South Central Course Description Guide

for the

2024-25 School Year

A Note From The Guidance Department

The Guidance Department of South Central Jr. – Sr. High School is pleased to present the 2024-25 "Course Description Guide". This guide can be of invaluable assistance to you in planning your academic course of study for next year and for the rest of your high school career. Please take the time to read through the guide carefully, noting specific course descriptions and recommended background/grade levels. The departments of study are listed alphabetically.

We encourage you and your parents/guardians to discuss your course selections thoroughly. Parents/guardians are always encouraged to take an active role in helping their children select the right courses that match their goals and aspirations. Parents/guardians should feel welcome to contact the Guidance Department at 767-2266 should any questions arise regarding the different curriculums, their child's placement in courses, their student's Graduation Pathway Plan, or their "4-year plan" of courses they need/want to take.

It is our hope that this guide will help you and your parents understand the courses we offer at South Central High School.

Tina Randall - Guidance Director

Athletic Eligibility

The academic eligibility requirements as set forth by the Indiana High School Athletic Association (IHSAA) states that in order to be academically eligible to participate in high school athletics, a student must pass five (5) credit classes, in the previous grading period. If the previous grading period ends at a semester break instead of a nine-week break, the overall semester grade is the grade that is used to calculate eligibility. If not, the nine-week grade is used.

Therefore, student athletes must be very careful when auditing a class. Make sure that you, your counselor, and your parents are aware of your athletic eligibility requirements before committing to a class schedule of this type. Each student must pass five (5) credit classes from the previous grading period to be eligible. They must also be currently enrolled in five (5) credit classes. Please note that courses taken in the Virtual Lab do not count toward the five (5) required classes. Also, auditing a class (re-taking a class already passed) sometimes places a student at risk of falling below this maximum number.

Schedule Changes

As a general rule, schedules may not be changed after class registration. Students are provided ample time during the registration process to make course selections. Also, classes are scheduled based on student course selections. Teachers and classrooms are committed to these student selections. Ordinarily exceptions to this policy will be for one of the following reasons:

1. To meet immediate graduation requirements
2. Schedule conflicts or scheduling errors
3. An injury which makes it impossible for the student to take or continue in a class
4. A recommendation by a teacher for a change because the student is misplaced

Ordinarily, this involves a student who is trying, but is unable to do the work in a course and is dropped back to a less difficult course within the same department.

Graduation Requirements

Students may take up to 7 classes for credit each semester.

Beginning with the students who enter high school in 2007-08, the completion of Core 40 becomes an Indiana graduation requirement. Indiana's Core 40 curriculum provides the academic foundation all students need to succeed in college and the workforce.

Note - Schools may have additional local graduation requirements. The minimum number of credits to graduate from South Central High School is **40**.

To graduate with less than CORE 40 (and get the Regular/General Diploma), the following formal opt-out process must be completed:

1) The student, the student's parent/guardian, and the student's counselor conference to discuss the student's progress.
2) The student's career and course plan is reviewed.
3) The student's parent/guardian determines whether the student will achieve greater educational benefits by completing the general curriculum or the CORE 40 curriculum.

If the decision is made to opt-out of CORE 40, the student is required to complete the course and credit requirements for a general diploma and the career/academic sequence the student will pursue is determined.

All requirements must be completed before a student may participate in the Commencement Program and receive a diploma.

Whenever a student fails a required course, the failed class should be repeated as soon as possible.

Diploma Requirements

General (40 credits)	Core 40 (40 credits)	AHD (47 credits)	THD (47 credits)
English 4 years	English 4 years	English 4 years	English 4 years
Algebra and one more year *All students must earn two math or quantitative reasoning credits during the student's junior or senior year. Quantitative Reasoning courses do not count as math credits.	Algebra, Geometry, Algebra II *All students must earn six (6) math credits after entering high school. *All students must be enrolled in a math or quantitative reasoning course each year the student is enrolled in high school.	Algebra, Geometry, Algebra II, 2 additional Core 40 Math credits– note @ SC MUST have Math Senior year *All students must earn at least six (6) of the requisite eight (8) math credits after entering high school. *All students must be enrolled in a math or quantitative reasoning course each year the student is enrolled in high school.	Algebra, Geometry, Algebra II (recommend Pre Calc/Trig) *All students must earn six (6) math credits after entering high school. *All students must be enrolled in a math or quantitative reasoning course each year the student is enrolled in high school.
Biology and one more year of any AS LONG AS 1 CREDIT IS A PHYSICAL SCIENCE	Biology, ICP or Chem Any other Core 40	Biology ICP or Chem Any other Core 40	Biology, ICP or Chem Any other Core 40
2 sem. PE 1 sem. Health	2 sem. PE 1 sem. Health	2 sem. PE 1 sem. Health	2 sem. PE 1 sem. Health
2 US History 1 Gov. and 1 additional social studies class	2 US History 1 Gov, 1 Econ, 2 Geography or W. History	2 US History, 1 Gov, 1 Econ, 2 Geography or W. History	2 US History, 1 Gov., 1 Econ, 2 Geography or W. History
Personal Finance Preparing for College and Careers	Personal Finance Preparing for College and Careers	Personal Finance Preparing for College and Careers	Personal Finance Preparing for College and Careers
College and Career Pathway 6 Credits (selecting courses in a deliberate manner to take full advantage of career exploration and preparation opportunities) Flex Credits - 5 Credits To earn 5 Flex Credits, a student must complete one of the following: *Additional courses to extend the college and career pathway *Courses involving workplace learning *High school/college dual credit courses *Additional courses in: Language Arts Social Studies Mathematics Science World Language Fine Arts Electives 6 Credits (Specifies the number of electives required by the state)	Directed Electives - 5 Credits (World Language, Fine Arts, and Career/Technical) Electives - 6 Credits All students are recommended to complete a College and Career Pathway (selecting electives in a deliberate manner) to take full advantage of career exploration and preparation opportunities.	*6-8 credits foreign language (3 years in a single language or 2 years in two different languages) Complete one of the following: 1) Four (4) credits in two (2) or more Advanced Placement Courses with corresponding exams 2) Two (2) dual high school and college credit courses resulting in six (6) transcripted college credits 3) Two (2) of the following requirements: a) a minimum of three (3) transcripted college credits b) Two (2) credits of Advanced Placement Courses with corresponding exams 4) The SAT with a composite score of 1250 or higher and a minimum score of 560 on math and 590 on the evidence based reading and writing section. 5) The ACT with a composite score of 26 or higher and completion of the written section *All grades C- or better *Overall GPA at least 3.0	Students must also complete the following: 1)Earn a minimum of six (6) credits in the college and career preparation courses in a state-approved College & Career Pathway and earn one (1) of the following: A) Pathway designated industry-based certification or credential; or B) Pathway designated dual high school and college credit courses resulting in six (6) transcripted college credits 2) Complete one (1) of the following: A) Any of the options listed for the Core 40 with Academic Honors Diploma (1-5) B) Earn the following minimum scores on WorkKeys: Workplace Documents, Level 6 Applied Mathematics, Level 6; and Graphic Literacy, Level 5 C) Earn the following minimum score on Accuplacer: Writing , 80; Reading, 90; and Math, 75 D) Earn the following minimum score on Compass: Algebra, 66; Writing, 70; and Reading, 80 *All grades C- or better *Overall GPA at least 3.0

- Note – students may not count the same dual credit courses for both AHD and THD requirements.

Additional Graduation Requirements

Beginning with students in the 2023 Cohort, the graduation requirements have changed to include the three parts of the Graduation Pathways This has taken the place of having to pass the Graduation Qualifying Exam in Math and ELA (ISTEP+). The Graduation Pathways consist of students completing at least one requirement in each of the three boxes listed on page 6 for students graduating in 2024 and listed on page 8 for students graduating in 2025 and years beyond that. For school accountability purposes, these students will still take the SAT for standardized test data during their Junior year, with those scores being one possible way for students to meet the "Box 3" requirements of the Graduation Pathways. All students will also have the opportunity to take the ASVAB during their Junior year as an additional way to meet "Box 3" requirements. The ASVAB results are also used for career exploration purposes with all students.

South Central Jr. – Sr. High School Graduation Pathway Checklist for Cohorts 2025 and Younger

❶ High School Diploma	Meet the State of Indiana requirements for a high school diploma: ☐General ☐Core 40 ☐Academic Honors ☐Technical Honors
❷ Learn and Demonstrate Employability Skills (Students must complete <u>at least one</u> of the following:) See reverse for more information.	☐Project-Based Learning: Working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge. Students engage in a rigorous, extended process of asking questions, finding resources, and applying information. Students often make work public by explaining, displaying, and/or presenting it to people beyond the classroom. This can include completion of a research project, completion of a course capstone, an AP Capstone Assessment, or any other experience as approved by the State Board of Education. Description: _____ Verification Product: _____ ☐Service-Based Learning: Integrates meaningful service to enrich and apply academic knowledge, teach civic and personal responsibility, and strengthen communities. This can include participation in a meaningful volunteer or civic engagement experience, engagement in a school-based activity, such as a co-curricular or extra-curricular activity or sport for at least one academic year, or another experience as approved by the State Board of Education. Description: _____ Verification Product: _____ ☐Work-Based Learning: Reinforces academic, technical, and social skills learned in the classroom through collaborative activities and employer partners, allowing students to apply classroom theories to practical problems, explore career options, and pursue personal and professional goals. This can include completion of a course capstone, completion of an internship, obtaining the Governor's Work Ethic Certificate, employment outside of the school day, or another experience as approved by the State Board of Education. Description: _____ Verification Product: _____
❸ Postsecondary-Ready Competencies (Students must complete <u>at least one</u> of the following:) See attached paper for current list of approved advanced CTE courses – list will not be finalized until the start of next school year as per the Department of Education	☐Honors Diploma: ☐AHD ☐THD ☐ACT College Ready Benchmarks (18 in English or 22 in Reading and 22 in Math or 23 in Science) English or Reading: _____ and Math or Science: _____ ☐SAT College Ready Benchmarks (480 in EBRW, 530 in Math) EBRW _____ Math _____ ☐ASVAB (minimum score of 31) AFQT score _____ ☐State and Industry Recognized Credential or Certification Certification: _____ ☐CTE Concentrator (earn "C" average the three course CTE Sequence) - NLPS Program: _____ Course: _____ Course: _____ Course: _____ ☐AP/IB/Dual Credit/Cambridge International/CLEP Exam (earn "C" average in at least 3 courses – at least one in a core) AP/DC 1 _____ AP/DC 2 _____ AP/DC 3 _____ AP/DC GPA _____ ☐CLEP Exams (minimum score of 50 on at least 3 subject area exams – at least one in core) ☐Locally Created and Approved Pathway LCP: _____

NLPS (Next Level Programs of Study) CTE (Career and Tech Education) Pathways – Available to SC Students

Advanced Manufacturing – Precision Machining (AK Smith Career Center – MC) • Principles of Precision Machining 7109 • Precision Machining Fundamentals 7105 • Advanced Precision Machining 7107	**Advanced Manufacturing – Welding (South Central)** • Principles of Welding Tech 7110 • Shielded Metal Arc Welding 7111 • Gas Welding Processes 7101	**Ag, Food and Natural Resources – Agriscience Animal or Combined (South Central)** • Principles of Agriculture 7117 • Animal Science NLPS 5008 • Advanced Life Science, Animals 5070 Or • Food Science 5102	**Ag, Food and Natural Resources – Horticulture or Landscape (South Central)** • Principles of Agriculture 7117 • Horticulture Science 5132 • Landscape and Turf Management 7115 Or • Greenhouse and Soilless Production 7114
Ag, Food and Natural Resources – Natural Resources (South Central) • Principles of Agriculture 7117 • Natural Resources 5180 • Forestry & Wildlife 7270	**Architecture and Construction – Building Facilities Maintenance (AK Smith Career Center – MC)** • Principles of Construction Trades 7130 • Building and Facilities Maintenance Fundamentals 7285 • Adv. Building and Facilities Maintenance 7286	**Architecture and Construction – Construction Trades - Carpentry (AK Smith Career Center – MC)** • Principles of Construction Trades 7130 • Construction Trades General Carpentry 7123 • Construction Trades Framing and Finishing 7122	**Architecture and Construction – Construction Trades - Electrical (AK Smith Career Center – MC)** • Principles of Construction Trades 7130 • Electrical Fundamentals 7124 • Advanced Electrical 7119
Arts, AV Tech and Comm – Radio and Television Broadcasting (Laporte High School) • Principles of Broadcasting 7139 • Audio and Video Production Essentials 7306 • Mass Media Production 7307	**Business Management and Administration - Business Management, Marketing, and Finance (South Central)** • Principles of Business Management 4562 • Management Fundamentals 7143 • Accounting Fundamentals 4524	**Education Training – Education Careers (AK Smith Career Center – MC)** • Principles of Teaching 7161 • Child and Adolescent Development 7157 • Teaching and Learning 7162	**Health Sciences – PLTW Biomedical Sciences and Technology (South Central)** • Principles of Biomedical Sciences 5218 • Human Body Systems 5216 • Medical Interventions 5217
Health Sciences – Emergency Medical Services (AK Smith Career Center – MC) • Principles of Healthcare 7168 • Medical Terminology 5274 • Emergency Medical Tech 7165	**Health Sciences – Pre Nursing (AK Smith Career Center – MC)** • Principles of Healthcare 7168 • Medical Terminology 5274 • Healthcare Specialist: CNA 7146 (done in Year 2 of program) • Healthcare Tech Skills Development 7156 (extra/non-required class for pathway)	**Hospitality and Tourism – Culinary Arts (AK Smith Career Center – MC)** • Principles of Culinary and Hospitality 7173 • Nutrition 7171 • Culinary Art 7169	**Human Services – Cosmetology (AK Smith Career Center – MC)** • Principles of Barbering and Cosmetology 7330 • Barbering and Cosmetology Fundamentals 7331 • Advanced Cosmetology 7332
Law, Public Safety, Corrections and Security – Criminal Justice (AK Smith Career Center – MC) • Principles of Criminal Justice 7193 • Law Enforcement Fundamentals 7191 • Corrections and Cultural Awareness 7188	**Law, Public Safety, Corrections and Security – Fire and Rescue (AK Smith Career Center – MC)** • Principles of Fire and Rescue 7195 • Fire Fighting Fundamentals 7189 • Advanced Fire Fighting 7186	**STEM – PLTW Engineering (South Central)** • Intro to Engineering Design 4802 • Principles of Engineering 5644 • Aerospace Engineering 5518 Or • Computer Integrated Manufacturing 5534	**Transportation, Distribution and Logistics – Automotive Services (AK Smith Career Center – MC)** • Principles of Automotive Services 7213 • Brake Systems 7205 • Steering and Suspensions 7212

Career and Technical Education (CTE) course titles and descriptions are included in this document under the following subject areas and career clusters:

CTE General	Advanced Manufacturing	Agriculture
Architecture and Construction	Arts, AV, and Communications	Business Management, Marketing, and Finance/Business, Marketing, and Entrepreneurship
Education and Training	Health Science	Hospitality and Tourism
Human Services	Information Technology	Law, Public Safety, Corrections, and Security
STEM	Transportation	

CAREER CLUSTER: CTE GENERAL

PERSONAL FINANCIAL RESPONSIBILITY 4540 (PRS FIN RSP)
One Semester
One Credit — Fulfills Elective/Directed Elective and local graduation requirement for
One Class Period — Class of 2020 and future classes
Open to: Sophomores-Seniors (required Sophomore year)
Qualifies as a quantitative reasoning course.

