

A green, curved line representing a hill. On the hill, there are five black silhouettes of people walking from left to right. The first is a person in a wheelchair, followed by a person walking, a person walking, a person walking, and a person in a graduation cap and gown.

Indiana Department of Education

Glenda Ritz, NBCT
Indiana Superintendent of Public Instruction

MEMORANDUM

TO: State Board of Education

FROM: Jenny Berry, Director, College and Career Readiness,
Leslie Fatum, Assistant Director, College and Career Readiness
Peggy Wild, State CTE Director

DATE: December 15, 2014

SUBJECT: Changes to Approved Course Titles and Descriptions for 2015-16

To assure that Indiana provides students with the most current offerings to prepare for college and careers, the Department of Education annually updates and distributes the course titles and descriptions for the following school year. Following are proposed changes to Indiana's state approved course titles for 2015-2016, based on demand and feedback from Indiana's secondary education community, post-secondary/higher education, and business/industry partners along with recommendations from the Career and Technical Education field, the College and Career Pathway Panels that have reviewed pathways and courses, and the Statewide Advisory Committee for Career and Technical Education.

Proposed changes to Indiana's state approved courses

We propose **adding** the following course titles in order to expand the offerings available to schools, increase flexibility, facilitate alignment and sequencing of general/liberal arts courses and Career and Technical Education (CTE) courses, increase accuracy of enrollment reports, and continue development and implementation of Indiana's College and Career Pathways.

American Sign Language IV

American Sign Language IV is a course that continues to focus on the students' non-verbal communication skills at advanced levels of competency beyond American Sign Language III. Indiana Academic Standards for American Sign Language adopted in 2014 include standards for American Sign Language Level IV. Adding American Sign Language IV expands schools' ability to meet student needs and interests in attaining proficiency in ASL.

Automation and Robotics I

Automation and Robotics I will be the first course in the new pathway in the current Manufacturing & Logistics Career Cluster. Students will gain skills to design and build basic robots that use sensors and actuators to solve specific problems and complete specific tasks. This will include introductory programming autonomous mode. Students will also learn to program a humanoid robot, tethered and in autonomous mode, able to react to specific circumstances and perform human-like tasks when programming is complete. This course will provide fundamental knowledge and skills in basic lasers, pneumatics, hydraulics, mechanics, basic electronics, and programmable logic controllers along with an understanding of career pathways in this sector.

Automation and Robotics II

Automation and Robotics II will support the new pathway in the Manufacturing Cluster and includes the study industrial robots, programming PLC's, automating cells, advanced programming, and designing/building task oriented robots. Students will engage in active learning, critical thinking, and problem solving through advanced robotic procedures and processes. Students will learn industrial robotic programming languages, strategies for automating to improve efficiencies, and be introduced to advanced programming language that is common in local industry. Students will study basic computer numerical controlled (CNC) machining and will combine automation and CNC machining. They will apply information in real world situations to create working solutions and will complete projects, including building robots to perform tasks in autonomous mode and analyze their own career pathway plans in this sector.

Introduction to the Energy Industry

Introduction to the Energy Industry follows the Center for Energy Workforce Development (CEWD) curriculum for the Energy Industry Fundamentals Certificate Program. This course provides students with an understanding of the occupations in the energy industry and the education and training to enter and advance in careers in the field. Students will discover all aspects of the energy industry including nuclear, natural gas and renewable energy. Schools with CEWD Approved Course Provider status can offer their students the opportunity to earn the Energy Industry Fundamentals Certificate.

Energy Industry I

Energy Industry I encompasses the curriculum created by the National Center for Research in Construction Education (NCCER) so that students can earn industry based certifications that could lead to entry level positions in the Energy Industry. This course includes the NCCER standards for Core Introductory Craft Skills, Alternative and Green Energy, and Electrical 1. Students will complete information and skills training in Craft Skills assessments which will be later required through Electrical 1 and 2. They will also review the relationship of Alternative and Green Energy as it relates to the delivery of Gas and Electrical Energy. Students will end the year by starting on the Electrical 1 curriculum from the NCCER. In all, students have the potential to earn 3 certifications from NCCER. This course includes field trips, on-site training, mentors, and project-based learning activities in the Energy Industry.

Energy Industry II

Energy Industry II continues with the NCCER Electrical 1 curriculum and goes into the Electrical 2 curriculum followed by the NCCER certification curriculum. This curriculum includes electrical installation and generation and will touch on natural gas services. Students will have the opportunity to experience career internships, participate with field mentors, carry out a culminating senior project and participate in field trips related to their area of interest. Industry partners would include Energy companies, Electricians Union (IBEW), the steel industry and manufacturing companies. Energy Industry I is a prerequisite.

Health Science Education II: Athletic Training

Health Science Education II: Athletic Training is an extended laboratory experience at a qualified clinical site designed for students to assume the role of an athletic trainer assistant and practice technical skills previously learned in the classroom, including information on the health care system and employment opportunities at a variety of entry levels, an overview of the health care delivery systems, health care terms, and legal and ethical considerations. It prepares students with the knowledge, skills and attitudes essential for providing basic care under the direction of licensed Athletic Trainers. Health Science I is a prerequisite.

Health Science Education II: Medical Forensics

Health Science Education II: Medical Forensics is a new course within the Health Science Cluster and Medical Specialties pathway. Students complete an extended work based learning laboratory experience at a qualified clinical site designed for students to assume the role of a forensic examiner assistant and practice previously learned technical skills, including information on health care and delivery systems, employment opportunities, medical terminology, and legal and ethical considerations. It prepares students with the knowledge, skills and attitudes essential for basic forensics under the direction of licensed Forensic Examiners. Health Science I is a prerequisite.

Introduction to Accounting (replaces *Accounting*)

Introduction to Accounting in a title change needed to build a dedicated course sequence for accounting. It introduces the language of business and Generally Accepted Accounting Principles (GAAP) and procedures for proprietorships and partnerships using double-entry accounting. Emphasis is placed on comprehending 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. It is a required prerequisite for *Advanced Accounting*.

Advanced Accounting

Advanced Accounting is the second course in the new Accounting sequence. Creating the Intro and Advanced sequence aligns these courses with the postsecondary offerings that require two years of accounting at the secondary level in order for students to earn dual college credit. *Advanced Accounting* expands on the Generally Accepted Accounting Principles (GAAP) and procedures for proprietorships and partnerships using double-entry accounting covered in *Introduction to 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 more complex financial reports as a basis for decision-making. Successful completion of *Introduction to Accounting* is a prerequisite to *Advanced Accounting*.

Banking and Investment Careers (replaces *Financial Services*)

Banking and Investment Careers addresses the need of schools in areas that have workforce demand in the finance industry. It analyzes and synthesizes high level skills needed for a multitude of career in the banking and investment industry. Students learn banking, investments, and other finance fundamentals and applications related to financial institutions, business and personal financial services, investment and securities, risk management products, and corporate finance. The course provides students with work based learning experiences to acquire and apply knowledge and skills in one or more careers in the industry. *Introduction to Accounting and Advanced Accounting* are prerequisites.

Advanced Placement (AP) and International Baccalaureate (IB) Course Offerings

Per the flexibility granted last year by the SBOE in order to be more responsive as these programs evolve, adjustments to the Advanced Placement (AP) and the International Baccalaureate (IB) courses have been made accordingly to align our course offerings with the changes and updates made by the governing organizations of these curricular programs.