Indiana Department of Education – Division of College & Career Preparation Indiana Career and Technical Education Curriculum Framework

PLTW BIOMEDICAL INNOVATION

PLTW Biomedical Innovation is a capstone course designed to give students the opportunity to design innovative solutions for the health challenges of the 21st century as they work through progressively challenging open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health. They have the opportunity to work on an independent project and may work with a mentor or advisor from a university, hospital, physician's office, or industry. Throughout the course, students are expected to present their work to an adult audience that may include representatives from the local business and healthcare community. NOTE: Use of the PLTW Course number is limited to schools that have agreed to be part of the Project Lead the Way network and follow all training and data collection requirements.

- DOE Code: 5219
- Recommended Grade Level: Grade 12
- Recommended Prerequisites: PLTW Principles of the Biomedical Sciences, PLTW Human Body Systems and PLTW Medical Interventions
- Credits: 1 credit per semester, 2 semesters maximum, maximum of two 2 credits
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Dual/college credit
 - Ivy Tech
 - DOE #5219 PLTW Biomedical Innovation will be paired with Ivy Tech's BIOT 107. This is the fourth course in the PLTW Biomedical Sciences sequence. In order to qualify for college credits in BIOT 107 at Ivy Tech, students must have completed DOE #5218 Principles of the Biomedical Sciences, DOE #5216 Human Body Systems, and DOE #5217 Medical Interventions prior to enrollment in BOE #5219 PLTW Biomedical Innovation.

Application of Content and Multiple Hour Offerings

Intensive laboratory applications are a component of this course and may be either school based or work based or a combination of the two. Work-based learning experiences should be in a closely related industry setting. Instructors shall have a standards-based training plan for students participating in work-based learning experiences.

Academic Standards Checklist

Schools must use the national standards for which this program is based upon.

Note: Only schools with a signed agreement with the national Project Lead The Way (PLTW) organization may use this title to offer any PLTW course. Schools must use the national standards for which this program is based upon.