Personal Financial Responsibility addresses the identification and management of personal financial resources to meet the financial needs and wants of individuals and families, considering a broad range of economic, social, cultural, technological, environmental, and maintenance factors. This course helps students build skills in financial responsibility and decision making; analyze personal standards, needs, wants, and goals; identify sources of income, saving and investing; understand banking, budgeting, record-keeping and managing risk, insurance and credit card debt. A project based approach and applications through authentic settings such as work based observations and service learning experiences are appropriate. Direct, concrete applications of mathematics proficiencies in projects are encouraged.

PREPARING FOR COLLEGE AND CAREERS 5394 (PRE CCS)
One Semester — Recommended Background: None
One Credit — Elective/Directed Elective and fulfills local graduation requirement
One Class Period
Required: 8th Grade (and any students new to South Central who have not taken it previously)

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.

CAREER CLUSTER: ADVANCED MANUFACTURING

NLPS Pathways can be used by Grades 9-12

Advanced Manufacturing – Precision Machining (AK Smith Career Center – MC)	**Advanced Manufacturing – Welding (South Central or AK Smith Career Center - MC)**
• Principles of Precision Machining 7109 • Precision Machining Fundamentals 7105 • Advanced Precision Machining 7107	• Principles of Welding Tech 7110 • Shielded Metal Arc Welding 7111 • Gas Welding Processes 7101

PRINCIPLES OF PRECISION MACHING 7109 PRIN PREC MACH

Two Semesters — Required Background: Passing all core classes, application process
One Credit Per Semester — Elective/Directed Elective
Taken as part of three class block — Note: This course is taken off campus through AK Smith Career Center; additional fees apply
Open To: Juniors-Seniors

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Principles of Precision Machining will provide students with a basic understanding of the processes used to produce industrial goods. Classroom instruction and labs will focus on shop safety, measurement, layout, blueprint reading, shop math, metallurgy, basic hand tools, milling, turning, grinding, and sawing operations. This course prepares the student for the optional National Institute for Metalworking Skills (NIMS) Measurement, Materials, & Safety certification that may be required for college dual credit

PRECISION MACHINING FUNDAMENTALS 7105 MACH FUN

Two Semesters — Required Background: Passing all core classes, application process
One Credit Per Semester — Elective/Directed Elective
Taken as part of three class block — Note: This course is taken off campus through AK Smith Career Center; additional fees apply
Open To: Juniors-Seniors
Qualifies as a quantitative reasoning course

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Precision Machining Fundamentals will build a foundation in conventional milling and turning. Students will be instructed in the classroom on topics of shop safety, theory, industrial terminology, and calculations. Lab work will consist of the setup and operation of vertical and/or horizontal milling machines and engine lathes. This course prepares the student for the optional National Institute for Metalworking Skills (NIMS) Milling I certification that may be required for college dual credit.

ADVANCED PRECISION MACHINING 7107 PREC MACH

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors
Qualifies as a quantitative reasoning course

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Advanced Precision Machining will build upon the Turning and Milling processes learned in Precision Machining Fundamentals and will build a foundation in abrasive process machines. Students will be instructed in the classroom on topics of shop safety, theory, industrial terminology, and calculations associated with abrasives. Lab work will consist of the setup and operation of bench grinders and surface grinders. Additionally students will be introduced to Computerized Numeric Controlled (CNC) setup, operations and programming. This course prepares the student for the optional National Institute for Metalworking Skills (NIMS) Grinding I certification that may be required for college dual credit.

PRECISION MACHINING CAPSTONE 7219 PREC MACH CAP

Two Semesters
Three Credit Per Semester
Taken as part of three class period block
Open To: Seniors (Year two of program)
Qualifies as a quantitative reasoning course

Required Background: Princ Prec Mach; Prec Mach Fund; Adv Prec Mach; application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Precision Machining Capstone is an in-depth study of skills learned in Precision Machining I, with a stronger focus on CNC setup/operation/programming. Students will be introduced to two axis CNC lathe programming and three axis CNC milling machine programming. Develops the theory of programming in the classroom with applications of the program accomplished on industry-type machines. Studies terminology of coordinates, cutter paths, angle cutting, and linear and circular interpolation. Classroom activities will concentrate on precision set-up and inspection work, as well as machine shop calculations. Students will develop skills in advanced machining and measuring parts involving tighter tolerances and more complex geometry. A continued focus on safety will also be presented.

NOTE THAT STUDENTS WHO TAKE THE WELDING CLASSES AT SC WILL NEED TO PURCHASE THEIR OWN SCHOOL-APPROVED PROTECTIVE EQUIPMENT.

PRINCIPLES OF WELDING TECHNOLOGY 7110 (PRIN WEL TCH)

When taken at South Central:

Two Semesters
Two Credits
One Class Period
Open to: Freshmen -Seniors, with preference given to those pursuing NLPS Pathway

Recommended Background: None
Elective/Directed Elective

Note: Students must complete enrollment through Dual Enroll through IvyTech to earn dual cred

When taken at AK Smith:

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Principles of Welding Technology includes classroom and laboratory experiences that develop a variety of skills in oxy-fuel cutting and basic welding. This course is designed for individuals who intend to make a career as a Welder, Technician, Designer, Researcher, or Engineer. Emphasis is placed on safety at all times. OSHA standards and guidelines endorsed by the American Welding Society (AWS) are used. Instructional activities emphasize properties of metals, safety issues, blueprint reading, electrical principles, welding symbols, and mechanical drawing through projects and exercises that teach students how to weld and be prepared for postsecondary and career success.

SHIELDED METAL ARC WELDING 7111 (SHLD MAW)

When taken at South Central:

Two Semesters
Two Credits
One Class Period
Open to: Sophomores - Seniors, with Preference given to those pursuing NLPS Pathway

Recommended Background: Princ of Welding prereq or concurrent
Elective/Directed Elective

Note: Students must complete enrollment through Dual Enroll through IvyTech to earn dual cred

When taken at AK Smith:

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Shielded Metal Arc Welding involves the theory and application of the Shielded Metal Arc Welding process. Process theory will include basic electricity, power sources, electrode selection, and all aspects pertaining to equipment operation and maintenance. Laboratory welds will be performed in basic weld joints with a variety of electrodes in the flat, horizontal and vertical positions. Emphasis will be placed on developing the basic skills necessary to comply with AWS industry standards.

GAS WELDING PROCESSES 7101 (GAS WEL PRC)

When taken at South Central:

Two Semesters
Two Credits
One Class Period
Open to: Juniors -Seniors, with preference given to those pursuing NLPS Pathway

Recommended Background: Princ of Welding, Shielded Metal Arc Weld
Elective/Directed Elective

Note: Students must complete enrollment through Dual Enroll through IvyTech to earn dual cred

When taken at AK Smith:

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Gas Welding Processes is designed to cover the operation of Gas Metal Arc Welding (MIG) equipment. This will include all settings, adjustments and maintenance needed to weld with a wire feed system. Instruction on both short-arc and spray-arc transfer methods will be covered. Tee, lap, and open groove joints will be done in all positions with solid, fluxcore, and aluminum wire. Test plates will be made for progress evaluation. Schools may choose to offer the course as a comprehensive MIG Welding course or a combination of introductory MIG and TIG Welding operations. •Recommended Grade(s): 10, 11, 12 •Required Prerequisites: Principles of Welding Technology •Recommended Prerequisites: none •Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum •Counts as a directed elective or elective for all diplomas •Schools may choose to cover both introductory MIG and TIG Welding. This configuration is available for dual credit through ITCC.

WELDING TECHNOLOGY CAPSTONE 7226 (WELD TECH CAP)

When taken at South Central:

Two Semesters
Two Credits
One Class Period
Open to: Seniors

Required Background: Completion of first three Welding courses and teacher approval
Elective/Directed Elective
Note: Students must complete enrollment through Dual Enroll through IvyTech to earn dual cred

When taken at AK Smith:

Two Semesters
Three Credits Per Semester
Taken as part of three class period block
Open To: Seniors (Year two of program)

Required Background: Princ of Weld; Shielded Metal Arc Weld; Gas Welding Proc; Passing all core classes; application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

The Welding Technology Capstone course builds upon the knowledge and skills developed in Welding Fundamentals, Shielded Metal Arc Welding, and Gas Metal Arc Welding by developing advanced welding skills in Gas Tungsten Arc Welding (TIG), Pipe Welding, and Fabrication. As a capstone course, students should have the opportunity to apply their knowledge and use skills through an intensive work-based learning experience.

CAREER CLUSTER: AGRICULTURE

NLPS Pathways can be used by Grades 9-12

Ag, Food and Natural Resources – Agriscience Animal or Combined (South Central) • Principles of Agriculture 7117 • Animal Science NLPS 5008 • Advanced Life Science, Animals 5070	**Ag, Food and Natural Resources – Agriscience Animal or Combined (South Central)** • Principles of Agriculture 7117 • Animal Science NLPS 5008 • Food Science 5102	**Ag, Food and Natural Resources – Horticulture or Landscape (South Central)** • Principles of Agriculture 7117 • Horticulture Science 5132 • Landscape and Turf Management 7115 OR • Greenhouse and Soilless Production 7114	**Ag, Food and Natural Resources – Natural Resources (South Central)** • Principles of Agriculture 7117 • Natural Resources 5180 • Forestry & Wildlife 7270

INTRODUCTION TO AGRICULTURE, FOOD AND NATURAL RESOURCES 5056 (INT AGFNR)

Two Semesters
Two Credits
One Class Period
Open to: 8th Grade Only

Recommended Background: None
Elective/Directed Elective

Note: Students MUST be enrolled in an Ag class to join FFA.

Introduction to Agriculture, Food and Natural Resources is a one or two semester course that is highly recommended as a prerequisite to and as a foundation for all other agricultural classes. Through hands-on learning activities, students are encouraged to investigate areas of agriculture. Students are introduced to the following areas of agriculture: animal science, plant and soil science, food science, horticultural science, agricultural business management, natural resources, agriculture power, structure, and technology, careers in agriculture, leadership, and supervised agricultural experience. An activity and project-based approach is used along with team building to enhance the effectiveness of the student learning activities

PRINCIPLES OF AGRICULTURE 7117

Two Semesters
Two Credits
One Class Period
Open to: Freshmen and Sophomores, Other grades pursuing NLPS Pathway

Recommended Background: None
Elective/Directed Elective
Note: Students must complete enrollment through Dual Enroll through Ivy Tech to earn dual cred

Note: Students MUST be enrolled in an Ag class to join FFA.

Principles of Agriculture is a two semester course that will cover the diversity of the agricultural industry and agribusiness concepts. Students will develop an understanding of the role of agriculture in the United States and globally. Students will explore Agriculture, Food, and Natural Resource (AFNR) systems related to the production of food, fiber and fuel and the associated health, safety and environmental management systems. Topics covered in the course range from animals, plants, food, natural resources, ag power, structures and technology, and agribusiness. Participation in FFA and Supervised Agricultural Experiences (SAE) will be an integral part of this course in order to develop leadership and career ready skills.

ANIMAL SCIENCE 5008 (ANML SCI)

Two Semesters
Two Credits
One Class Period
Open to: Freshmen -Seniors

Required Background: Principles of Ag (prereq or concurrent)
Fulfills Science requirement for all diplomas and
Physical Science for General Diploma
Note: Students must complete enrollment through Dual Enroll through Ivy Tech to earn dual credit.

Note: Students MUST be enrolled in an Ag class to join FFA.

Animal Science is a two semester course that provides students with an overview of the animal agriculture industry. Students participate in a large variety of activities and laboratory work including real and simulated animal science experiences and projects. All areas that the students study may be applied to both large and small animals. Topics to be covered in the course include: history and trends in animal agriculture, laws and practices relating to animal agriculture, comparative anatomy and physiology of animals, biosecurity threats and interventions relating to animal and human safety, nutrition, reproduction, careers, leadership, and supervised agricultural experiences relating to animal agriculture

ADVANCED LIFE SCIENCE: ANIMAL SCIENCE 5070 (ALS ANML)

Two Semesters
Two Credits
One Class Period
Open to: Sophomores - Seniors

Recommended Background: Biology and Chemistry
Required Background: Principles of Ag; Animal Science (9th & 10th)
Fulfills Science requirement for all diplomas
Note: Students must complete enrollment through Dual Enroll through Ivy Tech to earn dual credit.

Note: Students MUST be enrolled in an Ag class to join FFA.

Advanced Life Science: Animals is a two semester course that provides students with opportunities to participate in a variety of activities including laboratory work. Students will explore concepts related to history and trends in animal agriculture as related to animal welfare, husbandry, diseases and parasites, laws and practices relating to handling, housing, environmental impact, global sustainable practices of animal agriculture, genetics, breeding practices, biotechnology uses, and comparative knowledge of anatomy and physiology of animals used in animal agriculture.

• Qualifies as a quantitative reasoning course

FOOD SCIENCE 5102 (FOOD SCI)

Two Semesters
Two Credits
One Class Period
Open to: Freshmen – Seniors
(9th graders would have to take Princ of Ag also)

Recommended Background: Intro to Ag.
Required Background: Principles of Ag (prereq or concurrent)
Fulfills Life Science or Physical Science for General Diploma only or Elective/Directed Elective for Core 40, AHD, or THD
Note: Students must complete enrollment through Dual Enroll through Ivy Tech to earn dual credit.

Note: Students MUST be enrolled in an Ag class to join FFA.

Food Science is a two semester course that provides students with an overview of food science and the role it plays in the securing of a safe, nutritious, and adequate food supply. A project-based approach is utilized in this course, along with laboratory, team building, and problem solving activities to enhance student learning. Students are introduced to the following areas of food science: food processing, food chemistry and physics, nutrition, food microbiology, preservation, packaging and labeling, food commodities, food regulations, issues and careers in the food science industry.

HORTICULTURAL SCIENCE 5132 (HORT SCI)

Two Semesters
Two Credits
One Class Period
Open to: Freshmen – Seniors
(9th graders would have to take Princ of Ag also)

Recommended Background: Intro to Ag.
Required Background: Principles of Ag (prereq or concurrent)
Fulfills Life Science or Physical Science for General Diploma only or Elective/Directed Elective for Core 40, AHD, or THD
Note: Students must complete enrollment through Dual Enroll through Ivy Tech to earn dual credit.

Note: Students MUST be enrolled in an Ag class to join FFA.

