includes: (1) prewriting, (2) drafting, (3) peer sharing, (4) revising, (5) editing. Techniques of persuasive writing and formal argument are studied, and increased emphasis is placed on language and style. This class is a bridge class for English 11 students to qualify for dual credit English classes.

- 1 trimester, Grades 11 – 12
- Prerequisite: Earned "B" or better in English 11A/B and passed ELA ISTEP+ 10
- Fulfills an English/Language Arts requirement for all diplomas

ENGLISH 12

1008 (ENG 12)

- NWHS Course Code: English 12 A 465 1st Tri/494 2nd Tri; English 12 B 466 2nd Tri/ 499 3rd Tri

Through the integrated study of language, literature composition, and oral communication, English 12 continues to develop all skills as outlined in English 9 through 11. This course increases students' awareness and development of language arts skills required of students to achieve success in postsecondary experiences, whether in the world of higher education or in the world of work. English 12 sharpens critical reading and interpretive skills to prepare students to make informed decisions as citizens of a democratic society. Oral communication prepares students to adapt content, presentation, and delivery to an audience and to establish purpose in formal speaking situations.

- 1 trimester each, Grade 12
- Fulfills an English/Language Arts requirement for all diplomas

ADVANCED COMPOSITION/ENG W131 INDIANA UNIVERSITY

1098 (ADV COMP)

- NWHS Course Code: 453 (1st Tri), 411 (2nd Tri), 419 (3rd Tri)

Students in Dual Credit Composition examine issues in varied disciplinary fields and cultivate reading, writing, and analytic skills. Students summarize arguments, identify the structure of claims, and examine the strength of evidence offered in support of those claims. Through a sequence of analytical responses, students demonstrate not only that they comprehend the argument of experts, but they can also formulate, articulate, and defend claims of their own.

- 1 trimester, Grade 12
- Recommended prerequisite: 3.0 Cumulative GPA
- This is a dual credit course offered through Indiana University. Additional fees will apply.
- Fulfills an English/Language Arts requirement for all diplomas

ENGLISH LITERATURE/L202 INDIANA UNIVERSITY

1030 (ENG LIT)

- NWHS Course Code:454

Students in A202 Literature explore the process of literary analysis. Students use techniques for close reading, develop a framework for articulating and supporting interpretations, and work with an array of classic and contemporary texts including short story, poetry, drama, film and novels. Students do extensive reading, write in response to literature, raise significant questions of themselves and of the text, and discover interrelationships among the works studied. The goal is for students to formulate precise, thoughtful, and in-depth responses to their reading, using the analytical powers they developed in Dual Credit Composition.

- 1 trimester, Grade 12
- Recommended Prerequisite: Cumulative GPA of 3.0 and Dual Credit Advanced Composition
- This is a dual credit class offered through IUSB. Additional fees may apply.
- Fulfills an English/Language Arts requirement for all diplomas

ADVANCED SPEECH AND COMMUNICATION/P155 INDIANA UNIVERSITY

1078 (ADV SPEECH)

- NWHS Course Code: 487 (1st Tri), 420 (2nd Tri), 432 (3rd Tri)

The theory and practice of public speaking; training in thought processes necessary to organize speech content; analysis of components of effective delivery and language, are areas of public speaking explored in the course.

Students will write and preform several different oral presentations. Presentations will be captured on video for close analysis, discussion and evaluation.

- 1 trimester, Grade 12
- Prerequisite: English 11 A/B with a grade of “B” or better
- This is a dual credit class offered through IUSB. Additional fees may apply
- Fulfills an English/Language Arts requirement for all diplomas

JOURNALISM

1080 (JRNALISM)

- NWHS Course Code: 490

Journalism, a course based on the Indiana Academic Standards for English/Language Arts, is a study of news elements, journalism history, First Amendment law, ethics, fact and opinion, copy editing, news, and features as they apply to print and digital media products. It includes a comparison study of journalistic writing to other types of English writing with practical application of news, features, editorials, reviews, columns and digital media writing forms. For the second credit: Students continue to develop journalistic writing skills in addition to studying graphic design, advertising, public relations, photojournalism and emerging media development and design. By the end of the semester, students write, shoot, and design stories for print and digital media products.

- 1 trimester, Grades 10-12
- Prerequisite: Application and interview process with the instructor
- Course is taken as part of Yearbook Series; Will also take 2 trimesters of Yearbook the same year as Journalism
- Counts as an Elective for all diplomas
- English/Language Arts credit (1080): If the student also takes a two-credit English dual credit course, up to two (2) credits accrued can be counted as part of the eight (8) required English/Language Arts credits for all diplomas.

STUDENT MEDIA

1086 (STDNT MEDIA)

- NWHS Course Codes: 491, 492, 493

This year long course provides the study and practice in gathering and analyzing information, interviewing, and note taking for writing, editing, and publishing for print in the Logue, NorthWood's state and nationally recognized school yearbook and for posting to the yearbook's social media accounts. Students plan, publish, market, and distribute their school publication. Photoshop and desktop publishing are used to support the curriculum. Involvement in the course does require regular extra-curricular involvement.

- 3 trimesters, Grades 10-12
- Prerequisite: Journalism
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills the Fine Arts requirement for the Core 40 with Academic Honors.

ENGLISH AS A NEW LANGUAGE & BASIC SKILLS DEVELOPMENT

1012 or 2188 (ENL)

0500 (BAS SKLS)

- NWHS Course Codes: ENL I 1651, 1652 and 1654
- NWHS Course Codes: ENL II 1656, 1657 and 1659

English as a New Language, an integrated English course incorporating both the Indiana Academic Standards for English Language Arts and the WIDA English Language Development (ELD) Standards, is the study of language, literature, composition and oral communication for Limited English Proficient (LEP) students. The purpose of the course is to achieve proficiency in listening, speaking, reading, writing and comprehension of Standard English. Students study English vocabulary used in fictional texts and content-area texts, speak and write English so that they can function within the regular school setting and an English-speaking society, and deliver oral presentations appropriate to their respective levels of English proficiency. The intent of the ENL course is to move students as successfully, smoothly, and rapidly as possible into the Core 40 English courses offered in grades 9-12.

- 3 trimesters, Grades 9-12
- Fulfills an English Language Arts requirement for all diplomas
- World Language credit (2188): If ENL course work addresses Indiana's Academic Standards for World Languages and is taken concurrently with another English Language Arts course, up to four (4) credits accrued may count as World Language credits for all diplomas

FAMILY AND CONSUMER SCIENCES

FRESHMAN YEAR	SOPHOMORE YEAR	JUNIOR YEAR	SENIOR YEAR
<ul style="list-style-type: none">• Interpersonal Relations• Nutrition & Wellness	<ul style="list-style-type: none">• Child Development• Housing & Interiors• Interpersonal Relations• Nutrition & Wellness	<ul style="list-style-type: none">• Adult Roles• Advanced Nutrition & Wellness (Prerequisite Required)• Child Development• Housing & Interiors• Nutrition & Wellness	<ul style="list-style-type: none">• Adult Roles• Advanced Nutrition & Wellness (Prerequisite Required)• Child Development• Housing & Interiors

INTERPERSONAL RELATIONSHIPS

5364 (INTRP RLT)

- NWHS Course Codes: 701 (1st Tri), 702 (2nd Tri), 704 (3rd Tri)

Interpersonal Relationships addresses the attitudes and behaviors all students need to participate in positive, caring relationships. Topics include an examination of values and goals as they influence relationships, communication and conflict resolution skills and the components of healthy relationships. Students will achieve a deeper understanding of themselves and others.

- 1 trimester, Grades 9-10
- Counts as a Directed Elective or Elective for all diplomas
- Qualifies as one of the F&CS courses a student can take to waive the Health & Wellness graduation requirement. To qualify for the Health and Wellness waiver, a student must take three of the approved courses

NUTRITION AND WELLNESS

5342 (NTRN WLNS)

- NWHS Course Codes: 703 (1st Tri), 707 (2nd Tri), 708 (3rd Tri)

Students will learn how to successfully prepare pasta, breads, dairy/egg dishes, fruits and vegetables, beef and poultry. Occasional home projects will encourage students to demonstrate mastery of food preparation skills as they prepare nutritional, delicious recipes for their families.

- 1 trimester, Grades 9-11
- Counts as a Directed Elective or Elective for all diplomas
- Qualifies as one of the F&CS courses a student can take to waive the Health & Wellness graduation requirement. To qualify for the Health and Wellness waiver, a student must take three of the approved courses.

INTRODUCTION TO HOUSING AND INTERIOR DESIGN

5350 (INT HSINT DES)

- NWHS Course Code: 710

This course may be a stepping stone toward choosing a career in interior design or architecture. Students survey architectural styles, design a functional room, research the history of furniture, and examine furniture construction. The elements and principles of design will enable students to make interior design decisions regarding floor plans, color schemes, paint, wallpaper, carpet and furniture arrangement.

- 1 trimester, Grades 10-12
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

CHILD DEVELOPMENT

5362 (CHLD DEV)

- NWHS Course Codes: 730 (1st Tri), 731 (2nd Tri), 732 (3rd Tri)

Do you aspire to a career that touches the life of a child - medicine, psychology, education, day care? You'll need to know how that child grows from infancy to age three intellectually, socially, emotionally, and physically. In addition to learning from the text, you'll also observe and interact with infants and toddlers.

- 1 trimester, Grades 10-12
- Qualifies as one of the F&CS courses a student can take to waive the Health & Wellness graduation requirement. To qualify for the Health and Wellness waiver, a student must take three of the approved courses
- Counts as a Directed Elective or Elective for all diplomas

ADVANCED NUTRITION AND WELLNESS

5340 (ADV NTRN WEL)

- NWHS Course Codes: 740 (2nd Tri), 741 (3rd Tri)

In this upper level laboratory class, students discover regional cuisines of the United States, Canada, Mexico, South America, Britain, France, Germany, Scandinavia, Spain, Italy, and Asian. Additional topics include social/cultural aspects, nutrition, health, safety, sanitation, careers, equipment, consumer skills, meal management and food preparation.

- 1 trimester, Grades 11-12
- Prerequisite: Passed Foods & Nutrition
- Counts as a Directed Elective or Elective for all diplomas

ADULT ROLES AND RESPONSIBILITIES

5330 (ADULTEROLES)

- NWHS Course Code: 745

The focus of this course is on building the knowledge and skills students will need as they become independent and assume contributing roles in families and society. Relationship skills are enhanced, and qualities of mature love relationships are examined as preparation for marriage.

- 1 trimester, Grades 11-12
- Qualifies as one of the F&CS courses a student can take to waive the Health & Wellness graduation requirement, in place of either Human Development and Wellness or Interpersonal Relationships. To qualify for the Health and Wellness waiver, a student must take three of the approved courses
- Counts as a Directed Elective or Elective for all diplomas

FINE ARTS: INSTRUMENTAL MUSIC

Band

*Choral Ensemble classes can also serve as the prerequisite to Music Theory

Music Theory*

Stand Alone Courses:

- Dance Performance
- Applied Music

ADVANCED CONCERT BAND – BRASS, PERCUSSION, OR WOODWINDS

4170 (ADV BAND)

- NWHS Course Codes:
 - 1066, 1067, 1068 – Brass
 - 1086, 1087, 1088 – Percussion
 - 1094, 1095, 1096 – Woodwinds

Band is a three-trimester course including marching band, solo and ensemble, and concert band. Each phase of the instrument music program offers unique perspectives on music and music performance. Ensemble and solo activities are designed to develop elements of musicianship including: 1) tone production, 2) technical skills, 3) intonation, 4) music literacy, 5) aural skills, 6) analyzing music and 7) studying historically significant styles of musical literature.

- 3 trimesters, Grades 9-12
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

DANCE PERFORMANCE: BALLET, MODERN, JAZZ, OR ETHNIC-FOLK

4146 (DNC PERF)

- NWHS Course Code: 1056

This class provides instruction in flag choreography with dance techniques such as ballet, modern, ethnic, and others. Students learn proper body mechanics for movement develop partnering skills and group performance skills. This class performs as the dance ensemble with the Marching Band and associated activities. Attendance is required at all rehearsals and performances.

- 1 trimester, Grades 9-12
- Selection for this course is based on audition and participation in the Summer Band program.
 - Students in Dance Performance must participate in the Summer Band program to prepare for Fall marching activities and performances
- Participation includes Fall Marching Band and Winter Guard activities
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

MUSIC THEORY AND COMPOSITION

4208 (MUS THEORY)

- NWHS Course Code: 1060

Students taking this course develop skills in the analysis of music and theoretical concepts. Students will 1) understand harmonic structures and analysis, 2) understand modes and scales, 3) study a wide variety of music, 4) study traditional music notation and 5) receive detailed instruction in other basic elements of music.

- 1 trimester, Grades 10-12
- Prerequisite: Pass Band or a Choral Ensembles class or by teacher approval
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

APPLIED MUSIC

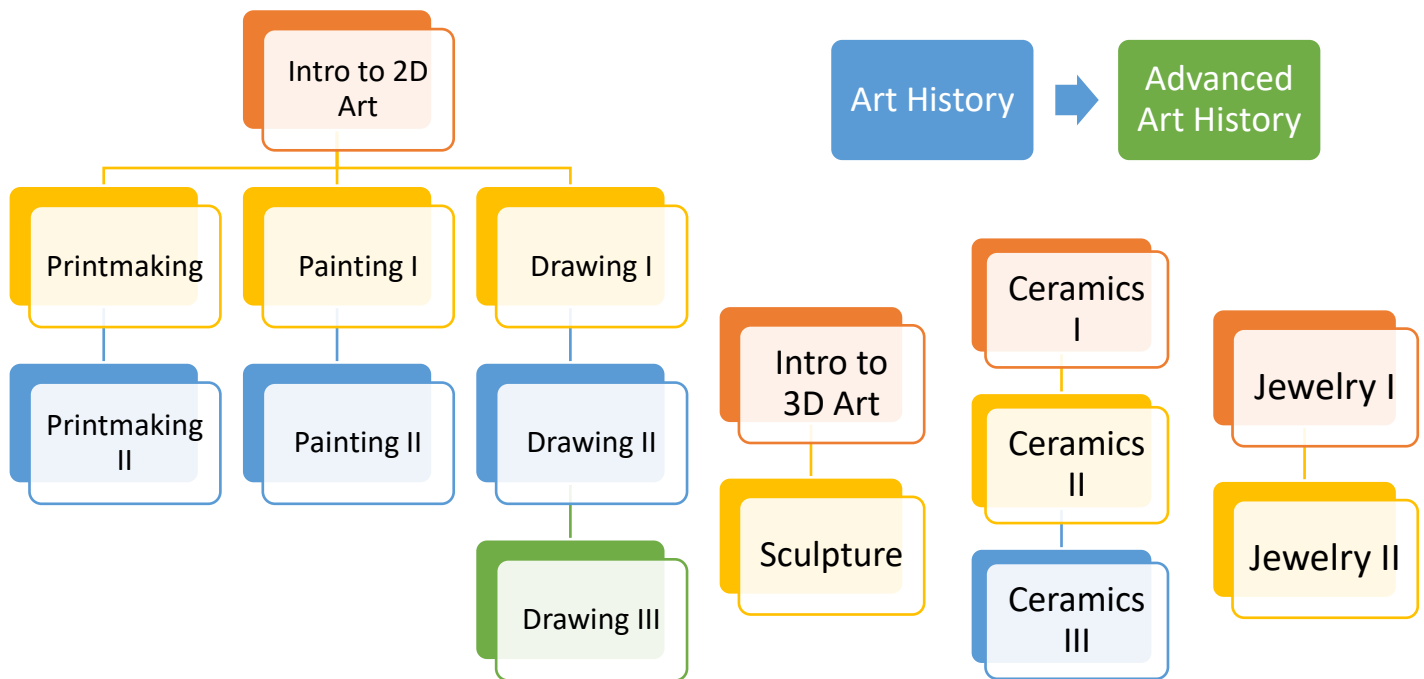
4200 (APPL MUS)

- NWHS Course Code: 1071

Applied Instrumental Music is intended for two different student-groups. This course offers opportunities for students not currently involved in instrumental music. Students may choose to study any wind or string instrument including: guitar, bass guitar, keyboard/piano, flute, clarinet, saxophone, trumpet, French horn, trombone or tuba. Facilities and equipment do not allow for drums or percussion. The second student group is current band students preparing an independent solo for ISSMA solo & ensemble. Ensemble and solo activities are designed to develop elements of musicianship including: 1) tone production, 2) technical skills, 3) intonation, 4) music literacy, 5) aural skills, 6) analyzing music and 7) studying historically significant styles of musical literature.