Horticulture Science is a two semester course that provides students with a background in the field of horticulture. Coursework includes hands-on activities that encourage students to investigate areas of horticulture as it relates to the biology and technology involved in the production, processing, and marketing of horticultural plants and products. Students are introduced to the following areas of horticulture science: reproduction and propagation of plants, plant growth, growth-media, management practices for field and greenhouse production, marketing concepts, production of plants of local interest, greenhouse management, floral design, and pest management. Students participate in a variety of activities including extensive laboratory work usually in a school greenhouse.

GREENHOUSE AND SOILLESS PRODUCTION 7114 (GRN S PROD)

Two Semesters
Two Credits
One Class Period
Open to: Freshmen -Seniors
(9th Graders would have to take Princ of Ag also)

Required Background: Principles of Ag (prereq or concurrent)
Elective/Directed Elective

Note: Students MUST be enrolled in an Ag class to join FFA.

Greenhouse and Soilless Production provides an overview of structural designs and uses of enclosed structures (greenhouses) to grow various plants and food. The course will focus on discussing different types of enclosed structures, management systems, and growing systems used to produce plants and food. The course will also present an overview of soilless growing systems such as hydroponics, aquaponics, aeroponics and fogponics. Students will utilize the school greenhouse as part of this course.

LANDSCAPE AND TURF MANAGEMENT 7115 (LAND TUR MAN)

Two Semesters
Two Credits
One Class Period
Open to: Freshmen -Seniors
(9th Graders would have to take Princ of Ag also)

Required Background: Principles of Ag (prereq or concurrent)
Elective/Directed Elective
Note: Students must complete enrollment through Dual Enroll through Ivy Tech to earn dual credit.

Note: Students MUST be enrolled in an Ag class to join FFA.

Landscape and Turf Management is a two semester course that provides the student with an overview of the many career opportunities in the diverse field of landscape and turf management. Students are introduced to the procedures used in the planning and design of a landscape using current technology practices, the principles and procedures involved with landscape construction, the determination of maintenance schedules, communications, and management skills necessary in landscaping operations, and the care and use of equipment utilized by landscapers. Upon completion of the program, students have the opportunity to become Indiana Landscape Industry Certified through a state approved program.

NATURAL RESOURCES 5180 (NAT RSS)

Two Semesters
Two Credits
One Class Period
Open to: Freshmen – Seniors
(9th graders would have to take Princ of Ag also)

Recommended Background: Intro to Ag.
Required Background: Principles of Ag (prereq or concurrent)
Fulfills Life Science or Physical Science for General Diploma only or Elective/Directed Elective for Core 40, AHD, or THD
Note: Students must complete enrollment through Dual Enroll through Ivy Tech to earn dual credit.

Note: Students MUST be enrolled in an Ag class to join FFA.

Natural Resources is a two semester course that provides students with a background in environmental science and conservation. Course work includes hands-on learning activities that 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, minerals, interrelationships between humans and natural systems, wetlands, wildlife, safety, careers, leadership, and supervised agricultural experience programs.

FORESTRY & WILDLIFE 7270 (FOR WILF MGMT)

Two Semesters
Two Credits
One Class Period
Open to: Freshmen – Seniors
(9th graders would have to take Princ of Ag also)

Recommended Background: Intro to Ag.
Required Background: Principles of Ag (prereq or concurrent)
Counts as Science or Elective/Directed Elective

Note: This course is NOT for dual credit.

Note: Students MUST be enrolled in an Ag class to join FFA.

Forestry and Wildlife Management is a two semester course that provides students with opportunities to participate in a variety of activities including laboratory work. Students will explore concepts related to environmental and ecological impacts, forestry management, timber harvesting, tree production, and wood utilization, as well as environmental issues and career exploration

CAREER CLUSTER: ARCHITECTURE AND CONSTRUCTION

NLPS Pathways can be used by Grades 9-12

Architecture and Construction – Building Facilities Maintenance (AK Smith Career Center – MC)	**Architecture and Construction – Construction Trades - Carpentry (AK Smith Career Center – MC)**	**Architecture and Construction – Construction Trades - Electrical (AK Smith Career Center – MC)**
• Principles of Construction Trades 7130 • Building and Facilities Maintenance Fundamentals 7285 • Adv. Building and Facilities Maintenance 7286	• Principles of Construction Trades 7130 • Construction Trades General Carpentry 7123 • Construction Trades Framing and Finishing 7122	• Principles of Construction Trades 7130 • Electrical Fundamentals 7124 • Advanced Electrical 7119

INTRODUCTION TO CONSTRUCTION (Woods 1) 4792 (INT CONST)

Two Semesters — Recommended Background: None
Two Credits — Fulfills Elective/Directed Elective
One Class Period
Open to: Freshman – Seniors

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

PRINCIPLES OF CONSTRUCTION TRADES 7130 (PRIN CON TR)

Two Semesters — Required Background: Passing all core classes, application process
One Credit Per Semester — Elective/Directed Elective
Taken as part of three class block — Note: This course is taken off campus through AK Smith Career Center; additional fees apply
Open To: Juniors-Seniors

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Principles of Construction Trades prepares students with the basic skills needed to continue in a construction trade field. Topics will include an introduction to the types and uses for common hand and power tools, learn the types and basic terminology associated with construction drawings, and basic safety. Additionally students will study the roles of individuals and companies within the construction industry and reinforce mathematical and communication skills necessary to be successful in the construction field.

CONSTRUCTION TRADES: GENERAL CARPENTRY 7123 (CON TRD GC)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Construction Trades: General Carpentry builds upon the skills learned in the Principles of Construction Trades and examines the basics of framing. This includes studying the procedures for laying out and constructing floor systems, wall systems, ceiling joist and roof framing, and basic stair layout. Additionally, students will be introduced to building envelope systems

CONSTRUCTION TRADES: FRAMING AND FINISHING 7122 (CON TRD FR FIN)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Construction Trades: Framing and Finishing prepares students with advanced framing skills along with interior and exterior finishing techniques. Topics include roofing applications, thermal and moisture protection, exterior finishing, cold-formed steel framing, drywall installation and finishing, doors and door hardware, suspended ceilings, window, door, floor, and ceiling trim, and cabinet installation.

CONSTRUCTION TRADES CAPSTONE 7242 (CSTR TR CAP)

Two Semesters
Three Credit Per Semester
Taken as part of three class period block
Open To: Seniors (Year two of program)

Required Background: Princ of Const; Constr: Gen Carpentry; Constr Trades: Framing & Fin; application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credits through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

The Construction Trades Capstone course covers the basics of electricity and working with concrete. Electrical topics include the National Electric Code, electrical safety, electrical circuits, basic electrical construction drawings, and residential electrical services. Students may also gain an understanding of concrete properties, foundations, slab-on-grades, and vertical and horizontal formwork. The course prepares students for the NCCER Carpentry Forms Level 3 and Electrical Level 1certificates.

ELECTRICAL FUNDAMENTALS 7124 (ELEC FUN)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

This course covers NCCER Electrical Level 1. Its modules cover topics such as orientation to the electrical trade, electrical safety, introduction to electrical circuits, electrical theory, introduction to the National Electrical Code, device boxes, hand bending, raceways and fittings, conductors and cables, basic electrical construction drawings, residential electrical services, and electrical test equipment. The NCCER Electrical Level 1 certificate and wallet card will also be awarded upon successful completion of this course

ADVANCED ELECTRICAL 7119 (ADV ELEC)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Advanced Electrical covers topics such as alternating current, motors: theory and application, electric lighting, conduit bending, and pull and junction boxes. The second part of the course will cover topics such as conductor installations, cable tray, conductor terminations and splices, grounding and bonding, circuit breakers and fuses, control systems and fundamental concepts. Students will be ready to complete the NCCER Electrical Level 2 certificate upon successful completion of the course.

CONSTRUCTION TRADES ELECTRICAL CAPSTONE 7263 CT ELEC CAP

Two Semesters
Three Credit Per Semester
Taken as part of three class period block
Open To: Seniors (Year two of program)

Required Background: Princ of Const; Electrical Fund; Adv Electrical; application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credits through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Construction Trades Electrical Capstone builds upon the skills learned in Electrical Fundamentals and Advanced Electrical. Topics include load calculations – branch and feeder circuits, conductor selection and calculations, practical applications of lighting. This course will also cover commercial electrical services including distribution equipment, transformers, and voice, data and video. Completion of this course will prepare students for the NCCER Electrical Level 3 certificate. Students may also complete an Ivy Tech CT by completing coursework in general carpentry.

BUILDING AND FACILITIES MAINTENANCE FUNDAMENTALS 7285 (BLDG FAC MAINT FUND)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Building and Facilities Maintenance Fundamentals prepares students to complete basic maintenance tasks like minor construction repairs and be able to repair and/or replace various building materials including flooring, wall covering, hardware, lighting and plumbing fixtures.

ADVANCED BUILDING AND FACILITIES MAINTENANCE 7286 (ADV BLDG FAC MAINT)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Advanced Building and Facilities Maintenance prepares students to complete more advanced repairs involving a buildings mechanical system including electrical, HVAC, and plumbing.

BUILDING AND FACILITIES MAINTENANCE CAPSTONE 7287 (BLDG FAC MAINT CAP)

Two Semesters
Three Credit Per Semester
Taken as part of three class period block
Open To: Seniors (Year two of program)

Required Background: Princ of Const; Build & Fac Maint Fund; Adv Build & Fac Maint Fund; application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credits through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Building and Facilities Maintenance Capstone will continue to develop student's maintenance skills ideally through a work-based learning experience. Students will also explore additional topics like processing work orders, fair housing regulation compliance, environmental and regulation compliance, reporting and documentation of maintenance activities, and implementation of a preventive maintenance schedule

CAREER CLUSTER: ARTS, AV AND COMMUNICATIONS

NLPS Pathway can be used by Grades 9-12

Arts, AV Tech and Comm –
Radio and Television Broadcasting
(Laporte High School)

- Principles of Broadcasting 7139
- Audio and Video Production Essentials 7306
- Mass Media Production 7307

PRINCIPLES OF BROADCASTING Principles of Broadcasting 7139 (PRIN BROAD)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus at LaPorte High School from 7:45-10:10 a.m. daily. Students provide own transportation. Additional fees may apply.

*Students have opportunity to earn dual credit if requirements are met, contact LaPorte High School Instructor for info on how to qualify.

The purpose of the Principles of Broadcasting course is to provide entry-level fundamental skills for students who wish to seek or pursue opportunities in the field of broadcasting or mass media. Students will explore the technical aspects of audio and sound design for radio production and distribution, as well as, the technical aspects of video production and distribution.

AUDIO AND VIDEO PRODUCTION ESSENTIALS 7306 (AUD VID PROD)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus at LaPorte High School from 7:45-10:10 a.m. daily. Students provide own transportation. Additional fees may apply.

*Students have opportunity to earn dual credit if requirements are met, contact LaPorte High School Instructor for info on how to qualify.

Audio and Video Production Essentials provides an in-depth study on audio and video production techniques for radio, television, and digital technologies. Students will learn skills necessary for audio production and on-air work used in radio and other digital formats. Additionally, experience will be gained in the development of the video production process; including skills in message development, directing, camera, video switcher, and character generator operations.

MASS MEDIA PRODUCTION 7307 (MASS MED PROD)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus at LaPorte High School from 7:45-10:10 a.m. daily. Students provide own transportation. Additional fees may apply.

*Students have opportunity to earn dual credit if requirements are met, contact LaPorte High School Instructor for info on how to qualify.

Mass Media Production will focus on the study of theory and practice in the voice and visual aspects of radio and television performance. In addition, this course introduces the skills used to acquire and deliver news stories in a digital media format. Students will learn how to research issues and events, interview news sources, interact with law enforcement and government officials, along with learning to write in a comprehensive news style.

RADIO & TV BROADCASTING CAPSTONE 7308 (RAD TV BROAD CAP)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Seniors (Year Two)

Required Background: Princ of Broadcasting; Audio/Video Prod Essentials; Mass Media Prod; application process
Elective/Directed Elective
Note: This course is taken off campus at LaPorte High School from 7:45-10:10 a.m. daily. Students provide own transportation. Additional fees may apply.

*Students have opportunity to earn dual credit if requirements are met, contact LaPorte High School Instructor for info on how to qualify.

This course will cover a variety of domains further building on skills in video production, and broadcast industry practices specific to radio, television, and digital media. Attention will be given to cross-industry synergies, emerging technologies, and the global market for media. Students are highly encouraged to do a video newscast or radio practicum to gain real world experience. In most cases this practicum may be completed through a school-based enterprise.

CAREER CLUSTERS: BUSINESS, MARKETING, AND ENTREPRENEURSHIP and BUSINESS MANANAGEMENT, MARKETING, AND FINANCE

NLPS Pathway can be used by Grades 9-12

Business Management and Administration - Business Management, Marketing, and Finance (South Central)

- Principles of Business Management 4562
- Management Fundamentals 7143
- Accounting Fundamentals 4524

BUSINESS MATH 4512 (BUS MATH)

Two Semesters
Two High School Credits
One Class Period Required
Open To: Juniors-Seniors

Required Background: Successful completion of Algebra
Fulfills: Elective/General Elective and counts as Mathematics for General Diploma and Certificate of Completion only
Note: This course is taken in our Virtual Learning Lab

Business Math is a course designed to prepare students for roles as entrepreneurs, producers, and business leaders by developing abilities and skills that are part of any business environment. A solid understanding of math including algebra, basic geometry, statistics, and probability provides the necessary foundation for students interested in careers in business and skilled trade areas. The content includes mathematical operations related to accounting, banking and finance, marketing, and management. Instructional strategies should include simulations, guest speakers, tours, Internet research, and business experiences.

• Qualifies as a quantitative reasoning course

PRINCIPLES OF BUSINESS MANAGEMENT 4562 (PRIN BUS)

Two Semesters
Two Credits
One Class Period
Open To: Freshmen -Seniors
(Students taking in 9th & 10th graders should take Ivy Tech's Knowledge Assessment test this Spring to ensure they are are ready/qualify)

Recommended Background: None
Elective/Directed Elective
Note: May be taken for dual credit through Ivy Tech - Students must complete enrollment through Dual Enroll through Ivy Tech to earn dual credit. (Test scores/GPA qualifiers needed.)

Principles of Business Management examines business ownership, organization principles and problems, management, control facilities, administration, financial management, and development practices of business enterprises. This course will also emphasize the identification and practice of the appropriate use of technology to communicate and solve business problems and aid in decision making. Attention will be given to developing business communication, problem-solving, and decision-making skills using spreadsheets, word processing, data management, and presentation software.

MANAGEMENT FUNDAMENTALS Management Fundamentals 7143 (MGMT FUND)

Two Semesters
Two Credits
One Class Period
Open To: Sophomores -Seniors

Required Background: Principles of Business Management
Elective/Directed Elective

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met.

Management Fundamentals describes the functions of managers, including the management of activities and personnel. Describes the judicial system and the nature and sources of law affecting business. Studies contracts, sales contracts with emphasis on Uniform Commercial Code Applications, remedies for breach of contract and tort liabilities. Examines legal aspects of property ownership, structures of business ownership, and agency relationships.

ACCOUNTING FUNDAMENTALS Accounting Fundamentals 4524 (INTO ACCT)

Two Semesters
Two Credits
One Class Period
Open To: Sophomores -Seniors

Required Background: Principles of Business Management
Elective/Directed Elective

*Note this course is NOT for dual credit at this time.

Accounting Fundamentals 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.

CAREER CLUSTER: EDUCATION AND TRAINING

NLPS Pathway can be used by Grades 9-12

Education Training –
Education Careers
(AK Smith Career Center – MC)

- Principles of Teaching 7161
- Child and Adolescent Development 7157
- Teaching and Learning 7162

PRINCIPLES OF TEACHING 7161 (PRIN TEACH)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

This course provides a general introduction to the field of teaching. Students will explore educational careers, teaching preparation, and professional expectations as well as requirements for teacher certification. Current trends and issues in education will be examined. A minimum 20 hour classroom observation experience is required for successful completion of this course.

CHILD AND ADOLESCENT DEVELOPMENT 7157 (CHLD ADL DEV)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Child and Adolescent Development examines the physical, social, emotional, cognitive, and moral development of the child from birth through adolescence with a focus on the middle years through adolescence. Basic theories of child development, biological and environmental foundations of development, and the study of children through observation and interviewing techniques are explored. The influence of parents, peers, the school environment, culture and the media are discussed. An observation experience up to 20 hours may be required for completion of this course. This course has been approved to be offered for dual credit. Students pursuing this course for dual credit are still required to meet the minimum prerequisites for the course and pass the course with a C or better in order for dual credit to be awarded.

TEACHING AND LEARNING 7162 (TEACH LRN)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Teaching and Learning provides students the opportunity to apply many of the concepts that they have learned throughout the Education Professions pathway. In addition to a focus on best practices, this course will provide an introduction to the role that technology plays in the modern classroom. Through hands-on experience with educational software, utility packages, and commonly used microcomputer hardware, students will analyze ways to integrate technology as a tool for instruction, evaluation, and management.

EDUCATION PROFESSIONS CAPSTONE 7267 (ED PROF CAP)

Two Semesters
Three Credit Per Semester
Taken as part of three class period block
Open To: Seniors (Year two of program)

Required Background: Princ of Teaching; Child & Adoles Dev; Teaching and Learning; application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

The Education Professions Capstone provides an extended opportunity for field experience to further apply concepts that have been presented throughout the pathway. Students will also have the opportunity to explore the topics of the exceptional child and literacy development through children's literature. Students will gain a deeper understanding of inclusive teaching techniques along with policies, theories, and laws related to special education. Students interested in pursuing a career in Elementary Education are encouraged to also study the benefits of using children's literature in the classroom. This course may be further developed to include specific content for students interested in pursuing a career in secondary education. The course should include a significant classroom observation and assisting experience.

CAREER CLUSTER: HEALTH SCIENCE

NLPS Pathways can be used by Grades 9-12

Health Sciences – PLTW **Biomedical Sciences and Technology** **(South Central)** • Principles of Biomedical Sciences 5218 • Human Body Systems 5216 • Medical Interventions 5217	**Health Sciences –** **Emergency Medical Services** **(AK Smith Career Center – MC)** • Principles of Healthcare 7168 • Medical Terminology 5274 • Emergency Medical Tech 7165	**Health Sciences –** **Pre Nursing** **(AK Smith Career Center – MC)** • Principles of Healthcare 7168 • Medical Terminology 5274 • Healthcare Specialist: CNA 7146 (done in Year 2 of program) • Healthcare Tech Skills Development 7156 (extra/non-required class for pathway)

PLTW PRINCIPLES OF BIOMEDICAL SCIENCES 5218 (PRIN BIOMED)

Two Semesters — Required Background: Biology I or concurrent enrollment in Biology I
Two High School Credits — Elective/Directed Elective or Science Credit
One Class Period
Open To: Freshmen-Seniors

PLTW Principles of the Biomedical Sciences provides an introduction to this field through "hands-on" projects and problems. Student work involves the study of human medicine, research processes and an introduction to bioinformatics. Students investigate the human body systems and various health conditions including heart disease, diabetes, hypercholesterolemia, and infectious diseases. A theme through the course is to determine the factors that led to the death of a fictional person. After determining the factors responsible for the death, the students investigate lifestyle choices and medical treatments that might have prolonged the person's life. Key biological concepts included in the curriculum are: homeostasis, metabolism, inheritance of traits, feedback systems, and defense against disease. Engineering principles such as the design process, feedback loops, fluid dynamics, and the relationship of structure to function will be included where appropriate. The course is designed to provide an overview of all courses in the Biomedical Sciences program and to lay the scientific foundation necessary for student success in the subsequent courses.

PLTW HUMAN BODY SYSTEMS 5216 (HUMAN SYST)

Two Semesters — Required Background: Completion of PLTW PRIN BIOMED
Two High School Credits — Elective/Directed Elective or Science Credit
One Class Period
Open To: Sophomores-Seniors

PLTW Human Body Systems is a course designed to engage students in the study of basic human physiology and the care and maintenance required to support the complex systems. Using a focus on human health, students will employ a variety of monitors to examine body systems (respiratory, circulatory, and nervous) at rest and under stress, and observe the interactions between the various body systems. Students will use appropriate software to design and build systems to monitor body functions.

PLTW MEDICAL INTERVENTIONS 5217 (MED INTERV)

Two Semesters
Two High School Credits
One Class Period
Open To: Juniors-Seniors

Required Background: Completion of PLTW PRIN BIOMED & HUMAN BODY SYSTEMS
Elective/Directed Elective or Science Credit

PLTW Medical Interventions is a course that studies medical practices including interventions to support humans in treating disease and maintaining health. Using a project-based learning approach, students will investigate various medical interventions that extend and improve quality of life, including gene therapy, pharmacology, surgery, prosthetics, rehabilitation, and supportive care. Students will also study the design and development of various interventions. Lessons will cover the history of organ transplants and gene therapy with additional readings from current scientific literature addressing cutting edge developments.

PRINCIPLES OF HEALTHCARE 7168 (PRIN HLCR)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Principles of Healthcare content includes skills common to specific health career topics such as patient nursing care, dental care, animal care, medical laboratory, public health, and an introduction to healthcare systems. Lab experiences are organized and planned around the activities associated with the student's career objectives.

MEDICAL TERMINOLOGY 5274 (MED TERMS)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Medical Terminology prepares students with language skills necessary for effective, independent use of health and medical reference materials. It includes the study of health and medical abbreviations, symbols, and Greek and Latin word part meanings, all taught within the context of body systems. This course builds skills in pronouncing, spelling, and defining new words encountered in verbal and written information in the healthcare industry. Students have the opportunity to acquire essential skills for accurate and logical communication, and interpretation of medical records. Emphasis is on forming a foundation of a medical vocabulary including; appropriate and accurate meaning, spelling, and pronunciation of medical terms, and abbreviations, signs, and symbols.

TECHNICAL SKILLS DEVELOPMENT 7156 (TECH SKL DEV)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students MAY have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for details

The Technical Skills Development course may be used to provide students with the opportunity to apply the technical knowledge and skills learned in a Concentrator A or B course through additional real world learning experiences such as lab activities, project based learning or a work-based learning experience. Students must be co-enrolled in a Concentrator A and/or B course in order to be enrolled in the Technical Skills Development course..

HEALTHCARE SPECIALIST: CNA 7166 (HC SPEC CAN)

Two Semesters
One Credit Per Semester
Taken as part of three class period block
Open To: Seniors (Year two of program)

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

The Healthcare Specialist: CNA prepares individuals desiring to work as nursing assistants with the knowledge, skills and attitudes essential for providing basic care in extended care facilities, hospitals and home health agencies under the direction of licensed nurses. The course will introduce students to the disease process and aspects of caring for a long-term care resident with dementia. Individuals who successfully complete this course are eligible to apply to sit for the Indiana State Department of Health (ISDH) certification exam for nursing assistants. This course meets the minimum standards set forth by the ISDH for Certified Nursing Assistant training and for health care workers in long-term care facilities.

EMERGENCY MEDICAL TECH 7165 (EMT)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, Princ Healthcare; Med Term; application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

This course is based on the training program developed by the Department of Transportation and the Emergency Medical Services Commission of Indiana. It covers theories, techniques and operational aspects of pre-hospital emergency care within the scope and responsibility of the emergency medical technician (EMT). It requires laboratory practice and clinical observation in a hospital emergency room and ambulance. Successful completion of the course meets national requirements to test for certification as an NREMT.

HEALTHCARE SPECIALIST CAPSTONE 7255 (HC SPEC CAP)

Two Semesters
Two Credit Per Semester
Taken as part of three class period block
Open To: Seniors (Year two of program)

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

The capstone course will provide Healthcare students acquire additional knowledge and skills necessary to work in a variety of health care settings beyond a long term care facility, including hospitals, doctor's offices and clinics. Students can accomplish this goal by completing coursework that will cover topics such as Medical Law and Ethics, Electronic Health Records, and/or Behavioral Health. Schools may offer additional healthcare certifications such as the Certified Clinical Medical Assistant or Phlebotomy along with the coursework or in place of the coursework. •Recommended Grade(s): 11, 12 •Required Prerequisites: Principles of Healthcare; Medical Terminology; Healthcare Specialist: CNA, EMT or Certified Clinical Medical Assistant (CCMA) •Recommended Prerequisites: none •Credits: 2 semester course, 2 semester required, 1-3 credits per semester, 6 credits max •Counts as a Directed Elective or Elective for all diplomas

ANATOMY AND PHYSIOLOGY 5276 (A & P)

Two Semesters
Two High School Credits
One Class Period
Open To: Juniors – Seniors

Required Background: C's in Biology I and Chemistry I
Science or Elective/Directed Elective
Note: Students taking Health Careers at AK Smith get this content in coursework there

Anatomy & Physiology is a course in which students investigate concepts related to Health Science, with emphasis on interdependence of systems and contributions of each system to the maintenance of a healthy body. Introduces students to the cell, which is the basic structural and functional united of all organisms, and covers tissues, integument, skeleton, muscular and nervous systems as an integrated unit. Through instruction, including laboratory activities, students apply concepts associated with Human Anatomy & Physiology. Students will understand the structure, organization and function of the various components of the healthy body in order to apply this knowledge in all health related fields

CAREER CLUSTER: HOSPITALITY AND TOURISM

NLPS Pathway can be used by Grades 9-12

Hospitality and Tourism –
Culinary Arts
(AK Smith Career Center – MC)

- Principles of Culinary and Hospitality 7173
- Nutrition 7171
- Culinary Art 7169

PRINCIPLES OF CULINARY AND HOSPITALITY 7173 (PRIN HOSP)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Principles of Culinary and Hospitality is designed to develop an understanding of the hospitality industry and career opportunities, and responsibilities in the food service and lodging industry. Introduces procedures for decision making which affects operation management, products, labor, and revenue. Additionally, students will learn the fundamentals of food preparation, basic principles of sanitation, service procedures, and safety practices in the food service industry including proper operation techniques for equipment.

NUTRITION 7171 (FD THRY NUT)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Nutrition students will learn the characteristics, functions and food sources of the major nutrient groups and how to maximize nutrient retention in food preparation and storage. Students will be made aware of nutrient needs throughout the life cycle and to apply those principles to menu planning and food preparation. This course will engage students in hands-on learning of nutritional concepts such as preparing nutrient dense meals or examining nutritional needs of student athletes.

CULINARY ARTS 7169 (CUL ARTS)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Culinary Arts teaches students how to prepare the four major stocks, the five mother sauces (in addition to smaller sauces) and various soups. Additional emphasis is placed on the further development of the classical cooking methods. This course will also present the fundamentals of baking science including terminology, ingredients, weights and measures, and proper use and care of equipment. Students will produce yeast goods, pies, cakes, cookies, and quick breads.

BAKING AND PASTRY CAPSTONE 7235 (BAKE PSTRY CAP)

Two Semesters
Three Credits Per Semester
Taken as part of three class period block
Open To: Seniors (Year two of program)

Required Background: Princ of Cul & Hosp; Nutrition; Culinary Arts; application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

The objective of this course is to help students understand the science of baking and the different reactions that take place based on the ingredients, temperatures, and equipment in relation to the final product. The course requires students to produce and finish a variety of cakes. The course emphasizes application techniques, color coordination, and the flavor and texture of fillings. Students will practice the techniques of basic cake decorating. This course will also address classical French and European desserts, including the preparation of goods such as Napoleons, Gateau St. Honoré, petit fours and petit fours sec, ganaches, pastry creams and fillings, sauces, flans and tarts, and European sponges. The course also includes instruction in tempering of chocolates, molding, and chocolate plastique, preparation of truffles, pastillage and marzipan, short doughs, and meringues. The student will be instructed in the latest preparation methods, innovative ideas for impressive plate presentations, and techniques that utilize specialized equipment and tools to make high-tech, novel creations

CULINARY ARTS CAPSTONE 7233 (CUL ARTS CAP)

Two Semesters
Three Credits Per Semester
Taken as part of three class period block
Open To: Seniors (Year two of program)

Required Background: Princ of Cul & Hosp; Nutrition; Culinary Arts; application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

This course covers the techniques and skills needed in breakfast cookery as well as insight into the pantry department. Various methods of preparation of eggs, pancakes, waffles and cereals will be discussed. Students will receive instruction in salad preparation, salad dressing, hot and cold sandwich preparation, garnishes and appetizers. This course also covers the necessary skills for proper recruiting, staffing, training, and management of employees at various levels. The course will help prepare the student for the transition from employee to supervisor. Additionally, it will help the student evaluate styles of leadership, and develop skills in human relations and personnel management.

CAREER CLUSTER: HUMAN SERVICES

NLPS Pathway can be used by Grades 9-12

Human Services –
Cosmetology
(AK Smith Career Center – MC)

- Principles of Barbering and Cosmetology 7330
- Barbering and Cosmetology Fundamentals 7331
- Advanced Cosmetology 7332

Note – Students must provide their own transportation to and from the Cosmetology program.

PRINCIPLES OF BARBERING AND COSMETOLOGY 7330 (PRIN COSMO)

Two Semesters
One Credit Per Semester
Taken as part of four class period block
Open To: Juniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Principles of Cosmetology offers an introduction to cosmetology with emphasis on basic practical skills and theories including roller control, quick styling, shampooing, hair coloring, permanent waving, facials, manicuring, business and personal ethics, and bacteriology and sanitation. Successful completion of the course requires at least 375 Cosmetology studio hours. •This course may require extended hours of participation in order to meet the 1500 hours required for the Cosmetology and Barbering exams.

BARBERING AND COSMETOLGY FUNDAMENTALS 7331 (STY COSMO)

Two Semesters
One Credit Per Semester
Taken as part of four class period block
Open To: Juniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Barbering and Cosmetology Fundamentals focuses on the development of practical skills introduced in Principles of Cosmetology. Clinical application and theory in the science of cosmetology are introduced. Successful completion of the course requires at least 375 Cosmetology studio hours. •This course may require extended hours of participation in order to meet the 1500 hours required for the Cosmetology and Barbering exams.