- 1 trimester, Grades 9-12
- Student must have instructor consent
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

FINE ARTS – VISUAL ARTS



INTRODUCTION TO TWO-DIMENSIONAL ART

4000 (2D ART)

- NWHS Course Codes: 201 (1st Tri), 203 (2nd Tri), 204 (3rd Tri)

Students taking Introduction to Two-Dimensional Art engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality work. Additionally, students will: 1) create works of art; 2) reflect upon the outcomes of those experiences; 3) explore historical connections; 4) write about the process; 5) find direct correlation to other disciplines; 6) and work individually in groups cooperatively. Each project will connect to the art elements and principles as well as art history. This course will introduce students to: painting, printmaking, drawing and mixed media art.

- 1 trimester, Grades 9-12
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

INTRODUCTION TO THREE-DIMENSIONAL ART

4002 (3D ART)

- NWHS Course Codes: 202 (1st Tri), 207 (2nd Tri), 208 (3rd Tri)

Students taking Introduction to Three-Dimensional Art engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality work. Within this context, students will: 1) create works of art; 2) make presentations about their progress at regular intervals; 3) explore historical connections; 4) work individually and in groups; 5) write about the process; 6) and find a direct correlation to other disciplines. Each project will connect to the art elements and principles as well as art history. This course will introduce students to ceramic sculpture, papier mache, assemblage, relief sculpture and wire sculpture.

- 1 trimester, Grades 9-12
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

SCULPTURE

4044 (SCULPT)

- NWHS Course Code: 241

Students in Sculpture engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students evaluate subject matter, symbols and ideas that communicate intended meaning in their artwork by using organizational principles and functions to solve specific visual problems. Students create realistic and abstract sculptures through the process of carving, modeling, construction, and assembling. They explore historical connections and write about the process. Art museums, galleries, studios and community resources are utilized.

- 1 trimester, Grades 10-12
- Prerequisite: Intro to 3D Art with grade of “B-” or better
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

PRINTMAKING I/II

4066 (PRNTMKG)

- NWHS Course Codes: Printmaking I 205, Printmaking II 206

Students in printmaking engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production that lead to the creation of portfolio quality prints. In the area of: Art history, students search for meaning, significance and direction in their work through analysis of historical and contemporary prints. Art criticism, students search for meaning, significance and direction in their work by critically examining the relationships between context, form, function and meaning in their own work and in historical and contemporary prints. Aesthetics, students make informed judgments about artwork and the nature of art. Students search for meaning, significance and direction in their artwork by choosing and evaluating subject matter, symbols, and ideas that communicate intended meaning in their artwork. In addition, students: (1) use organizational principles and functions to solve specific visual problems, (2) apply media, techniques and processes with sufficient skill to communicate intended meaning and (3) create abstract and realistic prints using printmaking processes such as relief, intaglio, monotype, and mixed printmaking methods.

- 1 trimester each, Grades 10-12
- Prerequisite: Intro to 2D Art with grade of “B-” or better
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

CERAMICS I

4040 (CERAMICS)

- NWHS Course Codes: 211 (1st Tri), 214 (2nd Tri), 217 (3rd Tri)

Students in Ceramics engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students search for meaning through in-depth analysis of historical and contemporary ceramics from a variety of cultural groups identifying relationships between context, form and function. Students critically examine the relationships between context, form, function, and meaning in their own work and in historical and contemporary ceramic works, aesthetics, students search for meaning, significance, and direction in their work by formulating evaluations of historic and contemporary ceramic works. Students will also respond to personal questions about the nature of art and production, students use organizational principles and functions to solve specific visual problems. Students create works of art in clay utilizing the processes of hand building, drape molds, wheel throwing, slip and glaze techniques, and the firing processes. Additionally, students will reflect upon the outcome of these experiences and write about the process.

- 1 trimester, Grades 10-12
- Recommended Prerequisite: Intro to 3D Art with grade of “B-” or better
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

CERAMICS II

4040 (CERAMICS)

- NWHS Course Code: 212

This course will reinforce and expand the skills learned on Ceramics I with a greater emphasis placed on larger and more complex thrown and complex hand-built projects. Students may be required to buy additional materials not included in the general class fee.

- 1 trimester, Grades 10-12
- Prerequisite: Ceramics I with grade of “B-” or better.
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

CERAMICS III

4040 (CERAMICS)

- NWHS Course Code: 213

This course will reinforce and expand the skills learned on Ceramics II with a greater emphasis placed on larger and more complex thrown and complex hand-built projects. Students may be required to buy additional materials not included in the general class fee.

- 1 trimester, Grades 11-12
- Prerequisite: Ceramics II with grade of “B-” or better.
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

ART HISTORY

4024 (ART HIST)

- NWHS Course Code: 221

Students taking Art History engage in sequential learning experiences that encompass art history, art criticism and aesthetics. In the areas of:

- art history, students search for meaning and significance through a study of cultural and historical foundations or world art, which include ideas, beliefs, and values as reflected in works of art.
- art criticism, students analyze common characteristics and interpretation across time and cultures.
- aesthetics, students search for meaning and significance by formulating evaluations of the work of art based on their personal questions about the nature of art.

Students also reflect the changing definitions of art throughout history. Additionally, students study works of art and artifacts including those produced by men and women of multiple cultural groups. Students also explore historical and cultural connection and write about the process. Art museums, galleries, studios, and community resources are utilized.

- 1 trimester, Grades 10-12
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

ADVANCED ART HISTORY

4020 (ADV ART HST)

- NWHS Course Code: 224

Advanced Art History is a course based on the Indiana Academic Standards for Visual Art. Students in this course engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production. They build on knowledge and skills developed in Art History. Students continue to study works of art and artifacts from world cultures, engage in historically relevant studio activities; utilize research skills to discover social, political, economic, technological, environmental, and historical trends and connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. They utilize the resources of art museums, galleries, and studios, and identify art-related careers.

- 1 trimester, Grades 10 – 12
- Prerequisite: Art History
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic

JEWELRY I

4042 (JWLRY)

- NWHS Course Codes: 231 (1st Tri), 233 (2nd Tri), 236 (3rd Tri)

Students taking this Jewelry course engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. They are given practice in identifying relationships between context, form and function. Students critically examine the relationships between context, form, function, and meaning in their own work. Students search for meaning, significance and direction in their work by choosing and evaluating subject matter, symbols, and ideas that communicate intended meaning in their artwork. Students use organizational principles and functions to solve specific visual problems. Students produce works for their portfolios, which demonstrate a sincere desire to explore a variety of ideas and problems. Students create works of jewelry design and fabrication techniques including, sawing, piercing, and filing. Art museums, galleries, studios, and community resources are utilized. Chemical etching, beading, wire wrapping, and resin casting are utilized.

- 1 trimester, Grades 10-12
- Recommended Prerequisite: Intro to 3D Art with grade of “B-” or better
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

JEWELRY II

4042 (JWLRY)

- NWHS Course Code: 232 (1st Tri), 237 (2nd Tri), 238 (3rd Tri)

This course involves the design and fabrication of individual pieces made from brass, copper and silver. Students will explore elements of history, design and critique as they learn soldering, forging and stone setting techniques.

- 1 trimester, Grades 10-12
- Prerequisite: Jewelry I with grade of “B-” or better.
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

DRAWING I

4060 (DRAWING)

- NWHS Course Codes: 251 (1st Tri), 256 (2nd Tri), 257 (3rd Tri)

Students in Drawing engage in sequential learning experiences that encompass art criticism, aesthetics, and production and lead to the creation of portfolio quality works. In the areas of:

- art criticism, students search for meaning, significance, and direction in their work by critically examining the relationships between context, form, function and meaning in their own work.
- production, students search for meaning, significance and direction in their work by choosing and evaluating subject matter, symbols, and ideas that communicate intended meaning in their artwork.

In addition, students: (1) use organizational principles and functions to solve specific visual problems, (2) apply media, techniques, and processes with sufficient skill to communicate intended meaning and (3) use a variety of media such as pencil, chalk, pastels, charcoal, and pen and ink.

- 1 trimester, Grades 10-12
- Prerequisite: Intro to 2D Art with grade of “B-” or better
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

DRAWING II

4060 (DRAWING)

- NWHS Course Code: 252

This course will allow students to explore a wider variety of drawing styles and media with emphasis placed on development of personal styles, and portfolios.

- 1 trimester, Grades 10-12
- Prerequisite: Drawing I with grade of “B-” or better
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

DRAWING III

4060 (DRAWING)

- NWHS Course Code: 253

In this class the student will be working in a variety of media to complete a well-rounded portfolio for college admission. Some work will be teacher assigned and other work will be student initiated, depending on the need of the individual portfolio. Sketchbooks are required.

- 1 trimester, Grades 10-12
- Prerequisite: Drawing II with Grade of “B-” or better
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

PAINTING I

4064 (PAINTING)

- NWHS Course Codes: 261 (1st Tri), 263 (2nd Tri), 264 (3rd Tri)

Students in Painting engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. In the areas of:

- art history, students search for meaning, significance, and direction in their work through an in-depth analysis of historical and contemporary paintings
- art criticism, students search for meaning, significance, and direction in their work by critically examining the relationships between context, form, function and meaning in their own work and in historical and contemporary paintings
- aesthetics, students search for meaning, significance and direction in their work by formulating evaluations of historic and contemporary paintings
- production, students search for meaning, significance and direction in their work by choosing and evaluating subject matter, symbols, and ideas that communicate intended meaning in their artwork.

In addition, students: (1) use organizational principles and functions to solve specific visual problems, (2) apply media, techniques, and processes with sufficient skill to communicate intended meaning and (3) use a variety of media such as mixed media, watercolor, oil, acrylics as well as techniques such as stippling, gouache, wash and impasto.

- 1 trimester, Grades 10-12
- Prerequisite: Intro to 2D Art with Grade of “B-” or better
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

PAINTING II

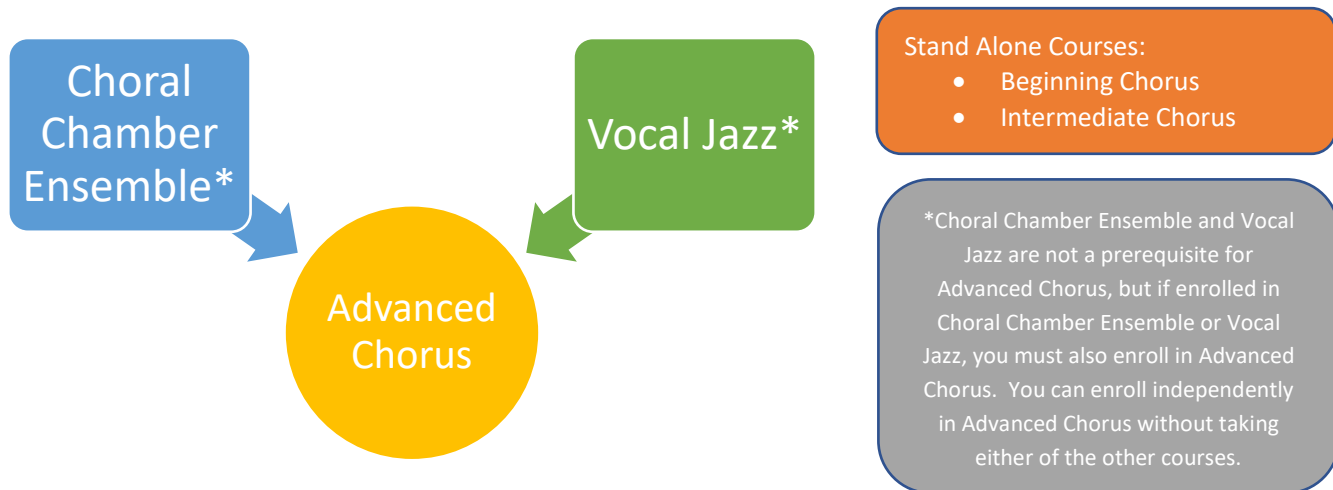
4064 (PAINTING)

- NWHS Course Code: 262

This course will reinforce skills learned in Painting I with emphasis placed on developing a personal style and portfolio. Material covered will include studio painting of still life, the human figure and outdoor landscapes. Students may be required to purchase additional materials depending on the project.

- 1 trimester, Grades 10-12
- Prerequisite: Painting I with grade of “B-” or better
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

FINE ARTS: VOCAL MUSIC



BEGINNING CHORUS

4182 (BEG CHOR)

- NWHS Course Codes: 1002, 1003

Students taking Beginning Choir will develop musicianship and specific performance skills through ensemble and solo singing. Activities in this class create the development of quality repertoire in the diverse styles of choral literature appropriate in difficulty and range for the students. Instruction is designed so that students are enabled to connect, examine, imagine, define, try, extend, refine, and integrate music study into other areas. A limited amount of time, outside the school day, may be scheduled for dress rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsals and music goals and will be graded accordingly.

- 2 trimesters, Grade 9
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

VOCAL JAZZ

4184 (VOC JAZZ)

- NWHS Course Code: 1017

Students in Vocal Jazz will be selected based on audition. Musicianship and specific performance skills in this course are enhanced through specialized small group instruction. Students will learn and sing a cappella music at an advanced level. Instruction is designed so that students are enabled to connect, examine, imagine, define, try, extend, refine, and integrate music study into other areas. A significant amount of time outside of the school day may be scheduled for dress rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and music goals and will be graded accordingly. After the first 12 weeks, Vocal Jazz will periodically meet during homeroom or after school to continue learning music.

- 1 trimester, Grades 10-12
- Students must audition and enroll in Advanced Chorus
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

INTERMEDIATE CHORUS

4186 (INT CHOR)

- NWHS Course Codes: 1024, 1025

Students taking Intermediate Chorus will develop musicianship and specific performance skills through ensemble and solo singing. Activities in this class create the development of quality repertoire in the diverse styles of choral literature appropriate in difficulty and range for the students. Instruction is designed so that students are enabled to connect, examine, imagine, define, try, extend, refine, and integrate music study into other areas. Students develop the ability to understand and convey the composer's intent to connect the performer with the audience. A limited amount of time, outside the school day, may be scheduled for dress rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and music goals.

- 2 trimesters, Grades 10-12
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

ADVANCED CHORUS

4188 (ADV CHOR)

- NWHS Course Codes: 1026, 1027

Advanced Chorus provides students with opportunities to develop musicianship and specific performance skills through ensemble and solo singing. Activities in this class create the development of quality repertoire in the diverse styles of choral literature appropriate in difficulty and range for the students. Instruction is designed so that students are enabled to connect, examine, imagine, define, try, extend, refine, and integrate music study into other areas. Students will rehearse and perform music at an advanced level, and individual accountability will be a much more integral part of a student's grade. A limited number of public performances may serve as a culmination of daily rehearsal and music goals and will be graded accordingly.

- 2 trimesters, Grades 10-12
- Students must receive instructor approval to enroll in course
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

CHORAL CHAMBER ENSEMBLE

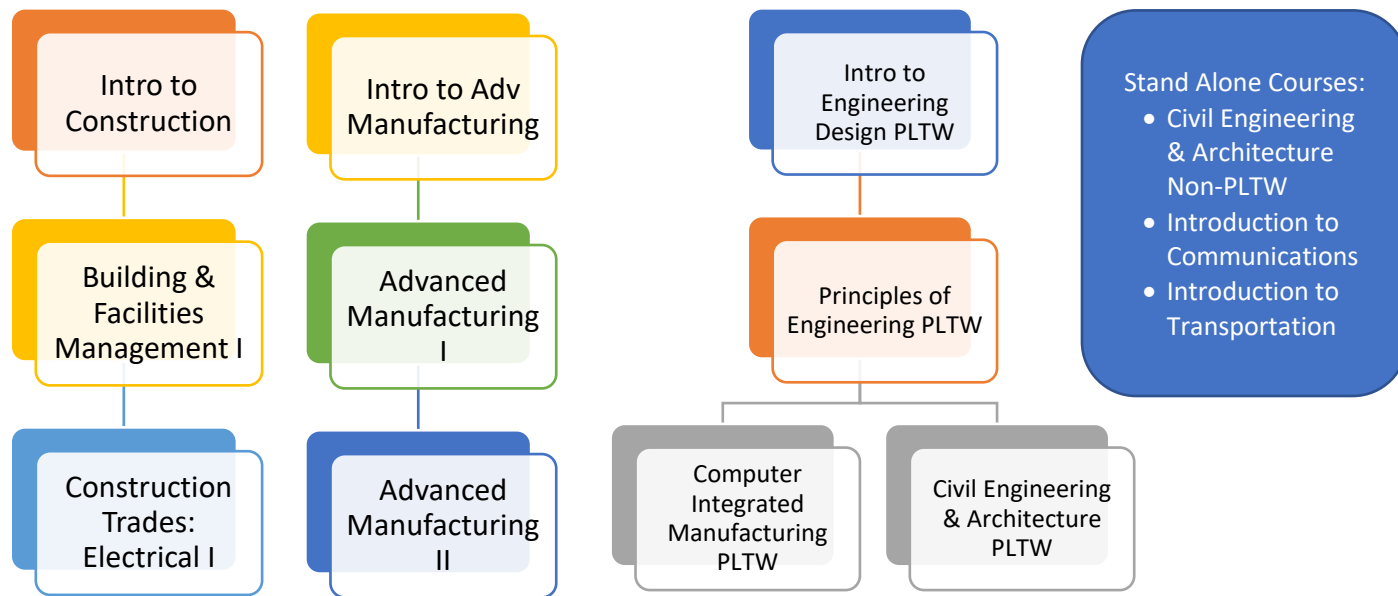
4180 (CHRL ENSEM)

- NWHS Course Codes: 1030, 1031

Students in Choral Chamber Ensemble will be selected based on audition. Musicianship and specific performance skills in this course are enhanced through specialized small group instruction. Students will incorporate choreographed movement and dramatic elements to the music selections. Instruction is designed so that students are enabled to connect, examine, imagine, define, try, extend, refine, and integrate music study into other areas. A significant amount of time outside of the school day may be scheduled for dress rehearsals and performances.