ADVANCED COSMETOLOGY 7332 (ADV COSMO)

Two Semesters
One Credit Per Semester
Taken as part of four class period block
Open To: Juniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Advanced Cosmetology will emphasize the development of advanced skills in styling, hair coloring, permanent waving, facials and manicuring. Students will also study anatomy and physiology as it applies to cosmetology. Successful completion of the course requires at least 375 Cosmetology studio hours. •This course may require extended hours of participation in order to meet the 1500 hours required for the Cosmetology and Barbering exams.

BARBERING AND COSMETOLOGY CAPSTONE 7334 (COSMO CAP)

Two Semesters
Three Credit Per Semester
Taken as part of FOUR class period block
Open To: Seniors (Year two of program)

Required Background: Princ of Barber & Cosmo; Barber & Cosmo Fund; Adv. Cosmo; application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; Students will leave SC after Period 3 and must provide their own transportation to and from Michigan City; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Barbering and Cosmetology Capstone builds and improves previously developed skills with emphasis on developing individual techniques. Professionalism, shop management, psychology in relation to cosmetology, and preparation for state board examination are stressed. Successful completion of the course requires at least 375 Cosmetology studio hours. •This course may require extended hours of participation in order to meet the 1500 hours required for the Cosmetology and Barbering exams.

CAREER CLUSTER: INFORMATION TECHNOLOGY

INTRODUCTION TO COMPUTER SCIENCE 4803 (INTO CS)

One or Two Semesters
One or Two Credits
One Class Period
Open to: Freshmen-Seniors

Recommended Background: None
Elective/Directed Elective

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.

CAREER CLUSTER: LAW, PUBLIC SAFETY, CORRECTIONS AND SECURITY

NLPS Pathways can be used by Grades 9-12

Law, Public Safety, Corrections and Security – Criminal Justice (AK Smith Career Center – MC)	**Law, Public Safety, Corrections and Security – Fire and Rescue (AK Smith Career Center – MC)**
• Principles of Criminal Justice 7193 • Law Enforcement Fundamentals 7191 • Corrections and Cultural Awareness 7188	• Principles of Fire and Rescue 7195 • Fire Fighting Fundamentals 7189 • Advanced Fire Fighting 7186

PRINCIPLES OF FIRE AND RESCUE 7195 (PRIN PS HAZ AWR)

Two Semesters — Required Background: Passing all core classes, application process
One Credit Per Semester — Elective/Directed Elective
Taken as part of three class block — Note: This course is taken off campus through AK Smith Career Center; additional fees apply
Open To: Juniors-Seniors

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Principles of Fire and Rescue introduces students to the various roles that firefighters and emergency services workers play to protect the public from the loss of life and property. They are frequently the first emergency personnel at the scene of a traffic accident or medical emergency and may be called upon to put out a fire, treat injuries or perform other vital functions. This course will introduce students to the history, terminology, and basic firefighting skills needed for a beginning firefighter. Additionally, students will develop a career plan for a career in public safety; including areas of Fire Science, Homeland Security, and Emergency Medical Services.

FIRE FIGHTING FUNDAMENTALS 7189 (FIRE FGHT FUN)

Two Semesters — Required Background: Passing all core classes, application process
One Credit Per Semester — Elective/Directed Elective
Taken as part of three class block — Note: This course is taken off campus through AK Smith Career Center; additional fees apply
Open To: Juniors-Seniors

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Fire Fighting Fundamentals is for those students who are seeking certification as a firefighter. This course will prepare students for the Hazardous Materials Awareness and Operations certifications and will introduce students to NFPA 1001 which serves as the standard of measurement for all fire fighters in North America. Students will learn the knowledge and hands-on practical skills for managing and controlling a hazardous materials incident required for the certifications. Furthermore, students will study how a fire behaves and will learn the basic firefighting skills needed to extinguish a fire while protecting themselves and other firefighters.

ADVANCED FIRE FIGHTING 7186 (ADV FIRE FGHT)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Advanced Fire Fighting expands upon the principles and techniques of firefighting learned in Fire Fighting Fundamentals. Students will study fire protection systems, firefighter safety and survival. Students will also learn what fire is, the chemical hazards of combustion, and related by-products of fire. Additionally, students will gain a better understanding of fire department organization, administration, operations, and basic strategies and tactics.

FIRE AND RESCUE CAPSTONE 7229 (FIRE RES CAP)

Two Semesters
Three Credit Per Semester
Taken as part of three class period block
Open To: Seniors (Year two of program)

Required Background: Princ of Fire; Fire Fight Fund, Adv Fire Fight; application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

Fire and Rescue Capstone will prepare students to earn the EMT certification.

PRINCIPLES OF CRIMINAL JUSTICE 7193 (PRIN CR JUST)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Principles of Criminal Justice covers the purposes, functions, and history of the three primary parts of the criminal justice system: law enforcement, courts, and corrections. This course further explores the interrelationships and responsibilities of these three primary elements of the criminal justice system.

LAW ENFORCEMENT FUNDAMENTALS 7191 (LAW ENF CLT AWR)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Law Enforcement Fundamentals Critically examines the history and nature of the major theoretical perspectives in criminology, and the theories found within those perspectives. Analyzes the research support for such theories and perspectives, and the connections between theory and criminal justice system practice within all the major components of the criminal justice system. Demonstrates the application of specific theories to explain violent and non-violent criminal behavior on both the micro and macro levels of analysis. Additionally, this course will introduce fundamental law enforcement operations and organization. This includes the evolution of law enforcement at federal, state, and local levels.

CORRECTIONS AND CULTURAL AWARENESS 7188 (CRT CORR)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

Corrections and Cultural Awareness emphasizes the study of American criminal justice problems and systems in historical and cultural perspectives, as well as discussing social and public policy factors affecting crime. Multidisciplinary and multicultural perspectives are stressed. Additionally, this course takes a further examination of the American correctional system; the study of administration of local, state, and federal correctional agencies. The examination also includes the history and development of correctional policies and practices, criminal sentencing, jails, prisons, alternative sentencing, prisoner rights, rehabilitation, and community corrections including probation and parole. Current philosophies of corrections and the debates surrounding the roles and effectiveness of criminal sentences, institutional procedures, technological developments, and special populations are discussed.

CRIMINAL JUSTICE CAPSTONE 7231 (CRIM JUST CAP)

Two Semesters
Three Credit Per Semester
Taken as part of three class period block
Open To: Seniors (Year two of program)

Required Background: Princ of CJ; Law Enf Fund; Correct and Cult Awareness; application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

The Criminal Justice Capstone course allows students to complete additional instruction to earn a postsecondary certificate and should include a work-based learning component such as job shadowing, internship, etc. once the core content is completed. Note that there may be age restrictions on work-based learning components.

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CAREER CLUSTER: SCIENCE, TECHNOLOGY, ENGINEERING AND MATH (STEM)

NLPS Pathway can be used by Grades 9-12

STEM – PLTW Engineering (South Central)

- Intro to Engineering Design 4802
- Principles of Engineering 5644
- Aerospace Engineering 5518

Or

- Computer Integrated Manufacturing 5534

INTRODUCTION TO ENGINEERING DESIGN PLTW 4802 (INT ENG DES)

Two Semesters
Two Credits
One Class Period
Open to: Freshmen-Seniors

Recommended Background: None
Fulfills Elective/Directed Elective

Note: Students must complete enrollment through Dual Enroll through Ivy Tech to earn dual credit.

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 begin with completing structured activities and move 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.

PRINCIPLES OF ENGINEERING PLTW 5644 (PRNC ENG)

Two Semesters
Two Credits
One Class Period
Open to: Sophomores-Seniors

Required: IED
Fulfills Elective/Directed Elective and counts as Science credits for all diplomas

Note: Students must complete enrollment through Dual Enroll through Ivy Tech to earn dual credit.

• Qualifies as a quantitative reasoning course

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.

AEROSPACE ENGINEERING 5518 PLTW (AERO ENG)

Two Semesters
Two Credits
One Class Period
Open to: Juniors-Seniors with required pre-requisite classes

Required: IED and POE
Science or Elective/Directed Elective

• Qualifies as a quantitative reasoning course

Aerospace Engineering provides students with the fundamental knowledge and experience to apply mathematical, scientific, and engineering principles to the design, development, and evolution of aircraft, space vehicles and their operating systems. Emphasis should include investigation and research on flight characteristics, analysis of aerodynamic design, and impact of this technology on the environment. Classroom instruction should provide creative thinking and problem-solving activities using software that allows students to design, test, and evaluate a variety of air and space vehicles, their systems, and launching, guidance and control procedures.

COMPUTER INTEGRATED MANUFACTURING PLTW 5534 (COMP INT MFG)

Two Semesters
Two Credits
One Class Period
Open to: Juniors-Seniors with required pre-requisite classes

Required: IED and POE
Elective/Directed Elective

• Qualifies as a quantitative reasoning course

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.

CAREER CLUSTER – TRANSPORTATION

NLPS Pathways can be used by Grades 9-12

Transportation, Distribution and Logistics – Automotive Services
(AK Smith Career Center – MC)

- Principles of Automotive Services 7213
- Brake Systems 7205
- Steering and Suspensions 7212

PRINCIPLES OF AUTOMOTIVE SERVICES 7213 (PRIN AUTO SER)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

This course gives students an overview of the operating and general maintenance systems of the modern automobile. Students will be introduced to the safety and operation of equipment and tools used in the automotive industry. Students will study the maintenance and light repair of automotive systems. Also, this course gives students an overview of the electrical operating systems of the modern automobile. Students will be introduced to the safety and operation of equipment and tools used in the electrical diagnosis and repair in the automotive electrical industry. Students will study the fundamentals of electricity and automotive electronics.

BRAKE SYSTEMS 7205 (AUTO BRK ELE)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

This course gives students an in-depth study of vehicle electrical systems. Students will study the fundamentals of electricity and automotive electronics in various automotive systems. Additionally, it teaches theory, service and repair of automotive braking systems. This course provides an overview of various mechanical brake systems used on today's automobiles. This course will emphasize professional diagnosis and repair methods for brake systems.

STEERING AND SUSPENSIONS 7212 (ENG PERF)

Two Semesters
One Credit Per Semester
Taken as part of three class block
Open To: Juniors-Seniors

Required Background: Passing all core classes, application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

This course takes an in-depth look at engine performance, including concepts in the diagnosis and repair of ignition, fuel, emission and related computer networks. This course presents engine theory and operation and studies the various engine designs utilized today. This course also takes an in-depth look at engine performance, including advanced concepts in the diagnosis and repair of ignition, fuel, emission and related computer networks. This course presents engine theory and operation and studies the various engine designs utilized today. Hybrid/Alternative fuel technology will also be introduced.

AUTOMOTIVE SERVICE CAPSTONE 7375 (AUTO SRV CAP)

Two Semesters
Three Credit Per Semester
Taken as part of three class period block
Open To: Seniors (Year two of program)

Required Background: Princ of Auto Serv; Brake Systems; Steering and Suspensions: application process
Elective/Directed Elective
Note: This course is taken off campus through AK Smith Career Center; additional fees apply

*Students have opportunity to earn dual credit through Ivy Tech if requirements are met, contact AK Smith Instructor for info on how to qualify

This course further explores important skills and competencies within the Automotive Service Technology Pathway. Topics such as Steering & Suspension, Engine Repair, Climate Control, and Driveline Service. Additionally, Co-Op and Internship opportunities will be available for students.

English/Language Arts

Placement in HONORS 9/10 and 11 English classes will be based on test scores and other data. Please note that Honors English classes are faster paced and require more intense analysis.

ENGLISH 9/HONORS ENGLISH 9 1002 (ENG 9)
Two Semesters — Recommended Background: Successful Completion of 8th grade English
Two Credits — Fulfills 2 credits of English graduation requirement
One Class Period
Required: Freshmen

This class is a study of language, literature, composition, and oral communication with a focus on exploring a wide-variety of genres and their elements. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 9 in classic and contemporary literature balanced with nonfiction. Students write short stories, responses to literature, expository and persuasive compositions, research reports, business letters, and technical documents. Students deliver grade-appropriate oral presentations and access, analyze, and evaluate online information.

ENGLISH 10/HONORS ENGLISH 10 1004 (ENG 10)
Two Semesters — Recommended Background: Successful Completion of 9th grade English
Two Credits — Fulfills 2 credits of English graduation requirement
One Class Period
Required: Sophomores

This class is a study of language, literature, composition, and oral communication with a focus on exploring universal themes across a wide variety of genres. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 10 in classic and contemporary literature balanced with nonfiction. Students write short stories, responses to literature, expository and persuasive compositions, research reports, business letters, and technical documents. Students deliver grade-appropriate oral presentations and access, analyze, and evaluate online information.

ENGLISH 11/HONORS ENGLISH 11 1006 (ENG 11)
Two Semesters — Recommended Background: Successful Completion of 10th grade English
Two Credits — Fulfills 2 credits of English graduation requirement
One Class Period
Required: Juniors

This class is a study of language, literature, composition, and oral communication with a focus on exploring characterization across universal themes and a wide variety of genres. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 11 in classic and contemporary literature balanced with nonfiction. American Literature is the basis for this course. Students write fictional narratives, short stories, responses to literature, reflective compositions, historical investigation reports. Students write and deliver grade-appropriate multimedia presentations and access, analyze, and evaluate online information.

ENGLISH 12 1008 (ENG 12)

Two Semesters
Two Credits
One Class Period
Required: Seniors must earn 2 English credits

Recommended Background: Successful Completion of 11th grade English or equivalent
Fulfills 2 credits of English graduation requirement

English 12 explores a variety of modern and contemporary short stories and books, especially nonfiction pieces. Lessons will focus on examining the purposes for writing, the effectiveness of texts, and the different ways writers share their experiences and ideas. Students will read for various perspectives on issues, engage in meaningful arguments on text interpretations, and will analyze how bringing in context shapes or changes reader understanding and response. Additionally, students will produce written and verbal responses to the readings and discussions, use web tools for sharing ideas, and will practice precise and accurate communication techniques.

DRAMATIC LITERATURE 1028 (DRAMA LIT)

One Semester
One Credit
One Class Period
Open to: Juniors and Seniors

Recommended Background: Completion of 9th and 10th grade English
Fulfills 1 credit of English graduation requirement

Dramatic Literature is a study of plays and literary art as different from other literary genres. Students view live, televised, or filmed productions and stage scenes from plays or scripts. Students examine tragedies, comedies, melodramas, musicals or operas created by important playwrights and screenwriters representing the literary movements in dramatic literature. Students analyze how live performance alters interpretation from text and how developments in acting and production have altered the way we interpret plays or scripts. Students analyze the relationship between the development of dramatic literature as entertainment and as a reflection of or influence on the culture.

GENRES OF LITERATURE: SPORTS HISTORY & ANALYSIS 1036 (GENRES LIT)

Two Semesters
Credit
One Class Period
Open to: Juniors who received a Semester Grade of A in Sophomore English - Seniors

Recommended Background: English 9 and 10 or teacher approval
Fulfills 2 credits of English graduation requirement

Sports History & Analysis is a course which looks to improve a student's traditional English skills through the lens of American sports history. Students will engage in materials which ask them to think critically, analyze information, make comparisons, present verbal arguments, develop written arguments, and produce formal written essays. Students should expect to learn about a wide range of sports. Students will learn about the creation of each sport, sport leagues and their creation, evolution of rules, evolution in game style, financial aspects of sports and their leagues, famous players, and much more!

SPEECH 1076 (SPEECH)

One Semester	Recommended Background: None
One Credit	Fulfills 1 credit of English graduation requirement
One Class Period	
Open to: Juniors-Seniors mainly	

Speech is the study and application of the basic principles and techniques of effective oral communication. Students deliver focused and coherent speeches that convey clear messages, using gestures, tone, and vocabulary appropriate to the audience and purpose. Students deliver different types of oral and multi-media presentations, including viewpoint, instructional, demonstration, informative, persuasive, and impromptu. Students use the same Standard English conventions for oral speech that they use in their writing.

ADVANCED SPEECH AND COMMUNICATION 1078 (ADV SPEECH) – **IU COLL - P155 PUBLIC SPEAKING, FUNDAMENTALS OF**

One Semester	Required Background: English 10 or 11 and Speech with B or better
One Credit	and letter of rec from English 10 or 11 teacher and GPA of
One Class Period	2.7 or higher
Open to: Juniors-Seniors	Fulfills 1 credit of English graduation requirement

Note: Books for the course must be purchased by student prior to start of class. Cost of books is not part of book rental.

Advanced Speech and Communication is the study and application of skills in listening, oral interpretation, media communications, research methods, and oral debate. Students deliver different types of oral and multi-media presentations, including speeches to inform, to motivate, to entertain, and to persuade through the use of impromptu, extemporaneous, memorized, or manuscript delivery. Course can be offered in conjunction with a composition and literature course, or schools may embed Indiana Academic Standards for English/Language Arts within curriculum.

This course prepares students in the liberal arts to communicate effectively with public audiences. Emphasizes oral communication as practiced in public contexts: how to advance reasoned claims in public; how to adapt public oral presentations to particular audiences; how to listen to, interpret, and evaluate public discourse; and how to formulate a clear response.

HONORS ENGLISH 12 1008 (HON ENG 12) **- IU W131 – ENGLISH COMPOSITION 1**

One Semester
One Credit
One Class Period
Open to Seniors

Required Background: Must meet the requirements below
Fulfills 1 credit of English graduation requirement

Note: Books for the course must be purchased by student prior to start of class. Cost of books is not part of book rental.

Instruction and practice in the reading, writing, and critical thinking skills required in college. Emphasis is on written assignments that require synthesis, analysis, and argument based on sources. This is a one-semester course that concentrates on analytical composition based on college-level readings, lecture, and discussion. To take the W131 course, students must:

ð have a grade average of B or better in English 11 Honors (OR) if the student was not in an advanced English course prior to the senior year, they must have two letters of recommendation from core subject area teachers attesting to the student's readiness for college writing and work expectations.
ð have successfully completed English 9 and 10 and one additional year of English credits
ð have a minimum cumulative grade point average of 2.7 a 4.0 scale
ð have earned adequate scores on a college readiness tests:

*have minimum PSAT (2015 and beyond) scores of 430 in the "Evidence-Based Reading & Writing" portion

(OR)

*have minimum SAT (2015 and prior) scores of 460 in the "Writing" portion, and a 460 in the "Critical Reading" portion or have minimum SAT (2016 and beyond) scores of 460 in the "Evidence-Based Reading & Writing" portion

(OR)

*have minimum ACT scores of 18 in the "English" portion, and a 21 on the "Reading" portion

(OR)

*have minimum ACCUPLACER scores of 78 in the 'Reading Comprehension" portion and 86 in "Sentence Skills"

ð agree to locate and purchase the required books (about $25 -- $150, depending on where you obtain books & in what condition)
ð agree to pay IU for the course ($25 per credit hour for a total of $75 for the class)
ð agree to adhere to Indiana University's attendance, conduct and grading policies
ð return a signed agreement form"

ADVANCED ENGLISH COLLEGE CREDIT (ADV ENG CC) **- IU L202 – APPRECIATION OF LITERATURE/LITERARY INTERPRETATION**

One Semester
One Credit
One Class Period
Open to: Seniors

Required Background: English 11 and ENG W131 w/C or above or SAT Reading score or 670 or higher or ACT English score of 32 or higher and GPA of 2.7 or higher
Fulfills 1 credit of English graduation requirement

Note: Books for the course must be purchased by student prior to start of class. Cost of books is not part of book rental.

Develops critical skills essential to participation in the interpretive process. Through class discussion and focused writing assignments, introduces the premises and motives of literary analysis and critical methods associated with historical, generic, and/or cultural concerns.

Fine Arts – Performing Arts

APPLIED MUSIC 4200 (APPL MUS)
One or Two Semesters
One or Two Credits
One Class Period
Open to: Freshmen-Seniors
Recommended Background: None
Fine Arts or Elective/Directed Elective

Do you want to get better at your instrument? Applied Music offers high school students the opportunity to receive small group or private instruction designed to develop and refine performance skills in music. Students have a large amount of control over the style of music they choose to perform. The course is open to musicians of all experience levels and all instruments (concert band instruments, guitarists, drummers, etc.). A variety of music methods and repertoire is utilized to refine students' abilities in performing, creating, and responding to music.

HIGH SCHOOL BAND 4160 (BAND)
Two Semesters
Two Credits
One Class Period
Open to: Freshmen-Seniors
Recommended Background: None
Fine Arts or Elective/Directed Elective

Students taking this course are provided with a balanced comprehensive study of music through the concert band, which develops skills in the psychomotor, cognitive, and affective domains. Ensemble and solo activities are designed to develop elements of musicianship including tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, studying historically significant styles of literature, and integration of other applicable disciplines. Experiences include improvising, conducting, playing by ear, and sight-reading. Students develop the ability to understand and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

HIGH SCHOOL CHOIR 4182
One or Two Semesters
One or Two Credits
Open to: Freshmen-Seniors
Recommended Background: None
Fine Arts or Elective/Directed Elective

Students taking choir develop musicianship and performance skills through the study of quality choral literature in diverse styles and levels. Solo opportunities are available for those willing to audition. Choir classes perform several times during the year outside of the school day. Attendance at all performances is required, including evenings and some weekends. A schedule will be provided at the beginning of the school year.

MUSIC HISTORY AND APPRECIATION: CLASSICAL MUSIC 4206c (MUS HIST)
Note: This class will be offered again during the 2025-26 academic year.

One Semester
One Credit
One Class Period
Open to: Freshmen-Seniors

Recommended Background: None
Fine Arts or Elective/Directed Elective

Students receive instruction designed to explore Classical Music. Activities include analyzing and describing music; evaluating music and music performances; and understanding relationships between music and the other arts, as well as disciplines outside of the arts.

MUSIC HISTORY AND APPRECIATION: THE HISTORY OF ROCK AND ROLL 4206RR (MUS HIST)
One Semester
One Credit
One Class Period
Open to: Freshmen-Seniors

Recommended Background: None
Fine Arts or Elective/Directed Elective

Students receive instruction designed to explore popular music (NOT CLASSICAL MUSIC) from World War II to modern times. Students will study major musical styles and periods in the evolution of popular music (rock & roll, British invasion, arena rock, punk, alternative, etc.) Activities include analyzing and describing music; evaluating music and music performances; and understanding relationships between music and the other arts, as well as disciplines outside of the arts.

MUSIC THEORY AND COMPOSITION 4208 (MUS THEORY)
One Semester
One Credit
One Class Period
Open to: Freshmen-Seniors

Recommended Background: None
Fine Arts or Elective/Directed Elective

Students develop skills in the analysis of music and theoretical concepts. They develop ear training and dictation skills, compose works that illustrate mastered concepts, understand harmonic structures and analysis, understand modes and scales, study a wide variety of musical styles, study traditional and nontraditional music notation and sound sources as tools for musical composition, and receive detailed instruction in other basic elements of music

THEATRE ARTS (L) 4242 (THTR ARTS)

One or Two Semesters
One or Two Credits
One Class Period
Open to: Sophomores-Seniors

Recommended Background: None
Fine Arts or Elective/Directed Elective

Students enrolled in Theatre Arts read and analyze plays, create scripts and theatre pieces, conceive scenic designs, and develop acting skills. These activities incorporate elements of theatre history, culture, analysis, response, creative process, and integrated studies. Additionally, students explore career opportunities in the theatre, attend and critique theatrical productions, and recognize the responsibilities and the importance of individual theatre patrons in their community.

ADVANCED THEATRE ARTS 4240 (ADV THTR)

One or Two Semesters
One or Two Credits
One Class Period
Open to: Juniors-Seniors

Required Background: Completion of at least one semester of Theatre Arts
Fine Arts or Elective/Directed Elective

Students read and analyze plays and apply criteria to make informed judgments. They draw on events and experiences to create scripted monologues and scenes, create scenic designs for existing plays, and build characters through observation, improvisation and script analysis. These activities should incorporate elements of theatre history, culture, analysis, response, creative process, and integrated studies. Additionally, students explore careers in theatre arts and begin to develop a portfolio of their work. They also attend and critique theatre productions and identify ways to support the theatre in their community.

Fine Arts – Visual Arts

INTRODUCTION TO THREE-DIMENSIONAL ART 4002 (3D ART)

One Semester
One Credit
One Class Period
Open to: Sophomores-Seniors (Freshmen with Teacher Recommendation)

Required Background: 2D/Adv. 2D or teacher recommendation
Fine Arts or Elective/Directed Elective

Introduction to Three-Dimensional Art is a course based on the Indiana Academic Standards for Visual Art. Students taking this course engage in sequential learning experiences that encompass art history, art criticism, aesthetics, production, and integrated studies and lead to the creation of portfolio quality works. Students explore historical and cultural background and connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; create three-dimensional works of art, reflect upon the outcomes, and revise their work; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. They identify ways to utilize and support art museums, galleries, studios, and community resources.

ADVANCED THREE-DIMENSIONAL ART 4006 (ADV 3D ART)

One Semester
One Credit
One Class Period
Open to: Sophomores-Seniors (Freshmen with Teacher Recommendation)

Required Background: Intro to 3D Art (and 3D prereqs)
Fine Arts or Elective/Directed Elective

Advanced Three-Dimensional Art is a course based on the Indiana Academic Standards for Visual Art. Students in this course build on the sequential learning experiences of Introduction to Three-Dimensional Art that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students explore historical and cultural background and connections; analyze, interpret, theorize, and make informed judgments about 188 Indiana Department of Education High School Course Titles and Descriptions artwork and the nature of art; create three-dimensional works of art, reflect upon the outcomes, and revise their work; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. They identify ways to utilize and support art museums, galleries, studios, and community resources.

INTRODUCTION TO TWO-DIMENSIONAL ART 4000 (2D ART)

One Semester
One Credit
One Class Period
Open to: Freshmen-Seniors

Recommended Background: None
Fine Arts or Elective/Directed Elective

Introduction to Two-Dimensional Art is a course based on the Indiana Academic Standards for Visual Art. Students taking this course engage in sequential learning experiences that encompass art history, art criticism, aesthetics, production, and integrated studies and lead to the creation of portfolio quality works. Students explore historical and cultural background and connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; create two-dimensional works of art, reflect upon the outcomes, and revise their work; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. They identify ways to utilize and support art museums, galleries, studios, and community resources.

ADVANCED TWO-DIMENSIONAL ART 4004 (ADV 2D ART)

One Semester
One Credit
One Class Period
Open to: Freshmen-Seniors

Required Background: Intro to 2D Art
Fine Arts or Elective/Directed Elective

Advanced Two-Dimensional Art is a course based on the Indiana Academic Standards for Visual Art. Students in this course build on the sequential learning experiences of Introduction to Two-Dimensional Art that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students explore historical and cultural background and connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; create two-dimensional works of art, reflect upon the outcomes, and revise their work; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. They identify ways to utilize and support art museums, galleries, studios, and community resources.

CERAMICS 4040 (CERAMICS)

One Semester
One Credit
One Class Period
Open to: Juniors-Seniors

Required Background: 2D/Adv. 2D or teacher recommendation
Fine Arts or Elective/Directed Elective

Ceramics is a course based on the Indiana Academic Standards for Visual Art. 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 create works of art in clay utilizing the processes of hand building, molds, slip and glaze techniques, and the firing processes. They reflect upon and refine their work; explore cultural and historical 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. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

ADVANCED CERAMICS 4040 (ADV. CERAMICS)

One Semester
One Credit
One Class Period
Open to: Juniors-Seniors

Required Background: Ceramics (and Ceramics prereqs)
Fine Arts or Elective/Directed Elective

This course is a continuation of the things learned in Ceramics.

ADVANCED CERAMICS: WHEEL THROWING 4040WT

One or Two Semesters
One or Two Credits
One Class Period
Open to: Juniors-Seniors

Required Background: Adv. Ceramics and teacher approval
Fine Arts or Elective/Directed Elective

This course will operate as an Independent Study.

DIGITAL DESIGN – Yearbook 4082 (DIG DESIGN)

Two Semesters
Two Credits
One Class Period
Open to: Sophomores -Seniors

Required: Application, Decent grades in English
Directed Elective, Fine Arts for AHD

Note: Students who are members of the Yearbook class will get free entry into all South Central Home Extracurricular events.

This class is designed to teach the skills necessary to produce the school yearbook which will offer a last product for the student body. The class will be setting the theme for the book and then creating a magazine-like look for the production. Students will learn and produce their own design techniques, creatively write, create headlines, and produce high quality photos for the book. This class will look at ad sale techniques from major companies through television and internet media before doing sales of their own. Students will create an ad campaign for the book and will use it to sell the book. At times, deadlines require that staff members work after school and on weekends to complete the book. By the end of the year, students will: be better creative writers and have a usable college writing portfolio, be familiar with various types of advanced design software, learn about advanced photography, and combine the two together for a lasting product. The yearbook is a constantly improving product at SC and looks great on resumes!

Health/Physical Education

HEALTH & WELLNESS EDUCATION 3506 (HLTH&WELL)

One Semester
One Credit
One Class Period
Required: Sophomores

Recommended Background: None
Meets Health & Wellness graduation requirement

Health & Wellness provides the basis to help students adopt and maintain healthy behaviors. Health education should contribute directly to a student's ability to successfully practice behaviors that protect and promote health and avoid or reduce health risks. Through a variety of instructional strategies, students practice the development of functional health information (essential concepts); determine personal values that support health behaviors; develop group norms that value a healthy lifestyle; develop the essential skills necessary to adopt, practice, and maintain health-enhancing behaviors. This course includes the application of priority areas in a planned, sequential, comprehensive health education curriculum. Priority areas include: promoting personal health and wellness, physical activity, healthy eating, promoting safety and preventing unintentional injury and violence, promoting mental and emotional health, a tobacco-free lifestyle and an alcohol- and other drug-free lifestyle and promoting human development and family health. This course provides students with the knowledge and skills of health and wellness core concepts, analyzing influences, accessing information, interpersonal communication, decision-making and goal-setting skills, health-enhancing behaviors, and health and wellness advocacy skills.