- 2 trimesters, Grades 10-12
- Students must audition and enroll in Advanced Chorus
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

INDUSTRIAL TECHNOLOGY



INTRODUCTION TO CONSTRUCTION

4792 (INT CONST)

- NWHS Course Codes: Intro To Const A 801 (1st Tri)/813 (2nd Tri); Intro to Const B 802 (2nd Tri)/814 (3rd Tri)

Introduction to Construction is a course that will offer hands-on activities and real-world experiences related to the skills essential in residential, commercial and civil building construction. During the course students will be introduced to the history and traditions of construction trades. The student will also learn and apply knowledge of the care and safe use of hand and power tools as related to each trade. In addition, students are introduced to blueprint reading, applied math, basic tools and equipment, and safety. Students will demonstrate building construction techniques, including concrete and masonry, framing, electrical, plumbing, dry walling, HVAC, and painting as developed locally in accordance with available space and technologies. Students learn how architectural ideas are converted into projects and how projects are managed during a construction project in this course. Students study construction technology topics such as preparing a site, doing earthwork, setting footings and foundations, building the superstructure, enclosing the structure, installing systems, finishing the structure, and completing the site. Students also investigate topics related to the purchasing and maintenance of structures, special purpose facilities, green construction and construction careers.

- 2 trimesters, Grades 9-12
- Counts as a Directed Elective or Elective for all diplomas

BUILDING AND FACILITIES MANAGEMENT I

5592 (BF MGMT I)

- NWHS Course Codes: 806, 807

Building and Facilities Management I is an instructional program that prepares students to service a variety of structures including commercial and institutional buildings. This course provides instruction in basic maintenance and repair skills related to air conditioning, heating, plumbing, electrical, and other mechanical systems. Emphasis should be placed on the use of hand and power tools and the selection and use of appropriate professional supplies needed for care, repair and maintenance. Students will reinforce their mathematical skills through the practical study of measurement units, ratios, area, and volume calculations. Scientific knowledge will be enhanced through the emphasis on environmental concerns and chemical and electrical safety instruction. Language skills will be strengthened through oral and written work intended to improve students' abilities to communicate with supervisors, colleagues, and clients.

- 2 trimesters, Grades 10-12
- Prerequisite: Pass Introduction to Construction
- Counts as a Directed Elective or Elective for all diplomas

CONSTRUCTION TRADES: ELECTRICAL I

4830 (CONSTRUCT I)

- NWHS Course Codes: 808, 809

Construction Trades: Electrical I includes classroom and laboratory experiences focused on the installation and repair of the electrical and wiring systems of physical structures. This course includes instruction on the reading of technical drawings and their application in construction processes. Topics include the relationship between views and details, interpretation of dimension, transposing scale, tolerance, electrical symbols, sections, material lists, architectural plans, room schedules and plot plans. This course covers both AC and DC circuits. Studies include electron theory, Ohm's Law, Watt's Law, Kirchhoff's Law, series circuits, series-parallel circuits, and other electrical concepts. Students will use the underlying scientific principles related to electricity, to complete construction projects. Mathematical principles will be used to solve electrical problems. Students will also interpret health, safety, and welfare standards and codes as dictated by local, state or federal agencies.

- 2 trimesters, Grades 11-12
- Prerequisite: Pass Construction Trades I and teacher approval
- Counts as a Directed Elective or Elective for all diplomas

CIVIL ENGINEERING & ARCHITECTURE Non-PLTW

5650 (CIVIL ENG)

- NWHS Course Codes: CEA non A 896 (1st Tri)/816 (2nd Tri); CEA non B 897 (2nd Tri)/817 (3rd Tri)

Civil Engineering and Architecture introduces students to the fundamental design and development aspects of civil engineering and architectural planning activities. Application and design principles will be used in conjunction with mathematical and scientific knowledge. Computer software programs should allow students opportunities to design, simulate, and evaluate the construction of buildings and communities. During the planning and design phases, instructional emphasis should be placed on related transportation, water resource, and environmental issues. Activities should include the preparation of cost estimates as well as a review of regulatory procedures that would affect the project design.

- 2 trimesters, Grades 9 – 12
- Counts as a Directed Elective or Elective for all diplomas
- Qualifies as a quantitative reasoning course

INTRODUCTION TO TRANSPORTATION

4798 (INT TRANS)

- NWHS Course Codes: Intro to Trans A 861 (1st Tri)/867 (2nd Tri); Intro to Trans B 864 (2nd Tri)/868 (3rd Tri)

Introduction to Transportation is an introductory course designed to help students become familiar with fundamental principles in modes of land, sea, air, and space transportation, including basic mechanical skills and processes involved in transportation of people, cargo, and goods. Students will gain and apply knowledge and skills in the safe application, design, production, and assessment of products, services, and systems as it relates to the transportation industries. Content of this course includes the study of how transportation impacts individuals, society, and the environment. This course allows students to reinforce, apply, and transfer their academic knowledge and skills to a variety of interesting and relevant transportation related activities, problems, and settings.

- 2 trimesters, Grades 9 – 12
- Counts as a Directed Elective or Elective for all diplomas

INTRODUCTION TO ENGINEERING DESIGN

4812 PLTW (IED)

- NWHS Course Codes: 825, 826

Introduction to Engineering Design is a fundamental pre-engineering course where students become familiar with the engineering design process. Students work both individually and in teams to design solutions to a variety of problems using industry standard sketches and current 3D design and modeling software to represent and communicate solutions. Students apply their knowledge through hands-on projects and document their work with the use of an engineering notebook. Students' progress from completing structured activities to solving open-ended projects and problems that require them to develop planning, documentation, communication, and other professional skills. Ethical issues related to professional practice and product development are also presented

- 2 trimesters, Grades 9-10
- Counts as a Directed Elective or Elective for all diplomas

PRINCIPLES OF ENGINEERING

4814 PLTW (POE)

- NWHS Course Codes: 827, 828

Principles of Engineering is a course that focuses on the process of applying engineering, technological, scientific and mathematical principles in the design, production, and operation of products, structures, and systems. This is a hands-on course designed to provide students interested in engineering careers to explore experiences related to specialized fields such as civil, mechanical, and materials engineering. Students will engage in research, development, planning, design, production, and project management to simulate a career in engineering. The topics of ethics and the impacts of engineering decisions are also addressed. Classroom activities are organized to allow students to work in teams and use modern technological processes, computers, CAD software, and production systems in developing and presenting solutions to engineering problems. This is a broad-based survey course designed to help students understand the field of engineering and engineering technology and its career possibilities. Students will develop engineering problem solving skills that are involved in postsecondary education programs and engineering careers. They will also learn how engineers address concerns about the social and political consequences of technological change.

- 2 trimesters, Grades 10-11
- Prerequisite: Pass Introduction to Engineering Design
- Counts as a Directed Elective or Elective for all diplomas
- Qualifies as a quantitative reasoning course

COMPUTER INTEGRATED MANUFACTURING

4810 PLTW (CIM)

- NWHS Course Codes: 837, 838

Computer Integrated Manufacturing is a course that applies principles of rapid prototyping, robotics, and automation. This course builds upon the computer solid modeling skills developed in Introduction of Engineering Design. Students will use computer controlled rapid prototyping and CNC equipment to solve problems by constructing actual models of their three-dimensional designs. Students will also be introduced to the fundamentals of robotics and how this equipment is used in an automated manufacturing environment. Students will evaluate their design solutions using various techniques of analysis and make appropriate modifications before producing their prototypes.

- 2 trimesters, Grades 11-12
- Recommended Prerequisite: Pass Principles of Engineering
- Counts as a Directed Elective or Elective for all diplomas
- Qualifies as a quantitative reasoning course

CIVIL ENGINEERING AND ARCHITECTURE

4820 PLTW (CEA)

- NWHS Course Codes: 839, 840

Civil Engineering and Architecture introduces students to the fundamental design and development aspects of civil engineering and architectural planning activities. Application and design principles will be used in conjunction with mathematical and scientific knowledge. Computer software programs should allow students opportunities to design, simulate, and evaluate the construction of buildings and communities. During the planning and design phases, instructional emphasis should be placed on related transportation, water resource, and environmental issues. Activities should include the preparation of cost estimates as well as a review of regulatory procedures that would affect the project design.

- 2 trimesters, Grades 11-12
- Recommended Prerequisites: Pass Introduction to Engineering Design and Principles of Engineering
- Counts as a Directed Elective or Elective for all diplomas
- Qualifies as a quantitative reasoning course

INTRODUCTION TO ADVANCED MANUFACTURING AND LOGISTICS

4796 (INT ADV MFTG)

- NWHS Course Codes: 842, 843

Introduction to Advanced Manufacturing and Logistics focuses on manufacturing systems with an introduction to advanced manufacturing and logistics and their relationship to society, individuals, and the environment. Students apply the skills and knowledge of using modern manufacturing processes to obtain resources and change them into industrial materials, industrial products and consumer products. Students investigate the properties of engineered materials. Students study six major types of material processes: casting and molding; forming; separating; conditioning; finishing; and assembling. After gaining a working knowledge of these materials, Students are introduced to advanced manufacturing, logistics, and business principles that are utilized in today's advanced manufacturing industry. Students gain a basic understanding of tooling, electrical skills, operation skills, inventory principles, MSDS's, chart and graph reading and MSSC concepts. There is also an emphasis placed on the flow process principles, material movement, safety, and related business operations. 2 trimesters, Grades 9 – 12

- Counts as a Directed Elective or Elective for all diplomas

ADVANCED MANUFACTURING I/IVY TECH ADMF 101 KEY PRINCIPLES OF ADMF

5608 (ADV MFTG I)

- NWHS Course Codes: 869, 870

Advanced Manufacturing I is a course that includes classroom and laboratory experiences in two broad areas: Industrial Technology/Software Controls and Manufacturing Trends. Domains include safety and impact, electricity, manufacturing essentials, fluid power principals, mechanical principals, lean manufacturing, and careers in advanced manufacturing. Hands-on projects and team activities will allow students to apply learning on the latest industry technologies. Students take this course with the goal of being a skilled machine operator, repair technician, or working in management at any company that produces goods and services using advanced manufacturing techniques.

- 2 trimesters, Grades 10 – 12
- Prerequisite: Introduction to Advanced Manufacturing
- Counts as a Directed Elective or Elective for all diplomas; This is a dual credit course offered through Ivy Tech

ADVANCED MANUFACTURING II/IVY TECH ADMF 102 TECHNOLOGY IN ADMF

5606 (ADV MFTG II)

- NWHS Course Codes: 852, 853

Advanced Manufacturing II builds on classroom and lab experiences students experienced in Advanced Manufacturing I. Domains include safety and impact, drafting principles, manufacturing programming, CAD/CAM and CNC technologies, automation and robotics, and careers in advanced manufacturing. Hands-on projects and team activities will allow students to apply learning on the latest industry technologies. Students continue this course with the goal of being a skilled machine operator, repair technician, or management at any company that produces goods and services using advanced manufacturing techniques. 2 trimesters, Grades 11 – 12

- Required Prerequisites: Advanced Manufacturing I
- Counts as a Directed Elective or Elective for all diplomas; This is a dual credit course offered through Ivy Tech
- Qualifies as a quantitative reasoning course

INTRODUCTION TO COMMUNICATIONS

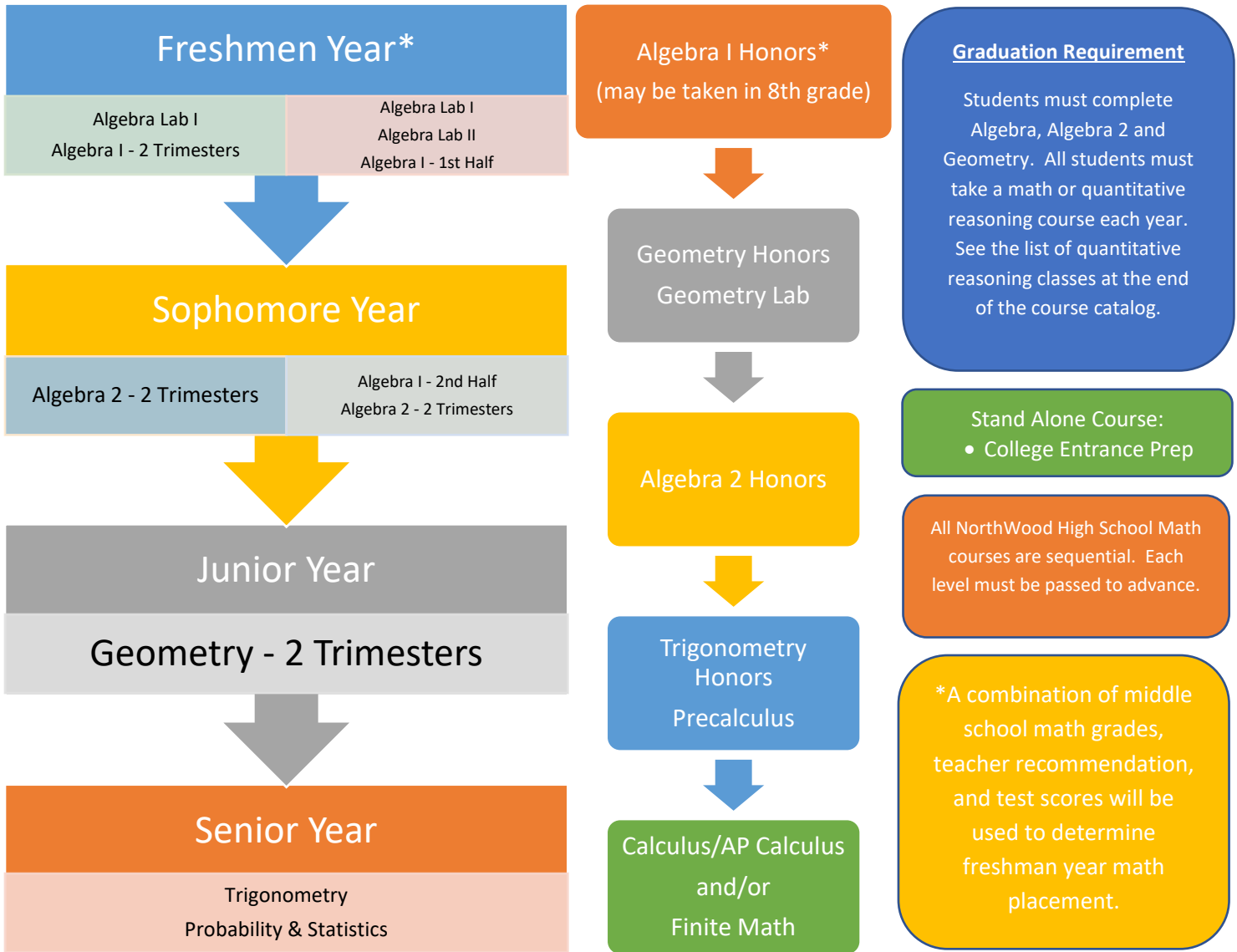
4790 (INT COMM)

- NWHS Course Codes: 857, 858

Introduction to Communications is a course designed to provide a foundational knowledge of identifying and using modern communication to exchange messages and information. This course explores the application of the tools, materials, and techniques used to design, produce, use, and assess systems of communication. Students will produce graphic and electronic media as they apply communication technologies. This course will also explore the various technical processes used to link ideas and people using electronic and graphic media. Major goals of this course include an overview of communication technology; the way it has evolved, how messages are designed and produced, and how people may profit from creating information services and products. Students will explore mass media communication processes including radio and television broadcasting, publishing and printing activities, telecommunication networks, recording services, computer and data processing networks, and other related systems. Using the base knowledge student will use the design process to solve design projects in each communication area.