PHYSICAL EDUCATION I 3542 (PHYS ED)

One Semester
One Credit
One Class Period
Required: Freshmen

Recommended Background: None
Fulfills part of Physical Education graduation requirement

Physical Education I focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum which provide students with opportunities to actively participate in at least four of the following: team sports; dual sport activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance, all which are within the framework of lifetime physical activities and fitness.

PHYSICAL EDUCATION II 3544 (PHYS ED II)

One Semester
One Credit
One Class Period
Required: Freshmen

Recommended Background: Physical Education I
Fulfills part of Physical Education graduation requirement

In Physical Education II, students actively participate in four of the following that were not in Physical Education I: team sports; dual sport activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance, all which are within the framework of lifetime physical activities and fitness. Ongoing assessment includes both written and performance-based skill evaluation.

ELECTIVE PHYSICAL EDUCATION 3560 (ELECT PE)

One or Two Semesters	Required Background: PE I & PE II, Varsity Letter or at least 2.8 GPA
One or Two Credits	
One Class Period	Elective
Open to: Sophomores-Seniors	Note: Enrollment will be capped at 28 students with upperclassmen having dibs

This class will focus on being in the weight room and tracking lifting exercises to be able to improve on weight lifting throughout the year. This class will focus on game play and will mainly consist of basketball with a few other favorites thrown in as well.

This course identifies what a student should know and be able to do as a result of a quality physical education program. The goal of a physically educated student is to maintain appropriate levels of cardio-respiratory endurance, muscular strength and endurance, flexibility, and body composition necessary for a healthy and productive life. Elective Physical Education promotes lifetime fitness, strength, and speed development and provides an opportunity for an in-depth study in one or more specific areas. It includes the study of physical development concepts and principles of sport and exercise as well as opportunities to develop or refine skills and attitudes that promote lifelong fitness. Students have the opportunity to design and develop an appropriate personal fitness program that enables them to achieve a desired level of fitness.

Mathematics

** Students will be placed in Math classes based on the recommendation of the Math Department.

ALGEBRA I 2520 (ALG I)

Two Semesters	Recommended Background: Successful completion of JH Math
Two High School Credits	Fulfills 2 credits of Mathematics graduation requirement
One Class Period Required	
Open To: Freshmen (JH students by recommendation of GT committee)	

Algebra I formalizes and extends the mathematics that students learned in the middle grades. Five critical areas comprise Algebra I: Relations and Functions; Linear Equations and Inequalities; Quadratic and Nonlinear Equations; Systems of Equations and Inequalities; and Polynomial Expressions. The critical areas deepen and extend understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend, and students engage in methods for analyzing, solving, and using quadratic functions. The Mathematical Practice Standards apply throughout each course and, together with the content 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.

GEOMETRY 2532 (GEOM)

Two Semesters
Two High School Credits
One Class Period
Open To: Freshmen.-Seniors

Required Background: Algebra I
Fulfills 2 credits of Mathematics graduation requirement

Geometry formalizes and extends students' geometric experiences from the middle grades. Students explore more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments. These critical areas comprise the Geometry course: Congruency and Similarity; Measurement; Analytic Geometry; Circles; and Polyhedra. Close attention should be paid to the introductory content for the Geometry conceptual category found in the high school CCSS. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that develops their ability to make sense of problem situations.

ALGEBRA II 2522 (ALG II)

Two Semesters
Two High School Credits
One Class Period
Open To: Sophomores-Seniors typically

Required Background: Algebra I & Geometry and teacher approval
Fulfills 2 credits of Mathematics graduation requirement

Algebra II builds on work with linear, quadratic, and exponential functions and allows for students to extend their repertoire of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions, and continue to expand and hone their abilities to model situations and to solve equations, including mastery of quadratic equations and solving exponential equations using the properties of logarithms. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that develops use of their ability to make sense of problem situations.

ANALYTICAL ALGEBRA II 2524 (ANA ALG)

Two Semesters
Two High School Credits
One Class Period
Open To: Juniors-Seniors typically

Required Background: Algebra I, Geometry, and teacher and parent approval
Fulfills 2 credits of Mathematics graduation requirement

Analytical Algebra II builds on previous work with linear, quadratic and exponential functions and extends to include polynomial, rational, radical, logarithmic, and other functions. Data analysis, statistics, and probability content should be included throughout the course, as students collect and use univariate and bivariate data to create and interpret mathematical models. Additionally, Analytical Algebra II should focus on the application of mathematics in various disciplines including business, finance, science, career and technical education, and social sciences, using technology to model real-world problems with various functions, using and translating between multiple representations. 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 develops their ability to make sense of problem situations.

This course is not recommended for students interested in pursuing a STEM degree at a four-year institution; this course does not prepare students for Pre Calculus/Trigonometry. If students use this course to fulfill the Algebra 2 credit requirement, the parent and student must sign a consent form notifying the parent and the student that enrollment in Analytical Algebra II may affect the student's ability to attend a particular post-secondary educational institution or enroll in a particular course at a particular post-secondary educational institution because Analytical Algebra II may not align with academic requirements established by the postsecondary educational institution.

PRE-CALCULUS: **ALGEBRA** 2564 (PRECAL AL)

One Semester	Required Background: Algebra I & II and Geometry
One High School Credit	Fulfills 1 credit of Mathematics graduation requirement
One Class Period	Note: Students must complete enrollment through Dual Enroll
Open To: Juniors-Seniors typically	through Ivy Tech to earn dual credit and meet qualifying requirements.

Pre-Calculus extends the foundations of algebra and functions developed in previous courses to new functions, including exponential and logarithmic functions, and to higher-level sequences and series. Pre-Calculus is made up of four strands: Functions in general; Quadratic, Polynomial, and Rational Equations and Functions; Exponential and Logarithmic Equations and Functions; and Parametric Equations. Students will also advance their understanding of imaginary numbers through an investigation of complex numbers and polar coordinates. The course is designed for students who expect math to be a major component of their future college and career experiences, and as such it is designed to provide students with strong foundations for calculus and other higher-level math courses. The Process Standards for Mathematics apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that develops their ability to make sense of problem situations

PRE-CALCULUS: TRIGONOMETRY 2566 (PRECAL TRIG)

One Semester	Required Background: Algebra I & II and Geometry
One High School Credit	Fulfills 1 credit of Mathematics graduation requirement
One Class Period	Note: Students must complete enrollment through Dual Enroll
Open To: Juniors-Seniors typically	through Ivy Tech to earn dual credit and meet qualifying requirements.

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. Students will also advance their understanding of imaginary numbers through an investigation of complex numbers and polar coordinates. The Process Standards for Mathematics apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that improves their ability to make sense of problem situations

QUANTITATIVE REASONING 2550 (QUANT REAS)

Two Semesters	Required Background: Algebra I and II and Geometry
Two High School Credits	Fulfills 2 credits of Mathematics graduation requirement
One Class Period	Note: Students must complete enrollment through Dual Enroll
Open To: Juniors-Seniors typically	through Ivy Tech to earn dual credit and meet qualifying requirements.

Quantitative Reasoning is a mathematics course focused on the study of numeracy, ratio and proportional reasoning, modeling, probabilistic reasoning to assess risk, and statistics. Students build knowledge of and confidence with basic mathematical/analytical concepts and operations required for problem solving, decision making, and economic productivity in real world applications and prepare for an increasingly information-based society in which the ability to use and critically evaluate information, especially numerical information, is essential. Technology, such as computers and graphing calculators, should be used frequently. This higher-level mathematics course is designed to align with college-level quantitative reasoning courses for dual secondary/college credit. 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 strengthens their ability to make sense of problem situations.

AP STATISTICS 2570 (AP STAT)

Two Semesters	Required Background: Algebra I & II and Geometry
Two High School Credits	Fulfills 2 credits of Mathematics graduation requirement
One Class Period	
Open To: Juniors and Seniors typically	Note: Teacher approval is highly recommended

AP Statistics is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. The AP Statistics course is equivalent to a one-semester, introductory, noncalculus-based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP Statistics course: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding.

AP CALCULUS AB 2562 (CALC AB AP)

Two Semesters	Required Background: Algebra I & II, Geometry, and Pre-Calculus
Two High School Credits	Fulfills 2 credits of Mathematics graduation requirement
One Class Period	
Open To: Juniors and Seniors typically	Note: Teacher approval is highly recommended

Calculus AB, Advanced Placement is a course based on content established by the College Board. Calculus AB is primarily concerned with developing the students' understanding of the concepts of calculus and providing experience with its methods and applications. The course emphasizes a multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. The connections among these representations also are important. Topics include: (1) functions, graphs, and limits; (2) derivatives; and (3) integrals. Technology should be used regularly by students and teachers to reinforce the relationships among the multiple representations of functions, to confirm written work, to implement experimentation, and to assist in interpreting results. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at:
http://apcentral.collegeboard.com/apc/public/repository/ap-calculus-course-description.pdf

Science Courses

BIOLOGY I 3024 (BIO I)

Two Semesters	Recommended Background: Successful completion of JH Science
Two High School Credits	Fulfills Biology graduation requirement
One Class Period	An entry level Science class
Open To: Freshmen – Seniors	

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.

INTEGRATED CHEMISTRY-PHYSICS 3108 (ICP)

Two Semesters
Two High School Credits
One Class Period
Open To: Freshmen – Seniors

Recommended Background: Completion of JH Science and Teacher Recommendation
Fulfills 2 credit requirement of Chemistry, ICP, or Physics and/or a Physical Science requirement
An entry level Science class

• Qualifies as a quantitative reasoning course

Integrated Chemistry and Physics incorporates high school Disciplinary Core Ideas, Science and Engineering Practices, and Crosscutting Concepts to help students gain a three-dimensional understanding of Chemistry and Physics topics. Disciplinary Core Ideas for this course include Matter and its Interactions, Forces, Energy, and Waves and their Applications in Technologies for Information Transfer. Instruction focuses on the observation of phenomena to develop an understanding of how scientific knowledge is acquired.

CHEMISTRY I 3064 (CHEM I)

Two Semesters
Two High School Credits
One Class Period
Open To: Sophomores – Seniors

Required Background: Biology I
Fulfills 2 credit requirement of Chemistry, ICP, or Physics

Chemistry I is a course based on the following core topics: properties and states of matter; atomic structure; bonding; chemical reactions; solution chemistry; behavior of gases, and organic chemistry. Students enrolled in Chemistry I compare, contrast, and synthesize useful models of the structure and properties of matter and the mechanisms of its interactions. 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.

• Qualifies as a quantitative reasoning course

ADVANCED SCIENCE, SPECIAL TOPICS (MARINE BIOLOGY) 3092 (ADV SCI ST – MARINE BIOLOGY)

One Semester
One Credit
One Class Period
Open To: Juniors and Seniors

Required Background: Biology I & Chemistry 1
Fulfills 1 credit of Science graduation requirement

Advanced Science, Special Topics is any science course that is grounded in extended laboratory, field, and literature investigations in one or more specialized science disciplines, in this case – Marine Biology. Students enrolled in this course engage in an in-depth study of Marine Biology. Students will learn about the physical structure and chemistry of the ocean, the diversity of ocean life, marine ecology, and the scope and impact of human interactions with the oceans. Laboratory activities reinforce concepts and principles presented. Under the direction of a science advisor, students enrolled in this course will complete an end-of-course project and presentation, such as a scientific research paper, integrating knowledge, skills, and concepts from the student's course of study. Individual projects are preferred, but group projects may be appropriate if each student in the group has specific and unique responsibilities.

ADVANCED SCIENCE, SPECIAL TOPICS (ZOOLOGY) 3092 (ADV SCI ST - ZOOLOGY)

One Semester
One Credit
One Class Period
Open To: Juniors and Seniors

Required Background: Biology I & Chemistry 1
Fulfills 1 credit of Science graduation requirement

Advanced Science, Special Topics is any science course that is grounded in extended laboratory, field, and literature investigations in one or more specialized science disciplines, in this case – Zoology. Students enrolled in this course engage in an in-depth study of Zoology. Students will learn about the structure and physiology of animals in all the major animal phyla, how life forms have changed through time and how organisms interact in various ecological systems. Laboratory activities will center around critical thinking activities and dissections. Under the direction of a science advisor, students enrolled in this course will complete an end-of-course project and presentation, such as a scientific research paper, integrating knowledge, skills, and concepts from the student's course of study. Individual projects are preferred, but group projects may be appropriate if each student in the group has specific and unique responsibilities.

NOTE THAT THE DESCRIPTION FOR ANATOMY & PHYSIOLOGY CAN BE FOUND UNDER THE CAREER CLUSTER: HEALTH SCIENCE SECTION ON PAGE 30.

CHEMISTRY II 3066 (CHEM II)

Two Semesters
Two High School Credits
One Class Period
Open To: Juniors and Seniors

Required Background: Must have earned at least C's in Biology I & Chemistry 1
Fulfills 2 credits of Science graduation requirement

• Qualifies as a quantitative reasoning course

Chemistry II is an extended laboratory, field, and literature investigations-based course. Students enrolled in Chemistry II examine the chemical reactions of matter in living and nonliving materials. Based on the unifying themes of chemistry and the application of physical and mathematical models of the interactions of matter, students use the methods of scientific inquiry to answer chemical questions and solve problems concerning personal needs and community issues related to chemistry.

AP BIOLOGY 3020 (BIO AP)

Two Semesters
Two High School Credits
One Class Period
Open To: Juniors and Seniors

Required Background: Must have earned at least C's in Biology I & Chemistry 1 and achieved a passing Biology ILEARN score, show AP Potential (shown on College Board account), or teacher approval
Fulfills 2 credits of Science graduation requirement

AP Biology is a course based on the content established by the College Board. The major themes of the course include: The process of evolution drives the diversity and unity of life, Biological systems utilize free energy and molecular building blocks to grow, to reproduce and to maintain dynamic homeostasis, Living systems store, retrieve, transmit and respond to information essential to life processes, Biological systems interact, and these systems and their interactions possess complex properties. A comprehensive description of this course can be found on the College Board AP Central Course Description webpage at:
http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

• Qualifies as a quantitative reasoning course

PHYSICS I 3084 (PHYS)

Two Semesters	Required Background: Excellent grade in Algebra II, and
Two High School Credits	Pre Calculus/Trigonometry (can be concurrent)
One Class Period	Fulfills 2 credit requirement of Chemistry, ICP, or Physics
Open To: Typically Seniors	Note: This course is taken online in our Virtual Lab

Physics I is a course focused on the following core topics: motion and forces; energy and momentum; temperature and thermal energy transfer; electricity and magnetism; vibrations and waves; light and optics. 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.

• Qualifies as a quantitative reasoning course

Social Studies

WORLD HISTORY AND CIVILIZATION 1548 (WLD HST/CVL)

Two Semesters	Recommended Background: None
Two Credits	Fulfills Geography or World History & Civ. graduation requirement
One Class Period	
Required: Sophomores	

World History emphasizes events and developments in the past that have greatly affected large numbers of people across broad areas and that have significantly influenced peoples and places in subsequent eras. Key events related to people and places as well as transcultural interaction and exchanges are examined in this course. Students are expected to compare and contrast events and developments involving diverse peoples and civilizations in different regions of the world. They will examine examples of continuity and change, universality and particularity, and unity and diversity among various peoples and cultures from the past to the present. Students are also expected to practice skills and process of historical thinking and research and apply content knowledge to the practice of thinking and inquiry skills and processes. There will be continuous and pervasive interactions of processes and content, skills and substance, in the teaching and learning of history.

UNITED STATES HISTORY (1877 to Present) 1542 (US HIST)

Two Semesters	Recommended Background: None
Two Credits	Fulfills US History graduation requirement
One Class Period	
Required: Juniors	

United States History builds upon concepts developed in previous studies of U.S. History and emphasizes national development from the late nineteenth century into the twenty-first century. After reviewing fundamental themes in the early development of the nation, students are expected to identify and review significant events, persons, and movements in the early development of the nation. The course then gives major emphasis to the interaction of key events, people, and political, economic, social, and cultural influences in national developments from the late nineteenth century through the present as they relate to life in Indiana and the United States. Students are expected to trace and analyze chronological periods and examine the significant themes and concepts in U.S. History. Students develop historical thinking and research skills and use primary and secondary sources to explore topical issues and to understand the cause for changes in the nation over time.

AP HISTORY 1562 (AP US HIST)
Two Semesters Recommended Background: PSAT Scores that predict AP Potential
Two Credits Fulfills US History graduation requirement
One Class Period
Open To: Juniors
This course is based on the content established and copyrighted by the College Board. AP United States History focuses on developing students' abilities to think conceptually about U.S. history from approximately 1491 to the present and apply historical thinking skills as they learn about the past. Seven themes of equal importance — identity; peopling; politics and power; work, exchange, and technology; America in the world; environment and geography; and ideas, beliefs, and culture — provide areas of historical inquiry for investigation throughout the course. These require students to reason historically about continuity and change over time and make comparisons among various historical developments in different times and places.

Students should be able to read a college level textbook and write grammatically correct, complete sentences, as writing is a large component of this course.

ECONOMICS 1514 (ECON)
One Semester Recommended Background: None
One Credit Fulfills Economics graduation requirement for Core 40, AHD, THD
One Class Period
Required: Seniors – Core 40, AHD, THD

Economics examines the allocation of resources and their uses for satisfying human needs and wants. The course analyzes economic reasoning used by consumers, producers, savers, investors, workers, voters, and government in making decisions. Key elements of the course include study of scarcity and economic reasoning, supply and demand, market structures, role of government, national income determination, the role of financial institutions, economic stabilization, and trade. Students will 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. The functions of government in a market economy and market structures will be examined. Students will understand economic performance, money, stabilization policies, and trade of the United States. The behavior of people, societies and institutions and economic thinking is integral to this course. Note: This class is taught using blended learning, which means the student will learn, in part, through delivery of content and instruction via digital and online media with some element of student control over time, place, path, or pace. This style of learning will benefit students that plan to continue their education through college or trade school as many of those courses are now moving to online components.

• Qualifies as a quantitative reasoning course

UNITED STATES GOVERNMENT 1540 (US GOVT)

One Semester
One Credit
One Class Period
Required: Seniors

Recommended Background: None
Fulfills Government graduation requirement

United States Government provides a framework for understanding the purposes, principles, and practices of constitutional representative democracy in the United States. Responsible and effective participation of citizens is stressed. Students understand the nature of citizenship, politics, and governments and understand the rights and responsibilities of citizens and how these are part of local, state, and national government. Students examine how the United States Constitution protects rights and provides the structure and functions of various levels of government. How the United States interacts with other nations and the government's role in world affairs will be examined. A focus on American interactions with other nations, and the government's role in world affairs, will also be included. Using primary and secondary resources, students articulate, evaluate, and defend positions on political issues. As a result, they will be able to explain the role of individuals and groups in government, politics, and civic activities and the need for civic and political engagement of citizens in the United States.

ETHNIC STUDIES 1516 (ETH STUDIES)

One Semester
One Credit
One Class Period
Open to: Freshmen-Seniors

Recommended Background: None
Fulfills Elective
Note: This course is offered in our Virtual Lab

This class 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 particular 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. This course may also include analysis of the political impact of ethnic diversity in the United States.

INDIANA STUDIES 1518 (IN STUDIES)

One Semester
One Credit
One Class Period
Open to: Freshmen-Seniors

Recommended Background: None
Fulfills Elective

Indiana Studies is an integrated course that compares and contrasts 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. Selections from Indiana arts and literature may also be analyzed for insights into historical events and cultural expressions.

World Languages

GERMAN I 2040 (GER I)
Two Semesters Recommended Background: None
Two High School Credits Fulfills 2 credits of World Language requirement for AHD
One Class Period or Elective/Directed Elective
Open To: 8th Grade-Seniors (8th Graders must have a B average or higher in English to sign up – semester grades must be a C- or higher for 8th graders to continue taking it and receive the high school credit)

German I introduces students to effective strategies for beginning German language learning, and to various aspects of German-speaking culture. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to basic requests and questions, understand and use appropriate greetings and forms of address, participate in brief guided conversations on familiar topics, and write short passages with guidance. This course also emphasizes the development of reading and listening comprehension skills, such as reading isolated words and phrases in a situational context and comprehending brief written or oral directions. Additionally, students will examine the practices, products and perspectives of German-speaking culture; recognize basic routine practices of the target culture; and recognize and use situation-appropriate non-verbal communication. This course further emphasizes making connections across content areas and the application of understanding German language and culture outside of the classroom.

GERMAN II 2042 (GER II)
Two Semesters Recommended Background: C- or better in German I
Two High School Credits Fulfills 2 credits of World Language requirement for AHD
One Class Period or Elective/Directed Elective
Open To: Freshmen-Seniors

German II builds upon effective strategies for German language learning by encouraging the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to requests and questions in expanded contexts, participate independently in brief conversations on familiar topics, and write cohesive passages with greater independence and using appropriate formats. This course also emphasizes the development of reading and listening comprehension skills, such as using contextual clues to guess meaning and comprehending longer written or oral directions. Students will address the presentational mode by presenting prepared material on a variety of topics, as well as reading aloud to practice appropriate pronunciation and intonation. Additionally, students will describe the practices, products and perspectives of German-speaking culture; report on basic family and social practices of the target culture; and describe contributions from the target culture. This course further emphasizes making connections across content areas and the application of understanding German language and culture outside of the classroom.

GERMAN III 2044 (GER III)

Two Semesters
Two High School Credits
One Class Period
Open To: Sophomores-Seniors

Recommended Background: C- or better in German II
Fulfills 2 credits of World Language requirement for AHD
or Elective/Directed Elective

German III builds upon effective strategies for German language learning by facilitating the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to initiate, sustain and close conversations; exchange detailed information in oral and written form; and write cohesive information with greater detail. This course also emphasizes the continued development of reading and listening comprehension skills, such as using cognates, synonyms and antonyms to derive meaning from written and oral information, as well as comprehending detailed written or oral directions. Students will address the presentational mode by presenting student-created material on a variety of topics, as well as reading aloud to practice appropriate pronunciation and intonation. Additionally, students will continue to develop understanding of German-speaking culture through recognition of the interrelations among the practices, products and perspectives of the target culture; discussion of significant events in the target culture; and investigation of elements that shape cultural identity in the target culture. This course further emphasizes making connections across content areas as well the application of understanding German language and culture outside of the classroom.

GERMAN IV 2046 (GER IV)

Two Semesters
Two High School Credits
One Class Period
Open To: Juniors-Seniors

Recommended Background: C- or better in German III
Elective/Directed Elective

German IV provides a context for integration of the continued development of language skills and cultural understanding with other content areas and the community beyond the classroom. The skill sets that apply to the exchange of written and oral information are expanded through emphasis on practicing speaking and listening strategies that facilitate communication, such as the use of circumlocution, guessing meaning in familiar and unfamiliar contexts, and using elements of word formation to expand vocabulary and derive meaning. Additionally, students will continue to develop understanding of German-speaking culture through explaining factors that influence the practices, products, and perspectives of the target culture; reflecting on cultural practices of the target culture; and comparing systems of the target culture and the student's own culture. This course further emphasizes making connections across content areas through the design of activities and materials that integrate the target language and culture with concepts and skills from other content areas. The use and influence of the German language and culture in the community beyond the classroom is explored through the identification and evaluation of resources intended for native German speakers.

SPANISH I 2120 (SPAN I)

Two Semesters
Two High School Credits
One Class Period

Recommended Background: None
Fulfills 2 credits of World Language requirement for AHD
or Elective/Directed Elective

Open To: 8th grade - Seniors (8th Graders must have a B average or higher in English to sign up – semester grades must be a C- or higher for 8th graders to continue taking it and receive the high school credit)

Spanish I introduces students to effective strategies for beginning Spanish language learning, and to various aspects of Spanish speaking culture. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to basic requests and questions, understand and use appropriate greetings and forms of address, participate in brief guided conversations on familiar topics, and write short passages with guidance. This course also emphasizes the development of reading and listening comprehension skills, such as reading isolated words and phrases in a situational context and comprehending brief written or oral directions. Additionally, students will examine the practices, products and perspectives of Spanish-speaking culture; recognize basic routine practices of the target culture; and recognize and use situation-appropriate non-verbal communication. This course further emphasizes making connections across content areas and the application of understanding Spanish language and culture outside of the classroom.

SPANISH II 2122 (SPAN II)

Two Semesters
Two High School Credits
One Class Period

Recommended Background: C- or better in Spanish I
Fulfills 2 credits of World Language requirement for AHD
or Elective/Directed Elective

Open To: Freshmen –Seniors

Spanish II builds upon effective strategies for Spanish language learning by encouraging the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to requests and questions in expanded contexts, participate independently in brief conversations on familiar topics, and write cohesive passages with greater independence and using appropriate formats. This course also emphasizes the development of reading and listening comprehension skills, such as using contextual clues to guess meaning and comprehending longer written or oral directions. Students will address the presentational mode by presenting prepared material on a variety of topics, as well as reading aloud to practice appropriate pronunciation and intonation. Additionally, students will describe the practices, products and perspectives of Spanish-speaking culture; report on basic family and social practices of the target culture; and describe contributions from the target culture. This course further emphasizes making connections across content areas and the application of understanding Spanish language and culture outside of the classroom.

SPANISH III 2124 (SPAN III)
Two Semesters
Two High School Credits
One Class Period
Open To: Sophomores-Seniors

Recommended Background: C- or better in Spanish II
Fulfills 2 credits of World Language requirement for AHD or Elective/Directed Elective

Spanish III builds upon effective strategies for Spanish language learning by facilitating the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to initiate, sustain and close conversations; exchange detailed information in oral and written form; and write cohesive information with greater detail. This course also emphasizes the continued development of reading and listening comprehension skills, such as using cognates, synonyms and antonyms to derive meaning from written and oral information, as well as comprehending detailed written or oral directions. Students will address the presentational mode by presenting student created material on a variety of topics, as well as reading aloud to practice appropriate pronunciation and intonation. Additionally, students will continue to develop understanding of Spanish-speaking culture through recognition of the interrelations among the practices, products and perspectives of the target culture; discussion of significant events in the target culture; and investigation of elements that shape cultural identity in the target culture. This course further emphasizes making connections across content areas as well the application of understanding Spanish language and culture outside of the classroom.

SPANISH IV 2126 (SPAN IV)
Two Semesters
Two High School Credits
One Class Period
Open To: Sophomores-Seniors

Required Background: Approval from Spanish teacher
Fulfills 2 credits of World Language requirement for AHD or Elective/Directed Elective

Spanish IV, a course based on Indiana's Academic Standards for World Languages, provides a context for integration of the continued development of language skills and cultural understanding with other content areas and the community beyond the classroom. The skill sets that apply to the exchange of written and oral information are expanded through emphasis on practicing speaking and listening strategies that facilitate communication, such as the use of circumlocution, guessing meaning in familiar and unfamiliar contexts, and using elements of word formation to expand vocabulary and derive meaning. Additionally, students will continue to develop understanding of Spanish-speaking culture through explaining factors that influence the practices, products, and perspectives of the target culture; reflecting on cultural practices of the target culture; and comparing systems of the target culture and the student's own culture. This course further emphasizes making connections across content areas through the design of activities and materials that integrate the target language and culture with concepts and skills from other content areas. The use and influence of the Spanish language and culture in the community beyond the classroom is explored through the identification and evaluation of resources intended for native Spanish speakers.

Other

STUDY HALL 9998
One or Two Semesters
No Credits
One Class Period
Open To: 7th Grade-Seniors

Students will be expected to have something to work on quietly each day during study hall.

BASIC SKILLS 0500 (BAS SKLS)
Two Semesters
Two High School Credits Elective for all diploma types
One Class Period
Open To: Freshman-Seniors, placement is determined by IEP and/or Case Conference

Basic Skills Instruction is supplemental instruction in either Language Arts Literacy or Mathematics based on each student's needs. Instruction and support are provided in the basic concepts and skills that students need in order to be successful in their classroom. This course will provide instruction for individuals in secondary-level reading, writing, computation, and problem-solving skills in order to assist them in achieving their academic, career, and personal goals. A student may only take this class if determined as a result of an IEP and/or Case Conference Decision.

Materials needed:
Students should bring pencil, paper, calculator, and any homework they have additional questions or concerns over.

OFFICE/MEDIA CENTER/HIGH SCHOOL TEACHER AIDE 9999 (AIDE)
One Semester Required: C- or better in all classes from the previous semester,
No Credits Approval of Principal, good attendance and behavior record
One Class Period
Open to: Juniors-Seniors ONLY

SC STUDENT TECHNOLOGY ASSISTANT
Two Semesters Required Required: See Mrs. Kammrath with questions.
One Class Period
Open to: Juniors-Seniors ONLY

The SC Student Technology Assistant is a new program designed to help students and staff with our one to one initiative and other new technologies at South Central. They will 1) Provide basic level support for Chromebooks. 2) Handle walk-in questions. 3) Maintain a log of all support requests with detailed information. 5) Participate in student-run training programs and/or meetings during the semester. 7) Assist teachers with classes. 8) Routinely check for tasks to be completed. 9) Use any free time not needed to fulfill the above duties to do self-training to develop knowledge and skills.

Knowledge and Experience: Familiarity with Chromebooks important. This includes knowledge of common applications (Google and various Browsers). The ability to analyze and solve problems is required. Experience or willingness to train in troubleshooting, hardware, network, and software problems is desirable.

Character: Student assistants must be trustworthy, reliable, and show initiative. They should be able to work independently