- 2 trimesters, Grades 9-12
- Counts as a Directed Elective or Elective for all diplomas

MATHEMATICS



ALGEBRA I LAB

2516 (ALG I LAB)

- NWHS Course Code: 910, 923

Algebra Lab is a mathematics support course for Algebra I. The course provides students with additional time to build the foundations necessary for high school math courses, while preparing rigorous, grade-level appropriate courses. The five critical areas of Algebra Enrichment align with the critical areas of Algebra I: Relationships between Quantities and Reasoning with Equations; Linear and Exponential Relationships; Descriptive Statistics; Expressions and Equations; and Quadratic Functions and Modeling. However, whereas Algebra I contains exclusively grade-level content, Algebra Lab combines standards from high school courses with foundational standards from the middle grades.

- 1 or 2 trimesters, Grade 9
- Counts as a Mathematics Course for the General Diploma only or as an Elective for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

ALGEBRA I

2520 (ALG I)

- NWHS Course Codes: 915, 916

Algebra 1 completes the minimum requirement of one complete year of high school math. Problem solving and logical thinking skills will be emphasized and developed throughout this three-trimester course. Topics to be covered include: (1) linear equations and inequalities, (2) operations with polynomial expressions, (3) functions, (4) operations with real numbers, and (5) algebraic fractions. Emphasis will be placed on preparation for the ISTEP Assessment throughout the course.

- 2 trimesters, Grades 9-10
- Counts as a Mathematics Course for all diplomas
- Fulfills the Algebra I/Integrated Mathematics I requirement for all diplomas
- Students pursuing Core 40, Core 40 with Academics Honors, or Core 40 with Technical Honors diploma should receive credit for Algebra I by the end of Grade 9

ALGEBRA I HONORS

2520 (ALG I)

- NWHS Course Codes: Algebra I H A 921 (1st Tri)/ 924 (2nd Tri); Algebra I H B 922 (2nd Tri)/928 (3rd Tri)

Honors Algebra I covers the study of linear functions and inequalities, operations with polynomial expressions, operations with real numbers, radical expressions, algebraic functions and problem-solving exercises. Students who are planning on attending a four-year school after graduation should enroll in this course.

- 2 trimesters, Grade 9
- Prerequisite: "B" average in 8th grade Math or teacher recommendation
- Counts as a Mathematics Course for all diplomas
- Fulfills the Algebra I/Integrated Mathematics I requirement for all diplomas
- Students pursuing Core 40, Core 40 with Academics Honors, or Core 40 with Technical Honors diploma should receive credit for Algebra I by the end of Grade 9

GEOMETRY

2532 (GEOM)

- NWHS Course Codes: Geometry A 935 (1st Tri)/937 (2nd Tri); Geometry B 936 (2nd Tri)/940 (3rd Tri)

Geometry is the study of points, lines, planes and their relationship to each other in angles, polygons, circles, solids, etc. It also introduces the deductive method of logical thinking and proof. This course will provide adequate preparation for post-secondary education, but students planning on attending college are recommended to enroll in Honors Geometry.

- 2 trimesters, Grade 11
- Prerequisite: Pass Algebra II
- Counts as a Mathematics Course for all diplomas
- Fulfills the Geometry/Integrated Mathematics II requirement for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diploma

GEOMETRY HONORS & MATH LAB - GEOMETRY

2532 (GEOM)

2560 (MATH LAB)

- NWHS Course Codes: 931, 932 934

Honors Geometry is the study of points, lines and planes and their relationship to each other in angles, polygons, circles, solids, etc. It also introduces the deductive method of logical thinking and nature of the proof. Students who are planning on attending a four-year school after graduation should enroll in this course.

- 3 trimesters, Grade 9-10
- Prerequisite: Pass Algebra I Honors or teacher recommendation

Geometry:

- Counts as a Mathematics Course for all diplomas
- Fulfills the Geometry/Integrated Mathematics II requirement for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diploma

Geometry Lab:

- Counts as an Elective for all diplomas

COLLEGE-ENTRANCE PREPARATION (MATH)

0532 (COL-ENT PREP)

- NWHS Course Codes: 943 SAT Prep – Juniors (2nd Tri)/944 SAT Prep – Seniors (1st Tri)

With increasing value placed on SAT scores by colleges and universities, we highly recommend that all college-bound students take this course during the second trimester of their junior year. The course will assist students in analyzing the Math portion of the SAT. Focus will be on Numbers and operations, Algebra and functions, Geometry and measurement, Data analysis, Statistics and probability. Students will gain test taking strategies and have ample practice opportunities.

- 1 trimester, Grade 11 – 12
- Counts as an Elective for all diplomas

ALGEBRA II

2522 (ALG II)

- NWHS Course Codes: Algebra II A 945 (1st Tri)/947 (2nd Tri); Algebra II B 946 (2nd Tri)/948 (3rd Tri)

Algebra 2 expands the study of algebra with topics covering functions and relations in two and three variables, polynomial and rational expressions, quadratic functions, conic sections, and exponential and logarithmic functions. Matrices, probability, sequences and series, and trigonometric functions will also be introduced. Students will be recommended to have access to a Texas Instrument TI-84 Graphing Calculator or higher (Price range \$85-\$100). To meet college expectations, students are recommended complete the additional trimester of Trigonometry and/or Probability and Statistics.

- 2 trimesters, Grades 10-12
- Prerequisite: Pass Algebra I
- Counts as a Mathematics Course for all diplomas
- Fulfills the Algebra II/Integrated Mathematics III requirement for all diplomas

ALGEBRA II HONORS

2522 (ALG II)

- NWHS Course Codes: Algebra II H A 941 (1st Tri)/949 (2nd Tri); Algebra II H B 942 (2nd Tri)/950 (3rd Tri)

Honors Algebra II expands the study of algebra with topics covering functions and relations in two and three variables, polynomial and rational expressions, quadratic functions, conic sections, and exponential and logarithmic functions. Matrices, probability, sequences and series, and trigonometric functions will also be introduced. Students will be required to have access to a Texas Instrument TI-84 Graphing Calculator or higher (Price range \$85-\$100).

- 2 trimesters, Grades 10-11
- Prerequisite: Pass Geometry Honors or teacher recommendation
- Counts as a Mathematics Course for all diplomas
- Fulfills the Algebra II/Integrated Mathematics III requirement for all diplomas

TRIGONOMETRY

2566 (TRIG)

- NWHS Course Codes: 951 (1st Tri)/953 (2nd Tri)/954 (3rd Tri)

Trigonometry focuses on the study of trigonometric functions, their properties and applications. Additional topics included the study of vectors, polar and rectangular forms of trigonometric properties. Students will be required to have access to a Texas Instrument TI-84 Graphing Calculator or higher (Price range \$85-\$100).

- 1 trimester, Grades 11-12
- Prerequisite: Pass Geometry and Algebra II
- Counts as a Mathematics course for all diplomas

PRE-CALCULUS/MATH 136 COLLEGE ALGEBRA

2564 (PRE CAL)

- NWHS Course Codes: 962 (2nd Tri)/963 (3rd Tri)

Pre-Calculus includes the study of trigonometric, exponential, logarithmic, and polynomial functions. Also included will be study of series and sequences, statistical analysis of data, basics of probability, polar coordinates and complex numbers. These topics will be studied with a strong visual emphasis on graph analysis. Students will be required to have access to a Texas Instrument TI-84 Graphing Calculator or higher (Price range \$85-\$100).

- 1 trimester, Grades 11-12
- Prerequisite: Algebra II Honors and Trigonometry Honors or teacher recommendation
- This is a dual credit course offered through Ivy Tech. Additional fees may apply.
- Counts as a Mathematics Course for all diplomas

TRIGONOMETRY HONORS/MATH 137 TRIGONOMETRY WITH ANALYTICAL GEOMETRY

2566 (TRIG)

- NWHS Course Codes: 952 (1st Tri)/964 (2nd Tri)

Trigonometry provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Trigonometry provides the foundation for common periodic functions that are encountered many disciplines, including music, engineering, medicine, and finance (and nearly all other STEM disciplines). Trigonometry consists of seven strands: Conics; Unit Circle; Geometry; Periodic Functions; Identities; Polar Coordinates; and Vectors. A strong understanding of complex and imaginary numbers is a necessity for fields such as engineering and computer programming. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- 1 trimester, Grades 11-12
- Prerequisites: Algebra II Honors or teacher recommendation
- This is a dual credit course offered through Ivy Tech. Additional fees may apply.
- Counts as a Mathematics course for all diplomas

PROBABILITY AND STATISTICS

2546 (PROB/STAT)

- NWHS Course Codes: 956 (1st Tri)/ 967 (2nd Tri)/ 968 (3rd Tri)

This course expands the fundamental principles of probability and statistics introduced in previous courses. The student will learn advanced methods of handling data, including some use of Excel and will study elementary concepts of statistical inference. Students will be required to have a Texas Instrument TI-84 Graphing Calculator or higher (Price range \$85-\$100).

- 1 trimester, Grades 11 – 12
- Prerequisite: Pass Geometry and Algebra II
- Counts as a Mathematics Course for all diplomas

FINITE MATHEMATICS

2530 (FINITE)

- NWHS Course Codes: 974, 975

Finite Mathematics is an umbrella of mathematical topics. It is a course designed for students who will undertake higher-level mathematics in college that may not include calculus. Finite Math is made up of five strands: Sets; Matrices; Networks; Optimization; and Probability. The skills listed in these strands indicate what students should know and be able to do in Finite Math. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- 2 trimesters, Grades 11 – 12
- Prerequisite: Algebra II Honors
- This may be a dual credit course offered through Indiana University. Additional fees may apply.
- Counts as a Mathematics course for all diplomas

CALCULUS and AP CALCULUS AB

2527 (CALC)

2562 (CALC AB AP)

- NWHS Course Codes: 969, 971, 972

Calculus I will prepare the student to take AP Calculus. Topics will include limits, differentiation and integration of polynomial, algebraic and transcendental functions. AP Calculus will prepare the student to take the first level Advanced Placement Exam. Topics will include limits, differentiation and integration of polynomial, algebraic and transcendental functions. College credit may be earned based on the student's score on the AP test in May and college acceptance. Students will be required to have access to a Texas Instrument TI-84 Graphing Calculator or higher (Price range \$85-\$100).

- 3 trimesters, Grade 12
- Prerequisite: Pass Pre-Calculus

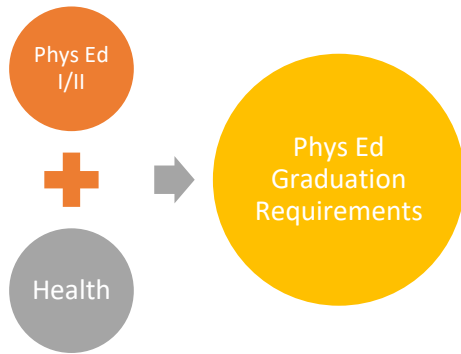
Calculus:

- Counts as a Mathematics Course for all diplomas

AP Calculus A/B:

- Required Prerequisites: Pre-Calculus
- Counts as a Mathematics Course for all diplomas
- Qualifies as a quantitative reasoning course

PHYSICAL EDUCATION & HEALTH SCIENCES



After completion of graduation requirements, students can take up to 8 credits in:

- Elective Physical Education – Fitness and Toning
- Elective Physical Education – Adv Physical Conditioning
- Elective Physical Education – Athletic Training
- Elective Physical Education – Lifeguarding

PHYSICAL EDUCATION I

3542 (PHYS ED)

- NWHS Course Codes: Females: 611 (1st Tri)/ 613 (2nd Tri); Males: 601 (1st Tri)/ 603 (2nd Tri)

Secondary Physical Education I continues the emphasis on health-related fitness and developing the skills and habits necessary for a lifetime of activity. This program includes skill development and the application of rules and strategies of complex difficulty in at least three of the following different movement forms: (1) health-related fitness activities (cardio respiratory endurance, muscular strength and endurance, flexibility, and body composition), (2) aerobic exercise, (3) team sports, (4) individual and dual sports, (5) outdoor pursuits, (6) aquatics, (7) dance, and (8) recreational games. Ongoing assessment includes both written and performance-based evaluations.

- 1 trimester, Grade 9
- Swimsuits are required
- All Piercings MUST be removed daily
- Fulfills part of the Physical Education requirement for all diplomas

PHYSICAL EDUCATION II

3544 (PHYS ED II)

- NWHS Course Codes: Females: 612 (2nd Tri)/ 614 (3rd Tri); Males: 602 (2nd Tri)/ 604 (3rd Tri)

Secondary Physical Education II emphasizes a personal commitment to lifetime activity and fitness for enjoyment, challenge, self-expression, and social interaction. This course provides students with opportunities to achieve and maintain a health-enhancing level of physical fitness and increase their knowledge of fitness concepts. Movement forms include: (1) health-related fitness activities (cardio respiratory endurance, muscular strength and endurance, flexibility, and body composition), (2) aerobic exercise, (3) team sports, (4) individual and dual sports, (5) outdoor pursuits, (6) dance, and (7) recreational games. Ongoing assessment includes both written and performance-based evaluations. This course will also include a discussion of related careers.

- 1 trimester, Grades 9-12
- Prerequisite: A passing grade in Physical Education I
- All Piercings MUST be removed daily
- Fulfills part of the Physical Education requirement for all diplomas

HEALTH & WELLNESS EDUCATION

3506 (HLTH&WELL)

- NWHS Course Codes: 605 (1st Tri)/ 607 (2nd Tri)/ 608 (3rd Tri)

High school health education provides the basis for continued methods of developing knowledge, concepts, skills, behaviors, and attitudes related to student health and well-being. This course includes the major content areas in a planned, sequential, comprehensive health education curriculum as expressed in the Indiana Health Education Proficiency Guide: (1) Growth and Development, (2) Mental and Emotional Health; (3) Community and Environmental Health; (4) Nutrition, (5) Family Life Education; (6) Consumer Health, (7) Personal Health, (8) Alcohol, Tobacco, and Other Drugs Education; (9) Intentional and Unintentional Injury; and (10) Health Promotion and Disease Prevention. This course assists students in understanding that health is a lifetime commitment by analyzing individual risk factors and decisions that promote health and prevent disease. Students are encouraged to assume individual responsibility for becoming competent health consumers.

- 1 trimester, Grade 9
- Fulfills the Health & Wellness requirement for all diploma types

ELECTIVE PHYSICAL EDUCATION – LIFEGUARDING (CO-ED)

3560 (ELECT PE)

- NWHS Course Codes: 615 (1st Tri)/616 (2nd Tri)

Students will complete the Red Cross Lifeguarding Class, which includes First Aid. Students will be certified lifeguards at the end of the course.

- 1 trimester, Grades 9-12
- Prerequisite: Teacher approval. Must be able to:
 - Swim 300 yards continuously
 - Touch bottom of pool in 9 feet of water
- Student MUST be 15 years old at the end of the class
- Counts as an Elective requirement for all diplomas
- Students are limited to only 8 credits of Advanced PE Courses. Courses taken after that will be graded on a pass/fail basis and will not count for credit. The Advanced PE courses include:
 - Elective Physical Education – Fitness and Toning
 - Elective Physical Education – Advanced Physical Conditioning
 - Elective Physical Education – Athletic Training
 - Elective Physical Education – Lifeguarding

ELECTIVE PHYSICAL EDUCATION – ADVANCED PHYSICAL CONDITIONING (CO-ED)

3560 (ELECT PE)

- NWHS Course Codes: 621, 622, 623

This is a weight training class. The programs followed in these classes are designed to develop strength, explosive power, flexibility, agility, coordination, quickness, speed, muscular and cardiovascular endurance. Outcomes from these classes are enhanced physical fitness, pride, self-discipline, proper attitude toward work, sacrifice and commitment. Students will be required to keep daily records of their weights and log their performance on a variety of physical fitness screens.

- 1 trimester each, Grades 9-12
- Counts as an Elective requirement for all diplomas
- Students are limited to only 8 credits of Advanced PE Courses. Courses taken after that will be graded on a pass/fail basis and will not count for credit. The Advanced PE courses include:
 - Elective Physical Education – Fitness and Toning
 - Elective Physical Education – Advanced Physical Conditioning
 - Elective Physical Education – Athletic Training
 - Elective Physical Education – Lifeguarding

ELECTIVE PHYSICAL EDUCATION – FITNESS AND TONING

3560 (ELECT PE)

- NWHS Course Code: 625

This fitness based Physical Education course will include activities such as aerobics, body-shaping, yoga, and long-term exercise programs. Students will be required to keep a fitness log, set personal fitness goals and develop an individualized fitness program.

- 1 trimester, Grades 10-12
- Prerequisite: Passed Physical Education I/II
- Counts as an Elective requirement for all diplomas
- Students are limited to only 8 credits of Advanced PE Courses. Courses taken after that will be graded on a pass/fail basis and will not count for credit. The Advanced PE courses include:
 - Elective Physical Education – Fitness and Toning
 - Elective Physical Education – Advanced Physical Conditioning
 - Elective Physical Education – Athletic Training
 - Elective Physical Education – Lifeguarding

ELECTIVE PHYSICAL EDUCATION – ATHLETIC TRAINING

3560 (ELECT PE)

- NWHS Course Code: 628

The course introduces students to the career of athletic training. Sports medicine careers, musculoskeletal anatomy, treatment modalities, specific sport injuries/conditions, and various other topics will be explored. This course is recommended for students strongly interested in pursuing a medical career.

- 1 trimester, Grades 10 – 12
- Prerequisite: Instructor Approval
- Counts as an Elective requirement for all diplomas
- Students are limited to only 8 credits of Advanced PE Courses. Courses taken after that will be graded on a pass/fail basis and will not count for credit. The Advanced PE courses include:
 - Elective Physical Education – Fitness and Toning
 - Elective Physical Education – Advanced Physical Conditioning
 - Elective Physical Education – Athletic Training
 - Elective Physical Education – Lifeguarding

SCIENCE

9th Grade	10th Grade	11th Grade	12th Grade
<ul style="list-style-type: none">•Biology	<ul style="list-style-type: none">•Chemistry or Integrated Chem/Phys•<u>Elective Options:</u><ul style="list-style-type: none">•Anatomy•Environmental Science•Genetics•Microbiology•Zoology	<ul style="list-style-type: none">•<u>Options:</u><ul style="list-style-type: none">•Anatomy•Chemistry I•Chem/CHEM101/121•Environmental Science•Genetics•Integrated Chem/Phys•Microbiology•Physics•Zoology	<ul style="list-style-type: none">•<u>Options:</u><ul style="list-style-type: none">•Anatomy•Chemistry I•Chem/CHEM101/121•Environmental Science•Genetics•Integrated Chem/Phys•Microbiology•Physics•Zoology

Your science teachers have more information available to help you make decisions on which courses to take. Required prerequisites for all courses after Biology I are listed in the course descriptions.

BIOLOGY I

3024 (BIO I)

- NWHS Course Codes: Biology I A 1101 (1st Tri)/1103 (2nd Tri); Biology I B 1102 (2nd Tri)/1104 (3rd Tri)

Biology I provides, through regular laboratory and field investigations, a study of the structures and functions of living organisms and their interactions with their environment. At a minimum, this study explores and functions and processes of living cells, tissues, organs, and systems within various species of living organisms and the roles and interdependencies of organisms within populations, communities, ecosystems, and the biosphere. Students have opportunities to: (1) gain and understanding of the history of the development of biological knowledge, (2) explore the uses of biology in various careers, and (3) investigate biological questions and problems related to personal and social issues.

- 2 trimesters, Grade 9
- Fulfills the Biology requirement for all diplomas

INTEGRATED CHEMISTRY-PHYSICS

3108 (ICP)

- NWHS Course Codes: ICP Chem 1121 (1st Tri), 1123 (2nd Tri), 1124 (3rd Tri)
- NWHS Course Codes: ICP Physics 1122 (1st Tri), 1128 (2nd Tri), 1129 (3rd Tri)

Integrated Chemistry-Physics introduces the fundamental concepts of scientific inquiry, the structure of matter, chemical reactions, forces, motion, and the interactions, between energy and matter. The goal of the course is to produce scientifically literate citizens capable of using their knowledge of physical science to solve real-world problems and to make personal, social, and ethical decisions that have consequences beyond the classroom walls. This course MAY NOT prepare you for the academic science rigor at the college level.

- 2 trimesters, Grades 10-12
- Prerequisite: Pass Biology I
- Fulfills a science (physical) course requirement for all diplomas

ENVIRONMENTAL SCIENCE

3010 (ENVSCI)

- NWHS Course Codes: Env Sci A 1125 (1st Tri), 1130 (2nd Tri), 1133 (3rd Tri)
- NWHS Course Codes: Env Sci B 1126 (1st Tri), 1134 (2nd Tri), 1137 (3rd Tri)

Environmental Science is an interdisciplinary course that integrates biology, earth science, chemistry, and other disciplines. Students enrolled in this course conduct in-depth scientific studies of ecosystems, population dynamics, resource management, and environmental consequences of natural and anthropogenic processes. Students formulate, design, and carry out laboratory and field investigations as an essential course component. Students completing Environmental Science acquire the essential tools for understanding the complexities of national and global environmental systems.

- 2 trimesters, Grades 10-12
- Prerequisite: Pass Biology I
- Fulfills a science (life) course requirement for all diplomas

ADVANCED SCIENCE, SPECIAL TOPICS - ZOOLOGY

3092 (ADV SCI ST)

- NWHS Course Codes: 1145 (1st Tri), 1148 (2nd Tri), 1149 (3rd Tri)

Zoology is a trimester course that provides the student with a survey of invertebrate and vertebrate animals. Zoology students will delve into the diversity of life by studying the evolution, characteristics, taxonomic relationships, life processes, survival mechanisms, and economic importance among the organisms. This course will include a *significant amount of dissection* of various animals and challenge students with activities, experiments, critical-thinking, and problem solving.

- 1 trimester, Grades 10 – 12
- Prerequisite: Pass Biology I with a grade of “C” or better or instructor approval
- Counts as a science course for all diplomas

ADVANCED SCIENCE, SPECIAL TOPICS - GENETICS

3092 (ADV SCI ST)

- NWHS Course Codes: 1146 (1st Tri), 1150 (2nd Tri), 1153 (3rd Tri)

The course is designed to expand upon the Genetics unit introduced in the Biology I course and to show the importance of Genetics in taking our understanding of humans to a new level. Topics include the complexity involved in designing organisms (more specifically humans) and to demonstrate both the fragility and sturdiness of the materials that make up our genomes.

- 1 trimester, Grades 10 – 12
- Prerequisite: Pass Biology I with a grade of “B” or better or instructor approval
- Counts as a science course for all diplomas

ADVANCED SCIENCE, SPECIAL TOPICS - MICROBIOLOGY

3092 (ADV SCI ST)

- NWHS Course Codes: 1147 (1st Tri), 1154 (2nd Tri), 1157 (3rd Tri)

This course covers principles of microbiology with emphasis on microorganisms and human disease. Topics include an overview of microbiology and aspects of medical microbiology, the environment and economic impact of microorganisms, identification and control of pathogens, disease transmission, host resistance, and immunity.

- 1 trimester, Grades 10 – 12
- Prerequisite: Pass Biology I with a grade of “B” or better or instructor approval
- Counts as a science course for all diplomas

ANATOMY AND PHYSIOLOGY

5276 (A & P)

- NWHS Course Codes: A & P A 1141 (1st Tri)/1158 (2nd Tri); A & P B 1142 (2nd Tri)/1159 (3rd Tri)

This course introduces students to the structure and function of the human body. Designed for students who are considering a career in health and human care, any student who has successfully completed a year of Biology may take the course.

Following a review of important Biology concepts and very basic principles of chemistry, each chapter thereafter covers a body system. The course is content driven, not project oriented, and has numerous lab activities to heighten understanding. Grades are based on homework assignments, lab completions and a test that concludes each chapter.

- 2 trimesters, Grades 10-12
- Prerequisite: Pass Biology I with a grade of “B” or better or instructor approval
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a science course requirement for all diplomas

CHEMISTRY I

3064 (CHEM I)

- NWHS Course Codes: Chemistry I A 1155 (1st Tri), 1160 (2nd Tri)/Chemistry I B 1156 (2nd Tri)/1163 (3rd Tri)

Academic Honors Diploma students or any student planning on studying Math or Science at the collegiate level are strongly encouraged to be enrolled in this course. First year Chemistry allows students to synthesize useful models of the structure of matter and the mechanics of its interactions through laboratory investigations of matter and chemical reactions. Students have opportunities to: (1) gain an understanding of the history of chemistry, (2) explore the uses of chemistry in various careers, (3) investigate chemical questions and problems related to personal needs and social issues, and (4) learn and practice laboratory safety. Preparation for college content will be the basis for this course.

- 2 trimesters, Grades 10-12
- Prerequisite: Pass Algebra I and Biology I each with a grade of “B” or better
- Counts as an Elective for all diplomas
- Fulfills a science (physical) course requirement for all diplomas
- Qualifies as a quantitative reasoning course

PHYSICS I

3084 (PHYS I)

- NWHS Course Codes: Physics I A 1161 (1st Tri)/1164 (2nd Tri); Physics I B 1162 (2nd Tri)/1174 (3rd Tri)

Physics I aids students in synthesizing the fundamental concepts and principles concerning matter and energy through the laboratory study of mechanics, wave motion, heat, light, electricity, magnetism, electromagnetism, and atomic and nuclear physics. Students have opportunities to (1) acquire an awareness of the history of physics and its role in the birth of technology, (2) explore the uses of its models, theories, and laws in various careers, and (3) investigate physics questions and problems related to personal needs and social issues.

- 2 trimesters, Grades 11-12
- Prerequisite: Pass Algebra II CP
- Counts as an Elective for all diplomas
- Fulfills a science (physical) course requirement for all diplomas
- Qualifies as a quantitative reasoning course

CHEMISTRY II & ADVANCED SCIENCE, COLLEGE CREDIT/CHEM 101/121 INDIANA UNIVERSITY

3066 (CHEM II)

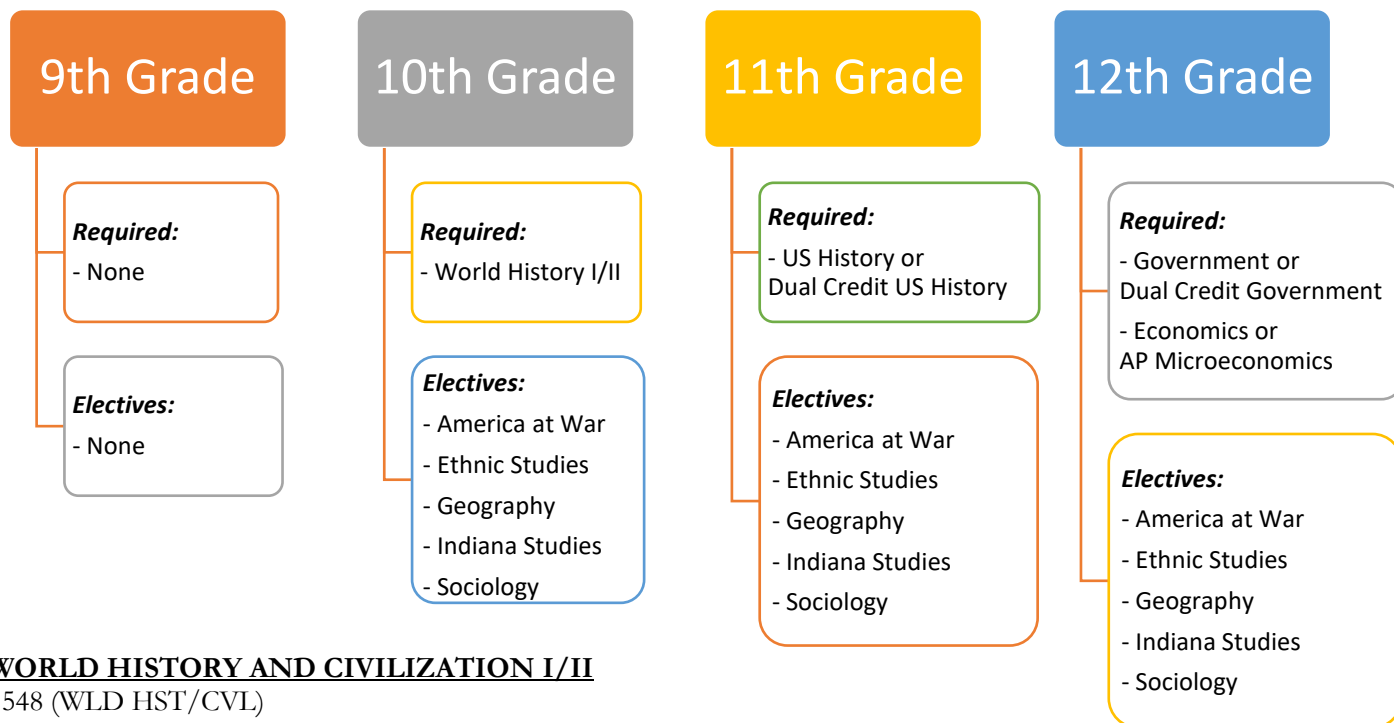
3090 (ADV SCI CC)

- NWHS Course Codes: 1168, 1169, 1170

Students study stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and nonmetals. This class is required of students majoring in biology, chemistry, and physics and some students in engineering. Third trimester students study solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Students can earn 5 college credits.

- 3 trimesters, Grades 11-12
- Prerequisite: Pass Chemistry I CP with a grade of “B” or better and have a 3.0 cumulative GPA
- This is a dual credit course offered through IUSB. Additional fees may apply.
- Counts as a Science Course for all diplomas

SOCIAL STUDIES



WORLD HISTORY AND CIVILIZATION I/II

1548 (WLD HST/CVL)

- NWHS Course Codes: WHI: 1211 1st Tri/1214 2nd Tri; WHII: 1213 2nd Tri/1215 3rd Tri

The focus of this course is on the study of ancient civilizations up through our current world. The student will analyze the culture, religion, and governments of past civilizations. The areas of study will include ancient Greece, Rome, South America, North America, and Europe. Students are expected to apply content knowledge to the practice of thinking and inquiry skills and processes.

- 2 trimesters, Grade 10
- Counts as an Elective for all diplomas
- Fulfills the Geography History of the World/World History and Civilization graduation requirement for all diplomas

TOPICS IN HISTORY – AMERICA AT WAR

1538 (TOP HIST)

- NWHS Course Code: 1220

Topics in History will provide students with a specific look at major wars the US has been involved in. The focus will be the Civil War, WWI, WWII, Korean War, the Vietnam War, and the Gulf Wars. The students will get a chance to develop historical research skills using both primary and secondary sources. Sources such as letters, books, music, and other documents will be used in research. Both sides of the war issue will be examined to help develop an understanding of why wars might happen.

- 1 trimester, Grade 10 – 12
- Counts as an Elective all diplomas

SOCIOLOGY

1534 (SOCIOLOGY)

- NWHS Course Code: 1228

Sociology allows students to study human social behavior from a group perspective. The sociological perspective is a method of studying recurring patterns in people's attitudes and actions and how these patterns vary across time, cultures, and in social settings and groups. The influence of culture on group behavior is addressed through institutions such as the family, religion, education, economics, community organizations, government, and political and social groups. Influences on group behavior and social problems are included in the course.

- 1 trimester, Grades 10-12
- Prerequisite: Cumulative GPA of 3.0 or higher
- Counts as an Elective for all diplomas

UNITED STATES HISTORY A/B

1542 (US HIST)

- NWHS Course Codes: US History A: 1245 1st Tri/1247 2nd Tri; US History B: 1246 2nd Tri/1248 3rd Tri

United States History is a two-trimester course, which builds upon concepts developed in previous studies of American history. The course gives major emphasis to the interaction of key events, persons, and groups with political, economic, social, and cultural influences on state and national development in the late nineteenth, twentieth, and early twenty-first centuries. Students are expected to develop skills and processes of historical thinking and inquiry that involve chronological thinking, comprehension, analysis and interpretation, and research that use primary and secondary sources.

- 2 trimesters, Grade 11
- Fulfills the US History requirement for all diplomas

UNITED STATES HISTORY/HIS 103/113 TRINE UNIVERSITY

1542 (US HIST)

- NWHS Course Codes: US History A: 1231 1st Tri/1233 2nd Tri; US History B: 1232 2nd Tri/1239 3rd Tri

The first trimester involves a study of the development of American political, economic, and social institutions from the early explorations and colonial settlements through Reconstruction. The second trimester will be a study of the growth of the United States from 1877 to the present. The new industrialism, agrarian problems, depression, the New Deal, the two World Wars, the Cold War, and similar topics are analyzed.

- 2 trimesters, Grade 11
- Prerequisite: Cumulative GPA of 3.0 or higher
- This is a dual credit course offered through Trine University. Additional fees may apply.
- Fulfills the US History requirement for all diplomas

UNITED STATES GOVERNMENT

1540 (US GOVT)

- NWHS Course Codes: 1265 1st Tri/1267 2nd Tri/1272 3rd Tri

United States Government provides a framework for understanding the purposes, principles, and practices of democracy in the United States of America. Students examine how the United States Constitution protects individual rights and provides the structures and functions for the various levels of government affecting their lives. Students inquire about American government through primary and secondary sources and articulate, evaluate, and defend positions on political issues with sound reasoning and evidence. As a result, students can explain the roles of citizens in the United States and the participation of individuals and groups in government.

- 1 trimester, Grade 12
- Fulfills the Government requirement for all diplomas

ECONOMICS

1514 (ECON)

- NWHS Course Codes: 1266 1st Tri/ 1273 2nd Tri/ 1274 3rd Tri

Key elements of the course include a study of scarcity and economic reasoning, supply and demand, market structures, the role of government, national income determination, money and the role of financial institutions, economic stabilization, and trade. Students will examine the functions of government in a market economy and study market structures, including the organization and role of businesses. Students will understand the role of economic performance, money, stabilization policies, and trade of the United States.

- 1 trimester, Grade 12
- Fulfills the Economics requirement for all diplomas
- Qualifies as a quantitative reasoning course

UNITED STATES GOVERNMENT/Y103 INDIANA UNIVERSITY

1540 (US GOVT)

- NWHS Course Codes: 1268 1st Tri/ 1277 2nd Tri/ 1278 3rd Tri

This course is an introduction to the principles, institutions, and dynamics of American government and politics. Topics include the origin and development of the United States Constitution, federalism, separation of powers, major institutions of national government and its political power base. Included are discussions of the nature and problems of democracy.

- 1 trimester, Grade 12
- Prerequisite: Cumulative GPA of 3.0 or higher
- This is a dual credit course offered through IUSB. Additional fees may apply.
- Fulfills the Government requirement for all diplomas

AP MICROECONOMICS

1566 (MICRO-ECON)

- NWHS Course Codes: 1269, 1270 AP Economics A/B

The course focuses on microeconomics only. The syllabus covers societal applications of core analytical concepts such as: scarcity, opportunity costs, competitive and non-competitive market pricing, and interdependence. Students apply these concepts to many current economic policy problems, such as: poverty, pollution, excise taxes, and farm subsidies.

- 2 trimesters, Grade 12
- An Advanced Placement exam is given in May to determine possible college credit. A fee is charged for the test.
- Fulfills the Economics requirement for all diplomas
- Qualifies as a quantitative reasoning course

WORLD GEOGRAPHY

1546 (WORLD GEO)

- NWHS Course Code: 1201

The study of the physical world and the places in it. The class contains understanding of the 5 themes of geography. Students would not only get a book understanding of the key places on the earth, but also know how to place them on a map. Students would also look at key resources of the earth and the influence they have on the planet.

- 1 trimester, Grade 10-12
- Counts as an Elective for all diplomas

ETHNIC STUDIES

1516 (ETH STUDIES)

- NWHS Course Code: 1275

Ethnic Studies provides opportunities to broaden students' perspectives concerning lifestyles and cultural patterns of ethnic groups in the United States. This course will either focus on a ethnic group or groups or use a comparative approach to the study of patterns of cultural development, immigration, and assimilation, as well as the contributions of specific ethnic or cultural groups. The course may also include analysis of the political impact of ethnic diversity in the United States.

- 1 trimester, Grade 10 – 12
- Counts as an Elective for all diplomas

INDIANA STUDIES

1518 (IN STUDIES)

- NWHS Course Code: 1276

Indiana Studies is an integrated course that compares state and national developments in the areas of politics, economics, history, and culture. The course uses Indiana history as a basis for understanding current policies, practices, and state legislative procedures. It also includes the study of state and national constitutions from a historical perspective and as a current foundation of government. Examination of individual leaders and their roles in a democratic society will be included and student will examine the participation of citizens in the political process.

- 1 trimester, Grade 10 – 12
- Counts as an Elective for all diplomas

PSYCHOLOGY

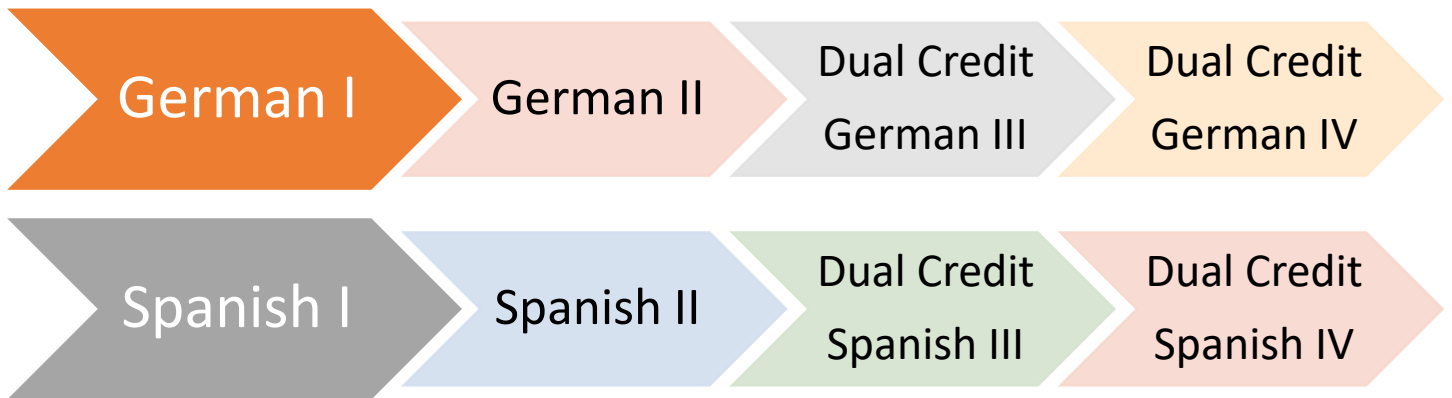
1532 (PSYCH)

- NWHS Course Code: 1225 1st Tri/ 1226 2nd Tri/ 1227 3rd Tri

Psychology is the scientific study of mental processes and behavior. History & Scientific Method explores the history of psychology, the research methods used, and the ethical considerations that must be utilized. Biological Basis for Behavior focuses on the way the brain and nervous system function, including sensation, perception, motivation and emotion. Development looks at all the changes through one's life; physical, cognitive, as well as emotional, social and moral development. Cognition focuses on learning, memory, information processing, and language development. Personality and Assessment looks at the approaches used to explain one's personality and the assessment tools used. Abnormal Psychology explores psychological disorders and the various treatments used for them. Socio-Cultural Dimensions of Behavior covers topics such as conformity, obedience, perceptions, attitudes and influence of the group on the individual. Psychological Thinking explores how to think like a psychologist and expand critical thinking skills needed in the life of a psychologist.

- 1 trimester, Grade 11 – 12
- Credits: 1 trimester course, 1 credit per semester
- Will be offered in 2019 – 2020 School Year
- Counts as an Elective for all diplomas

WORLD LANGUAGES



GERMAN I

2040 (GER I)

- NWHS Course Codes: German I A 511 (1st Tri)/513 (2nd Tri); German I B 512 (2nd Tri)/514 (3rd Tri)

Level I world language courses provide instruction enabling students to discuss the many reasons for learning languages and to develop and understanding of the people who speak them. Students can apply effective strategies for language learning and show a willingness to experience various aspects of the cultures. The course provides students with opportunities to: respond to and give oral direction; understand and use appropriate forms of address; ask and answer simple questions and participate in brief guided conversations related to their needs and interests; read words and phrases in a situational context; write familiar words and phrases in appropriate contexts. Additionally, students will learn about the major holidays and geographical features of the countries being studied and appropriate etiquette in a variety of settings.

- 2 trimesters, Grades 9-12
- Prerequisite: “B” average in middle school English or a “C” or better average in high school English
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma

GERMAN II

2042 (GER II)

- NWHS Course Codes: German II A 521 (1st Tri)/523 (2nd Tri); German II B 522 (2nd Tri)/524 (3rd Tri)

Level II world language courses enable students to participate in conversations dealing with daily activities and personal interests. Students can: ask questions regarding routine activities; participate in conversations on a variety of topics; relate a simple narrative about a personal experience; interact in a variety of situations to meet personal needs; understand main ideas and facts from simple texts to over familiar topics; write briefly in response to given situations. Additionally, students will become familiar with major geographical features and with different aspects of the culture.

- 2 trimesters, Grades 10-12
- Prerequisite: German I with a grade of “B-” or better or teacher approval
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma

GERMAN III/GER 101/102 PURDUE UNIVERSITY

2044 (GER III)

- NWHS Course Codes: 535, 536

Level III world language courses provide instruction enabling students to understand and appreciate other cultures. Students are willing to initiate and participate in discussions concerning these cultures. Students can: respond to factual and interpretive questions and interact in a variety of social situations; read for comprehension from a variety of authentic materials; read short literary selections for poetry, plays, or short stories; write paraphrases, summaries, and brief compositions; describe different aspects of the culture, using the world language where appropriate and participate appropriately at special family occasions

- 2 trimesters, Grades 11-12
- Prerequisite: German II with a grade of “B-” or better or teacher approval
- This is a dual credit course offered through Purdue University Northwest. Additional fees may apply.
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma

GERMAN IV/GER 201/202 PURDUE UNIVERSITY

2046 (GER IV)

- NWHS Course Codes: 543, 544

Level IV world language courses enable students to participate in classroom activities related to the language studied, such as presentations. Students are willing to participate in conversations with native and advanced non-native speakers. Students can: respond to factual and interpretive questions, interact in complex social situations, and express opinions and make judgments; give presentations on cultural topics; read for comprehension from a variety of longer authentic materials; write well-organized compositions on a given topic; begin using the language creatively in writing simple poetry and prose; able to participate appropriately in a variety of specific circumstances.

- 2 trimesters, Grade 12
- Prerequisite: German III with a grade of “B-” minimum or teacher approval
- This is a dual credit course offered through Purdue University Northwest. Additional fees may apply.
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma

SPANISH I

2120 (SPAN I)

- NWHS Course Codes: Spanish I A 551 (1st Tri)/553 (2nd Tri); Spanish I B 552 (2nd Tri)/554 (3rd Tri)

Spanish I classes introduce the Spanish language through writing, speaking, and reading activities. We will learn to express ourselves using basic grammar concepts of the Spanish language. We will also explore the culture, history, and literature of various Spanish-speaking countries. We will discover differences and similarities between the culture we live in and that of Hispanic countries

- 2 trimesters, Grades 9-12
- Prerequisite – “B” average in middle school English or a “C” or better average in high school English
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma

SPANISH II

2122 (SPAN II)

- NWHS Course Codes: Spanish II A 561 (1st Tri)/563 (2nd Tri); Spanish II B 562 (2nd Tri)/564 (3rd Tri)

Students in Spanish II will explore the rich and diverse cultures of the Dominican Republic (in the first trimester) and Costa Rica (in the second trimester). Students will learn about the geography, climate, history and culture of each country. In addition to the cultural content in the course, attention will be given to the study of Spanish as a language; this form-focus will include vocabulary study and grammar practice with a focus on the preterit and imperfect tenses and pronominal verbs.

- 2 trimesters, Grades 10-12
- Prerequisite: Spanish I with a grade of “B-” minimum or teacher approval
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma

SPANISH III/SPN 113/123 TRINE UNIVERSITY

2124 (SPAN III)

- NWHS Course Codes: Spanish III A 577 (1st Tri)/579 (2nd Tri); Spanish III B 578 (2nd Tri)/580 (3rd Tri)

Students in Spanish III will explore the rich and diverse cultures of Spain (in the first trimester) and Mexico (in the second trimester). Students will learn about the geography, history, cultural attractions and daily life of the Spanish and Mexican people. In addition to the historical and cultural content of the course, attention will also be given to study of Spanish as a language; this form-focus will include vocabulary study and grammar practice. The instruction of this course is predominately conducted in the target language.

- 2 trimesters, Grades 11-12
- Prerequisite: Spanish II with a grade of “B-” minimum or teacher approval
- This is a dual credit course offered through Trine University. Additional fees may apply.
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma

SPANISH IV/SPN 203/213 TRINE UNIVERSITY

2126 (SPAN IV)

- NWHS Course Codes: 587, 588

Students in Spanish IV will explore the rich and diverse cultures of Argentina (in the first trimester) and the US (in the second trimester). Students will learn about the geography, climate, history and culture of Argentina and the history and influence of Hispanics in the US using authentic texts. In addition to the cultural content in the course, attention will be given to the study of Spanish as a language; this form-focus will include vocabulary study and grammar practice including an expanded understanding of the subjunctive mood, the perfect tenses, and relative pronouns among other grammar topics. The instruction of this course is nearly entirely in Spanish.

- 2 trimesters, Grade 12
- Prerequisite: Spanish III with a grade of “B-” minimum or teacher approval
- This is a dual credit course offered through Trine University. Additional fees may apply.
- Credits: 1 trimester course, 1 credit per trimester. May be offered for successive trimesters
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma

APPENDIX A: DIRECT SPECIAL EDUCATION CLASSES*

**These courses are designed for students with Individual Education Programs (IEP).*

Certificate of Completion Course Sequence

Grade Level	English 8 Credits Needed	Math 4 Credits Needed	Social Studies 4 Credits Needed	Science 4 Credits Needed	Other PE/Health = 3 Employability = 10 Electives = 7
9th	Applied English 9 1002A	Applied Algebra 2520A	Applied Introduction to Social Science 1522A (2 Credits) Applied Topics in Social Science 1550A (1 Credit)	Applied Life Science 3030A (2 Credits) NEED AN ELECTIVE 1 TRIMESTER	Applied PE I/II 3542A 3544A Applied Health
10th	Applied English 10 1004A	Applied Algebra Lab 2516A	Applied State and Local Government 1536A (2 Credits) Applied Indiana Studies 1518A (1 Credit)	Applied Biology 3024A	Applied Basic Skills Development 0500A (Employability Credits)
11th	Applied English 11 1006A	Applied Geometry 2532A	Applied Geography & History of the World 1570A	Applied Earth Space Science 3044A	Applied Basic Skills Development 0500A (Employability Credits)
12th	Applied English 12 1008A	Applied Math Lab 2560A	Applied Economics 1514A (2 credits) Applied Citizenship and Civics 1508A (1 credit - Employability)	Applied Physical Science 3102A (2 Credits) NEED AN ELECTIVE 1 TRIMESTER	Applied Career Information and Exploration 0522A (Employability Credits)

ALGEBRA I APPLIED

2520A

- Will be 1815 in 2019 – 2020

Applied Algebra I formalizes and extends the mathematics students learned in the middle grades. Algebra I is made up of 4 strands: Numbers Sense, Expressions and Computation; Linear Equations, Inequalities, and Functions; Systems of Equations and Inequalities; and Quadratic and Exponential Equations and Functions. The strands are further developed by focusing on the content of the Algebra content connectors.

- 3 trimesters, Grade 9
- Counts as a Math Requirement for the Certificate of Completion

ALGEBRA I LAB APPLIED

2516A

- Will be 1820 in 2019 – 2020

Applied Algebra I Lab is a mathematics support course. Algebra I Lab should be taken while students are concurrently enrolled in a math course or have met the math requirements for the certificate of completion. This course provides students with additional time to build the foundations necessary for high school math courses and work on specific, individualized math skills, while concurrently having access to rigorous, grade-level appropriate courses. The five critical areas align with the critical areas of Math: Number Sense, Computation, Data Analysis, Geometry, Measurement and Algebraic Thinking. Algebra I Lab combines standards from high school courses with foundational standards from the middle grades.

- 3 trimesters, Grade 10
- Counts as an Elective for the Certificate of Completion

BASIC SKILLS DEVELOPMENT – APPLIED

0500A

- Will be 1805 in 2019 – 2020

Applied Basic Skills Development is a multidisciplinary course that provides students continuing opportunities to develop basic skills including: (1) reading, (2) writing, (3) listening, (4) speaking, (5) mathematical computation, (6) note taking, (7) study and organizational skills, and (8) problem-solving skills, (9) employability skills, which are essential for high school achievement and post-secondary outcomes. Determination of the skills to be emphasized in this course is based on Indiana's standards and Content Connectors, individual school corporation general curriculum plans, and the student's Individualized Education Programs (IEP) or other individualized plans. Skills selected for developmental work provide students with the ability to continue to learn in a range of different life situations and may be applied using instructional practices related to community-based instruction.

- 3 trimesters, Grade 10
- Can earn up to 8 credits
- Counts as an Employability Requirement, Capstone Course or Elective for the Certificate of Completion

BASIC SKILLS DEVELOPMENT - ENGLISH

0500 (BAS SKLS)

- Formerly 1824 Direct English

Direct English is a course which provides students continuing opportunities to develop the basic skills including: (1) reading, and writing (2) note taking, and (3) study and organizational skills that are essential for high school course work achievement. Determination of the skills to be emphasized in this course is based on the Indiana State proficiencies, individual school corporation general curriculum plans, and student Individual Education Programs (IEP). Skills selected for developmental work provide students with the ability to continue to learn in a range of different life situations.

- 1 trimester, Grade 9-12
- Counts as an Elective for all diplomas

BASIC SKILLS DEVELOPMENT - MATH

0500 (BAS SKLS)

- Formerly 1827, 1828, 1829 Direct Math

Direct Math is a multidisciplinary course which provides students continuing opportunities to develop the basic skills including: (1) mathematical computation, (2) note taking, (3) study and organizational skills, and (4) problem-solving skills that are essential for high school course work achievement. Determination of the skills to be emphasized in this course is based on the Indiana State proficiencies, individual school corporation general curriculum plans, and student Individual Education Programs (IEP). Skills selected for developmental work provide students with the ability to continue to learn in a range of different life situations.

- 3 trimesters, Grade 9-12
- Can earn up to 8 credits
- Counts as an Elective for all diplomas

BIOLOGY APPLIED

3024A

- Will be 1830 in 2019 – 2020

Applied Biology I is a course based on the following core topics: cellular chemistry, structure and reproduction; matter cycles and energy transfer; interdependence of organisms; molecular basis of heredity; genetics and evolution. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation by designing and conducting investigations guided by theory and by evaluating and communicating the results of those investigations according to accepted procedures.

- 3 trimesters, Grade 10
- Counts as a Science Requirement for the Certificate of Completion

CAREER INFORMATION AND EXPLORATION APPLIED

0522A

- Will be 1854 in 2019 – 2020

Career Information and Exploration provides students with opportunities to learn about themselves and about various traditional and nontraditional occupations and careers. Students also gain an awareness of the type of occupational preparation or training needed for various occupations and careers. Students develop skills in: (1) employability, (2) understanding the economic process, and (3) career decision making and planning. Opportunities are provided for students to observe and participate in various job situations through opportunities such as field trips, internships, mock interviews, and guest speakers. Resume development experience and career-related testing are also provided to students.

- 3 trimesters, Grade 11-12
- Counts as an Employability Requirement, Capstone Course or Elective for the Certificate of Completion

CITIZENSHIP AND CIVICS APPLIED

1508A

- Will be 1849 in 2019 – 2020

Applied Citizenship and Civics is an overview of citizenship roles and responsibilities designed to help students become independent thinkers and conscientious citizens. This course deals with political trends and behavior which citizens consider to be relevant to the most pressing issues of the day. The course provides students experiences that will develop attitudes of citizenship within a democratic society. Topics include: (1) the policymaking process, (2) public participation and policymaking, (3) citizenship rights and responsibilities in a changing society, and (4) the relationship between modern society and government. Study of the local government should be a component of this course.

- 1 trimester, Grade 12
- Counts as an Elective, Employability or Social Studies Requirement for the Certificate of Completion

EARTH SPACE SCIENCE APPLIED

3044A

- Will be 1838 in 2019 – 2020

Applied Earth and Space Science I is a course focused on the following core topics: study of the earth's layers; atmosphere and hydrosphere; structure and scale of the universe; the solar system and earth processes. Students analyze and describe earth's interconnected systems and examine how earth's materials, landforms, and continents are modified across geological time. Instruction should focus on developing student understanding that scientific knowledge is gained from observation and experimentation by conducting investigations and evaluating and communicating the results of those investigations. Course may include a variety of learning experiences and tools support the process of investigation, data collection and analysis.

- 2 trimesters, Grade 11
- Counts as an Elective or Science Requirement for the Certificate of Completion

ECONOMICS APPLIED

1514A

- Will be 1848 in 2019 – 2020

Applied Economics examines the allocation of resources and their uses for satisfying human needs and wants. The course identifies economic behaviors of consumers, producers, savers, investors, workers, voters, institutions, governments, and societies in making decisions. Students explain that because resources are limited, people must make choices and understand the role that supply, demand, prices, and profits play in a market economy. Key elements of the course include the study of scarcity and economic reasoning; supply and demand; market structures; the role of government; national economic performance; the role of financial institutions; economic stabilization; and trade. Students may be offered opportunities to better understand and apply course content through a variety of instructional strategies including project- and community-based instruction and real-world experiences.

- 2 trimesters, Grade 12
- Counts as a Social Studies Requirement or Elective for the Certificate of Completion

ENGLISH 9 APPLIED

1002A

- Will be 1814 in 2019 – 2020

Applied English 9 is an integrated English course based on the Indiana Content Connectors for English/Language Arts in Grades 9-10, is a study of language, literature, composition, and communication, focusing on literature and nonfiction within an appropriate level of complexity for each individual student. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to a variety of texts. Students form responses to literature, expository (informative), narrative, and argumentative/persuasive compositions, and research tasks when appropriate. Students deliver ability appropriate presentations with attention to audience and purpose and access, analyze, and evaluate online information.

- 3 trimesters, Grade 9
- Counts as an English/Language Arts Requirement for Certificate of Completion

ENGLISH 10 APPLIED

1004A

- Will be 1804 in 2019 – 2020

Applied English 10 an integrated English course based on the Indiana Content Connectors for English/Language Arts in Grades 9-10, is a study of language, literature, composition, and communication, focusing on literature and nonfiction within an appropriate level of complexity for each individual student. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to a variety of texts. Students form responses to literature, expository (informative), narrative, and argumentative/persuasive compositions, and research tasks when appropriate. Students deliver ability appropriate presentations with attention to audience and purpose and access, analyze, and evaluate online information.

- 3 trimesters, Grade 10
- Counts as an English/Language Arts Requirement for the Certificate of Completion

ENGLISH 11 APPLIED

1006A

- Will be 1836 in 2019 – 2020

Applied English 11, an integrated English course based on the Indiana Content Connectors English/Language Arts in Grades 9-10 and applicable employability skills. This course is a study of language, literature, composition, and communication focusing on literature with an appropriate level of complexity for each individual student. Students analyze, compare and evaluate a variety of classic and contemporary literature and nonfiction texts, including those of historical or cultural significance. Students write narratives, responses to literature, academic responses (e.g. analytical, persuasive, expository, summary), and research tasks when appropriate. Students analyze and create visual information in the form of pictures, graphs, charts and tables. Students write and deliver grade appropriate multimedia presentations and access online information.

- 3 trimesters, Grade 11
- Counts as an English/Language Arts Requirement for the Certificate of Completion

ENGLISH 12 APPLIED

1008A

- Will be 1846 in 2019 – 2020

Applied English 12, an integrated English course based on the Indiana Content Connectors English/Language Arts in Grades 9-10 and applicable employability skills. This course is a study of language, literature, composition, and communication focusing on literature with an appropriate level of complexity for each individual student. Students analyze, compare and evaluate a variety of classic and contemporary literature and nonfiction texts, including those of historical or cultural significance. Students write narratives, responses to literature, academic responses (e.g. analytical, persuasive, expository, summary), and research tasks when appropriate. Students analyze and create visual information in the form of pictures, graphs, charts and tables. Students write and deliver grade appropriate multimedia presentations and access online information.

- 3 trimesters, Grade 12
- Counts as an English/Language Arts Requirement for the Certificate of Completion

GEOGRAPHY AND HISTORY OF THE WORLD APPLIED

1570A

- Will be 1839 in 2019 – 2020

Applied Geography and History of the World is designed to enable students to use geographical tools, skills and historical concepts to apply their understanding of major global themes including the origin and spread of world religions; exploration; conquest, and imperialism; urbanization; and innovations and revolutions. Geographical and historical skills include forming research questions, acquiring information by investigating a variety sources, organizing information by creating graphic representations, analyzing information to understand, determine and explain patterns and trends, planning, and documenting and presenting findings orally or in writing. Students use the knowledge, tools, and skills obtained from this course to understand, analyze, evaluate, and make predictions about major global developments. This course is designed to nurture perceptive and responsible citizenship, to encourage and support the development of critical thinking skills and lifelong learning, and to help prepare Indiana students for the 21st Century.

- 3 trimesters, Grade 11
- Counts as a Social Studies Requirement or Elective for the Certificate of Completion

GEOMETRY APPLIED

2532A

- Will be 1837 in 2019 – 2020

Applied Geometry formalizes and extends students' geometric experiences from the middle grades. These critical areas comprise the Geometry course: Points, Lines, Angles, and Planes; Triangles; Quadrilaterals and Other Polygons; Circles; Transformations; and Three- dimensional Solids. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students Indiana Department of Education 226 High School Course Titles and Descriptions experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- 3 trimesters, Grade 11
- Counts as a Math Requirement for the Certificate of Completion

INDIANA STUDIES APPLIED

1518A

- Will be 1835 in 2019 – 2020

Applied Indiana Studies is an integrated course that compares state and national developments in the areas of politics, economics, history, and culture. The course uses Indiana history as a basis for understanding current policies, practices, and state legislative procedures. Examination of individual leaders (state or local) and their roles in a democratic society will be included. Student will examine the participation of citizens in the political process to understand their role. Selections from Indiana arts and literature may also be analyzed for insights into historical events and cultural expressions.

- 1 trimester, Grade 10
- Counts as a Social Studies Requirement or Elective for the Certificate of Completion

INTRODUCTION TO SOCIAL SCIENCE APPLIED

1522A

- Will be 1817 in 2019 – 2020

Applied Introduction to Social Science develops an understanding of the nature of the social sciences and presents reasons for studying them. The course involves consideration of the social sciences such as: (1) the study of humanity; (2) the reasons for separate fields or disciplines; (3) the objectives, materials, and methods of each discipline; and (4) the difficulties encountered by social scientists in applying scientific method to the study of human life. Content may include group and individual behavior, education, social systems, and the role of the social studies.

- 2 trimesters, Grade 9
- Counts as a Social Studies Requirement or Elective for the Certificate of Completion

LIFE SCIENCE APPLIED

3030A

- Will be 1816 in 2019 – 2020

Applied Life Science is an introduction to biology course. Students develop problem-solving skills and strategies while performing laboratory and field investigations of fundamental biological concepts and principles. Students explore the functions and processes of cells within all living organisms, general concepts of genetics, and the relationships of living organisms to each other and to the environment.

- 2 trimesters, Grade 9
- Counts as an Elective or Science Requirement for the Certificate of Completion

MATH LAB APPLIED

2560A

- Will be 1847 in 2019 – 2020

Applied Mathematics Lab provides students with individualized instruction designed to increase math related competencies and/or mathematics coursework aligned with Indiana's Academic Standards or Content Connectors for Mathematics.

- 3 trimesters, Grade 12
- Counts as an Elective for the Certificate of Completion

PHYSICAL SCIENCE APPLIED

3102A

- Will be 1852 in 2019 – 2020

Applied Physical Science is a course in which students develop problem solving skills and strategies while performing laboratory and field investigations of fundamental chemical, physical, and related Earth and space science concepts and principles that are related to students' interests and that address everyday problems.

- 2 trimesters, Grade 12
- Counts as an Elective or Science Requirement for the Certificate of Completion

STATE AND LOCAL GOVERNMENT APPLIED

1536A

- Will be 1834 in 2019 – 2020

Applied State and Local Government is the study of the function and organization of state, county, city, town, and township government units. This course also traces the role and influence of political and social institutions on a state's political development. The implications of this development for governmental units should be discussed relative to current political and governmental situations. Field trips, observations, and interviews with state and local leaders should be encouraged whenever possible and content may also focus on school or social communities.

- 2 trimesters, Grade 10
- Counts as a Social Studies Requirement or Elective for the Certificate of Completion

TOPICS IN SOCIAL SCIENCE APPLIED

1550A

- Will be 1835 in 2019 – 2020

Applied Topics in Social Science provides students with an opportunity for in-depth study of a specific topic, theme, or concept in one of the social science disciplines such as anthropology, archaeology, economics, geography, political science, psychology, or sociology. It is also possible to focus the course on more than one discipline. Courses taught under this title should emphasize application of scientific methods of inquiry and help students develop effective research and thinking skills.

- 1 trimester, Grade 9
- Counts as a Social Studies Requirement or Elective for the Certificate of Completion

APPENDIX B: SPECIAL PROGRAMS*

CADET TEACHING EXPERIENCE

0502 (CADET TCHG)

- NWHS Course Codes: 1401, 1402, 1403

This course gives students an opportunity to “test” their interest in becoming future educators. Part of the trimester is devoted to developing teaching skills and an awareness of current educational issues. Eight weeks are spent “on site” in an elementary or middle school classroom as an intern with a professional educator. Students usually take first trimester cadet teaching, and then second and third trimester is optional.

- 1 trimester each, Grades 11-12
- Prerequisite: 3.0 Cumulative GPA and instructor approval
- This course is 2 periods worth 1 credit that may be repeated up to 4 times
- Students must be able to provide their own transportation
- Cadet teaching experience for high school students is limited to grades kindergarten through grade nine
- Counts as a Directed Elective or Elective for all diplomas

PEER TUTORING

0520 (PEER TUTR)

- NWHS Course Codes: 1407, 1408, 1409

Peer Tutoring provides high school students with an organized exploratory experience to assist students in kindergarten through grade twelve (K-12), through a helping relationship, with their studies and personal growth and development. The course provides opportunities for the students taking the course to develop a basic understanding of individual differences and to explore career options in related fields. Peer Tutoring experiences are preplanned by the teacher trainer and any cooperating teacher under whom the tutoring is to be provided. It must be conducted under the supervision of a licensed teacher. The course provides a balance of class work relating to the development of and use of: (1) listening skills, (2) communication skills, (3) facilitation skills, (4) decision-making skills, and (5) teaching strategies.

- 1 trimester, Grades 11 – 12
- Course can be taken for a total of two trimesters, one credit each
- Students must be able to provide their own transportation to tutoring site
- Counts as an Elective for all diplomas

CAREER EXPLORATION INTERNSHIP

0530 (CARR EXP)

- NWHS Course Codes: 1591, 1592, 1593

The Career Exploration Internship course is a paid or unpaid work experience in the public or private sector that provides for workplace learning in an area of student career interest. Unlike a cooperative education program in which students gain expertise in a specific occupation, the career exploration internship is intended to expose students to broad aspects of an industry or career cluster area by rotating through a variety of work sites or departments. In addition to their workplace activities, students participate in 1) regularly scheduled meetings with their classroom teacher, or 2) a regularly scheduled with the teacher for the purpose of helping students make the connection between academic learning and their work-related. Specific instructional standards tied to the career cluster or pathway and learning objectives for the internship must be written clarify the expectations of all parties – the student, parent, employer, and instructor.

- 1 trimester, Grades 11 – 12
- Course can be taken for multiple periods and successive trimesters; 1 credit per period per trimester
- Students must be able to provide their own transportation
- Counts as a Directed Elective or Elective for all diplomas

WORK BASED LEARNING CAPSTONE, MULTIPLE PATHWAYS

5974 (WBL)

- NWHS Course Codes: 1451, 1452, 1453

This course provides a unique opportunity for senior students to experience work-based activities in career areas of interest. The Internship will occur during school hours and vary from student to student. Documentation of bi-weekly time sheets, attendance, performance reviews and completion of required activities will determine the final grade. The experience will provide for post-secondary placement. This experience is an extension of the normal academic school program on a voluntary basis and is not for pay.

- 1 credit per class period per trimester (6 credit maximum), Grade 12
- Required Prerequisites: A minimum of 4 credits of introductory and advanced CTE courses related to a student's pathway and to the work site placement; 3.0 Cumulative GPA and good attendance in addition to instructor approval
- Students must be able to provide their own transportation and complete required waiver forms
- Counts as a Directed Elective or Elective for all diplomas

**These programs may require an application, interview and special permission by an administrator.*

APPENDIX C: QUANTITATIVE REASONING COURSES

- AGRIBUSINESS MANAGEMENT
 - 5002 (AG BUS MGMT)
- ADVANCED LIFE SCIENCE: ANIMALS
 - 5070 (ALS ANIML)
- COMPUTER SCIENCE I
 - 4801 (COM SCI I)
- COMPUTER SCIENCE II: PROGRAMMING
 - 5236 (CS II PROG)
- ADVANCED ACCOUNTING
 - 4522 (ADV ACC)
- BANKING AND INVESTMENT CAPSTONE
 - 5258 (BANK INVEST)
- PRINCIPLES OF ENGINEERING
 - 4814 PLTW (POE)
- COMPUTER INTEGRATED MANUFACTURING
 - 4810 PLTW (CIM)
- CIVIL ENGINEERING AND ARCHITECTURE
 - 4820 PLTW (CEA)
 - 5650 Non-PLTW (CIVIL ENG)
- ADVANCED MANUFACTURING II
 - 5606 (ADV MFTG II)
- CHEMISTRY I
 - 3064 (CHEM I)
- PHYSICS I
 - 3084 (PHYS I)
- ECONOMICS
 - 1514 (ECON)
- AP MICROECONOMICS
 - 1566 (MICRO-ECON)

APPENDIX D: COLLEGE & CAREER PATHWAYS

Cluster: Agriculture				Pathway: Agribusiness			
SECONDARY	Grade	English	Math	Science	Health/PE Social Studies	CTE/Career Preparation Courses for this Pathway	Other Elective Courses for this Pathway
	9	English 9	Algebra I	Biology	Health & Wellness/ Physical Ed	Preparing for College & Careers	Fine Arts
	10	English 10	Geometry	Chemistry	World History I & II	Introduction to Agriculture	World Language
	11	English 11	Algebra II	3 rd Core 40 Science	US History	Animal Science Animal Science/ AGRI 103 Ivy Tech	World Language
	12	English 12	Math or Quantitative Reasoning		Government Economics	Agribusiness Management/ AGRI 102 Ivy Tech	World Language
State Specified Pathway Assessment: Dual credit assessment from Ivy Tech							
Industry Recognized Certification: N/A							
Postsecondary Courses Aligned for Potential Dual Credit**							
**See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives							
Ivy Tech Community College							
Ivy Tech AGRI 102: Agricultural Business and Farm Management (3 Credits) Ivy Tech AGRI 103: Animal Science (3 Credits)							

Cluster: Agriculture				Pathway: Animal Science			
SECONDARY	Grade	English	Math	Science	Health/PE Social Studies	CTE/Career Preparation Courses for this Pathway	Other Elective Courses for this Pathway
	9	English 9	Algebra I	Biology	Health & Wellness/ Physical Ed	Preparing for College & Careers	Fine Arts
	10	English 10	Geometry	Chemistry	World History I & II	Introduction to Agriculture	World Language
	11	English 11	Algebra II	3 rd Core 40 Science	US History	Animal Science Animal Science/ AGRI 103 Ivy Tech	World Language
	12	English 12	Math or Quantitative Reasoning		Government Economics	Advanced Life Science: Animals/ AGRI 107 Ivy Tech	World Language
State Specified Pathway Assessment: Dual credit assessment from Ivy Tech							
Industry Recognized Certification: N/A							
Postsecondary Courses Aligned for Potential Dual Credit**							
**See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives							
Ivy Tech Community College							
Ivy Tech AGRI 103: Animal Science (3 Credits) Ivy Tech AGRI 107: Advanced Life Science (3 Credits)							

Cluster: Architecture & Construction				Pathway: Architecture			
SECONDARY	Grade	English	Math	Science	Health/PE Social Studies	CTE/Career Preparation Courses for this Pathway	Other Elective Courses for this Pathway
	9	English 9	Algebra I	Biology	Health & Wellness/ Physical Ed	Preparing for College & Careers	Fine Arts
	10	English 10	Geometry	Chemistry	World History I & II	Introduction to Housing & Interior Design	World Language
	11	English 11	Algebra II	3 rd Core 40 Science	US History	Intro to Engineering Design PLTW	World Language
	12	English 12	Math or Quantitative Reasoning		Government Economics	Principles of Engineering PLTW	World Language
State Specified Pathway Assessment: N/A							
Industry Recognized Certification: N/A							
Postsecondary Courses Aligned for Potential Dual Credit**							
**See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives							
N/A							

Cluster: Architecture & Construction				Pathway: Recreation Vehicle Construction			
SECONDARY	Grade	English	Math	Science	Health/PE Social Studies	CTE/Career Preparation Courses for this Pathway	Other Elective Courses for this Pathway
	9	English 9	Algebra I	Biology	Health & Wellness/ Physical Ed	Preparing for College & Careers	Fine Arts
	10	English 10	Geometry	Chemistry	World History I & II	Introduction to Construction	World Language
	11	English 11	Algebra II	3 rd Core 40 Science	US History	Building & Facilities Management I	World Language
	12	English 12	Math or Quantitative Reasoning		Government Economics	Construction Trades: Electrical I	World Language
State Specified Pathway Assessment: Home Builders Institute (HBI) Principles of Construction or Carpentry Basic assessments							
Industry Recognized Certification: THOR Certification							
Postsecondary Courses Aligned for Potential Dual Credit**							
**See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives							
N/A							

Cluster: Business & Marketing				Pathway: Accounting & Finance				
SECONDARY	Grade	English	Math	Science	Health/PE Social Studies	CTE/Career Preparation Courses for this Pathway		Other Elective Courses for this Pathway
	9	English 9	Algebra I	Biology	Health & Wellness/ Physical Ed	Preparing for College & Careers		Fine Arts
	10	English 10	Geometry	Chemistry	World History I & II	Intro to Business	Intro to Accounting	World Language
	11	English 11	Algebra II	3 rd Core 40 Science	US History	Digital Applications	Advanced Accounting	World Language
	12	English 12	Math or Quantitative Reasoning		Government Economics	Business Law	Banking & Investment Capstone	World Language
State Specified Pathway Assessment: Dual credit assessment from Ivy Tech								
Industry Recognized Certification: N/A								
Postsecondary Courses Aligned for Potential Dual Credit**								
**See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives								
Ivy Tech Community College								
Ivy Tech BUSN 201: Business Law								

Cluster: Business & Marketing				Pathway: Business Management				
SECONDARY	Grade	English	Math	Science	Health/PE Social Studies	CTE/Career Preparation Courses for this Pathway		Other Elective Courses for this Pathway
	9	English 9	Algebra I	Biology	Health & Wellness/ Physical Ed	Preparing for College & Careers		Fine Arts
	10	English 10	Geometry	Chemistry	World History I & II	Intro to Business	Intro to Accounting	World Language
	11	English 11	Algebra II	3 rd Core 40 Science	US History	Digital Applications	Advanced Accounting	World Language
	12	English 12	Math or Quantitative Reasoning		Government Economics	Business Law		World Language
State Specified Pathway Assessment: Dual credit assessment from Ivy Tech								
Industry Recognized Certification: N/A								
Postsecondary Courses Aligned for Potential Dual Credit**								
**See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives								
Ivy Tech Community College								
Ivy Tech BUSN 201: Business Law (3 Credits)								

Cluster: Health Science				Pathway: Nursing				
SECONDARY	Grade	English	Math	Science	Health/PE Social Studies	CTE/Career Preparation Courses for this Pathway		Other Elective Courses for this Pathway
	9	English 9	Algebra I	Biology	Health & Wellness/ Physical Ed	Preparing for College & Careers		Fine Arts
	10	English 10	Geometry	Chemistry	World History I & II	Nutrition & Wellness		World Language
	11	English 11	Algebra II	3 rd Core 40 Science	US History	Interpersonal Relationships	Child Development	World Language
	12	English 12	Math or Quantitative Reasoning		Government Economics	Anatomy & Physiology		World Language
State Specified Pathway Assessment: N/A								
Industry Recognized Certification: N/A								
Postsecondary Courses Aligned for Potential Dual Credit**								
**See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives								
N/A								

Cluster: Hospitality & Human Services				Pathway: Human & Social Services				
SECONDARY	Grade	English	Math	Science	Health/PE Social Studies	CTE/Career Preparation Courses for this Pathway		Other Elective Courses for this Pathway
	9	English 9	Algebra I	Biology	Health & Wellness/ Physical Ed	Preparing for College & Careers		Fine Arts
	10	English 10	Geometry	Chemistry	World History I & II	Child Development	Nutrition & Wellness	World Language
	11	English 11	Algebra II	3 rd Core 40 Science	US History	Interpersonal Relationships	Advanced Nutrition & Wellness	World Language
	12	English 12	Math or Quantitative Reasoning		Government Economics	Adult Roles & Responsibility	Intro to Business	World Language
State Specified Pathway Assessment: N/A								
Industry Recognized Certification: N/A								
Postsecondary Courses Aligned for Potential Dual Credit**								
**See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives								
N/A								

Cluster: Information Technology				Pathway: PC Support/IT Technology Support			
SECONDARY	Grade	English	Math	Science	Health/PE Social Studies	CTE/Career Preparation Courses for this Pathway	Other Elective Courses for this Pathway
	9	English 9	Algebra I	Biology	Health & Wellness/ Physical Ed	Preparing for College & Careers	Fine Arts
	10	English 10	Geometry	Chemistry	World History I & II	Digital Applications	World Language
	11	English 11	Algebra II	3 rd Core 40 Science	US History	Intro to Computer Science	World Language
	12	English 12	Math or Quantitative Reasoning		Government Economics	Computer Science I	World Language
State Specified Pathway Assessment: N/A							
Industry Recognized Certification: N/A							
Postsecondary Courses Aligned for Potential Dual Credit**							
**See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives							
N/A							

Cluster: Manufacturing & Logistics				Pathway: Advanced Manufacturing			
SECONDARY	Grade	English	Math	Science	Health/PE Social Studies	CTE/Career Preparation Courses for this Pathway	Other Elective Courses for this Pathway
	9	English 9	Algebra I	Biology	Health & Wellness/ Physical Ed	Preparing for College & Careers	Fine Arts
	10	English 10	Geometry	Chemistry	World History I & II	Introduction to Advanced Manufacturing & Logistics	World Language
	11	English 11	Algebra II	3 rd Core 40 Science	US History	Advanced Manufacturing I/ ADMF 101	World Language
	12	English 12	Math or Quantitative Reasoning		Government Economics	Advanced Manufacturing II/ ADMF 102	World Language
State Specified Pathway Assessment: Manufacturing Skill Standards Council (MSSC) Assessment – All 4 Exams							
Industry Recognized Certification: MSSC Assessment							
Postsecondary Courses Aligned for Potential Dual Credit**							
**See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives							
Ivy Tech ADMF 101: Key Principles of ADMF Ivy Tech ADMF 102: Technology in ADMF							

Cluster: STEM				Pathway: Computer Science				
SECONDARY	Grade	English	Math	Science	Health/PE Social Studies	CTE/Career Preparation Courses for this Pathway		Other Elective Courses for this Pathway
	9	English 9	Algebra I	Biology	Health & Wellness/ Physical Ed	Preparing for College & Careers		Fine Arts
	10	English 10	Geometry	Chemistry	World History I & II	Intro to Computer Science	Digital Applications	World Language
	11	English 11	Algebra II	3 rd Core 40 Science	US History	Computer Science I		World Language
	12	English 12	Math or Quantitative Reasoning		Government Economics	Computer Science II: Programming		World Language
State Specified Pathway Assessment: Advanced Placement Exams taken at end of Computer Science I (AP Computer Science Principles) and Computer Science II: Programming (AP Computer Science A)								
Industry Recognized Certification: N/A								
Postsecondary Courses Aligned for Potential Dual Credit**								
**See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives								
N/A								

Cluster: STEM				Pathway: Engineering				
SECONDARY	Grade	English	Math	Science	Health/PE Social Studies	CTE/Career Preparation Courses for this Pathway		Other Elective Courses for this Pathway
	9	English 9	Algebra I	Biology	Health & Wellness/ Physical Ed	Preparing for College & Careers		Fine Arts
	10	English 10	Geometry	Chemistry	World History I & II	Introduction to Engineering Design PLTW		World Language
	11	English 11	Algebra II	3 rd Core 40 Science	US History	Principles of Engineering PLTW	Computer Science I	World Language
	12	English 12	Math or Quantitative Reasoning		Government Economics	Civil Engineering	Computer Int Manufacture	World Language
State Specified Pathway Assessment: N/A								
Industry Recognized Certification: N/A								
Postsecondary Courses Aligned for Potential Dual Credit**								
**See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives								
N/A								

APPENDIX E: COLLEGE & CAREER PATHWAYS

Cluster: Agriculture				Pathway: Animal Systems			
SECONDARY	Grade	English	Math	Science	Health/PE Social Studies	CTE/Career Preparation Courses for this Pathway	Other Elective Courses for this Pathway
	9	English 9	Algebra I	Biology	Health & Wellness/ Physical Ed	Preparing for College & Careers Intro to Agriculture	Fine Arts
	10	English 10	Geometry	Chemistry	World History I & II	Animal Science/ AGRI 103 Ivy Tech	World Language
	11	English 11	Algebra II	3 rd Core 40 Science	US History	Advanced Life Science: Animals/ AGRI 107 Ivy Tech	World Language
	12	English 12	Math or Quantitative Reasoning		Government Economics	Agribusiness Management/ AGRI 102 Ivy Tech	World Language
State Specified Pathway Assessment: Dual credit assessment from Ivy Tech							
Industry Recognized Certification: N/A							
Postsecondary Courses Aligned for Potential Dual Credit**							
**See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives							
Ivy Tech Community College							
Ivy Tech AGRI 102: Agribusiness Management (3 Credits) Ivy Tech AGRI 103: Animal Science (3 Credits) Ivy Tech AGRI 107: Advanced Life Science (3 Credits)							

Cluster: Architecture & Construction				Pathway: Recreation Vehicle Construction			
SECONDARY	Grade	English	Math	Science	Health/PE Social Studies	CTE/Career Preparation Courses for this Pathway	Other Elective Courses for this Pathway
	9	English 9	Algebra I	Biology	Health & Wellness/ Physical Ed	Preparing for College & Careers	Fine Arts
	10	English 10	Algebra II	Chemistry	World History I & II	Introduction to Construction	World Language
	11	English 11	Geometry	3 rd Core 40 Science	US History	Building & Facilities Management I	World Language
	12	English 12	Math or Quantitative Reasoning		Government Economics	Construction Trades: Electrical I	World Language
State Specified Pathway Assessment: Home Builders Institute (HBI) Principles of Construction or Carpentry Basic assessments							
Industry Recognized Certification: THOR Certification							
Postsecondary Courses Aligned for Potential Dual Credit**							
**See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives							
N/A							

Cluster: Business & Marketing				Pathway: Banking/Finance			
SECONDARY	Grade	English	Math	Science	Health/PE Social Studies	CTE/Career Preparation Courses for this Pathway	Other Elective Courses for this Pathway
	9	English 9	Algebra I	Biology	Health & Wellness/ Physical Ed	Preparing for College & Careers	Fine Arts
	10	English 10	Geometry	Chemistry	World History I & II	Intro to Accounting	World Language
	11	English 11	Algebra II	3 rd Core 40 Science	US History	Advanced Accounting	World Language
	12	English 12	Math or Quantitative Reasoning		Government Economics	Banking & Investment Capstone	World Language
State Specified Pathway Assessment: Dual credit assessment from Ivy Tech							
Industry Recognized Certification: N/A							
Postsecondary Courses Aligned for Potential Dual Credit**							
**See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives							
N/A							

Cluster: Manufacturing & Logistics				Pathway: Advanced Manufacturing			
SECONDARY	Grade	English	Math	Science	Health/PE Social Studies	CTE/Career Preparation Courses for this Pathway	Other Elective Courses for this Pathway
	9	English 9	Algebra I	Biology	Health & Wellness/ Physical Ed	Preparing for College & Careers	Fine Arts
	10	English 10	Geometry	Chemistry	World History I & II	Introduction to Advanced Manufacturing & Logistics	World Language
	11	English 11	Algebra II	3 rd Core 40 Science	US History	Advanced Manufacturing I/ ADMF 101	World Language
	12	English 12	Math or Quantitative Reasoning		Government Economics	Advanced Manufacturing II/ ADMF 102	World Language
State Specified Pathway Assessment: Manufacturing Skill Standards Council (MSSC) Assessment – All 4 Exams							
Industry Recognized Certification: MSSC Assessment							
Postsecondary Courses Aligned for Potential Dual Credit**							
**See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives							
Ivy Tech ADMF 101: Key Principles of ADMF							
Ivy Tech ADMF 102: Technology in ADMF							

Cluster: STEM/Information Tech				Pathway: Computer Science/Programming			
SECONDARY	Grade	English	Math	Science	Health/PE Social Studies	CTE/Career Preparation Courses for this Pathway	Other Elective Courses for this Pathway
	9	English 9	Algebra I	Biology	Health & Wellness/ Physical Ed	Preparing for College & Careers	Fine Arts
	10	English 10	Geometry	Chemistry	World History I & II	Intro to Computer Science	World Language
	11	English 11	Algebra II	3 rd Core 40 Science	US History	Computer Science I	World Language
	12	English 12	Math or Quantitative Reasoning		Government Economics	Computer Science II: Programming	World Language
State Specified Pathway Assessment: Advanced Placement Exams taken at end of Computer Science I (AP Computer Science Principles) and Computer Science II: Programming (AP Computer Science A)							
Industry Recognized Certification: N/A							
Postsecondary Courses Aligned for Potential Dual Credit**							
**See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives							
N/A							

Cluster: STEM				Pathway: Engineering				
SECONDARY	Grade	English	Math	Science	Health/PE Social Studies	CTE/Career Preparation Courses for this Pathway	Other Elective Courses for this Pathway	
	9	English 9	Algebra I	Biology	Health & Wellness/ Physical Ed	Preparing for College & Careers	Civ Engineer Non-PLTW	Fine Arts
	10	English 10	Geometry	Chemistry	World History I & II	Introduction to Engineering Design PLTW		World Language
	11	English 11	Algebra II	3 rd Core 40 Science	US History	Principles of Engineering PLTW		World Language
	12	English 12	Math or Quantitative Reasoning		Government Economics	Civ Engineer PLTW	CIM PLTW	World Language
State Specified Pathway Assessment: N/A								
Industry Recognized Certification: N/A								
Postsecondary Courses Aligned for Potential Dual Credit**								
**See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives								
N/A								