



Approved Innovative Course

- *Districts must have local board approval to implement innovative courses*
- *Innovative courses may meet state elective credit only*
- *CTE Innovative courses may not be the final course in a coherent sequence for an endorsement*
- *Course requirements must be met without modification*

Course: Principles of Biomedical Science

PEIMS Code: N1302092

Abbreviation: PRBIOSCI

Grade Level(s): 11-12

Number of Credits: 1.0

Course description:

The Principles of Biomedical Science (PBS)- PLTW course provides an introduction to biomedical science through hands-on projects and problems. Students investigate concepts of biology and medicine as they explore health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. They will determine the factors that led to the death of a fictional woman as they sequentially piece together evidence found in her medical history and her autopsy report. Students will investigate lifestyle choices and medical treatments that might have prolonged the woman's life and demonstrate how the development of disease is related to changes in human body systems.

The activities, projects and problems in PBS-PLTW introduce students to human physiology, basic biology, medicine, and research processes and allows students to design experiments to solve problems. Key biological concepts, including maintenance of homeostasis in the body, metabolism, inheritance of traits, and defense against disease are embedded in the curriculum.

Teacher qualifications:

An assignment for Principles of Biomedical Science is allowed with one of the following certificates as well as successful completion of the Project Lead The Way's Core Training requirements for Principles of Biomedical Science.

PLTW Core Training:

PLTW's Core Training requires approximately 90 hours of instruction led by PLTW approved Master Teachers. Course mastery is demonstrated by the submission and approval of a course portfolio that meet's PLTW's requirements. After successful completion of Core Training, teachers receive access to the National PLTW Engineering Professional Learning Community, course-specific student and classroom instructional resources, and Ongoing Training resources through the PLTW Content Management System.



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- Health Science: Grades 6-12.
- Health Science Technology Education: Grades 8-12.
- Vocational Health Occupations.
- Vocational Health Science Technology.
- Secondary Biology (Grades 6-12)
- Secondary Science, Composite (Grades 6-12)
- Secondary Science (Grades 6-12)
- Life Science: Grades 7-12
- Life Science: Grades 8-12
- Master Science Teacher: Grades 8-12
- Mathematics/Physical Science/Engineering: Grades 6-12
- Mathematics/Physical Science/Engineering: Grades 8-12
- Science, Technology, Engineering, and Mathematics: Grades 6-12
- Science: Grades 7-12
- Science: Grades 8-12
- Chemistry: Grades 7-12
- Chemistry: Grades 8-12
- Secondary Chemistry (Grades 6-12)
- Trade and Industrial Education: Grades 6-12. This assignment requires appropriate work approval.
- Trade and Industrial Education: Grades 8-12. This assignment requires appropriate work approval.
- Vocational Trades and Industry (Grades 6-12). This assignment requires appropriate work approval.
- Vocational Trades and Industry Pre-Employment Laboratory (Grades 6-12). This assignment requires appropriate work approval.
- Vocational Trades and Industry Co-op (Grades 6-12). This assignment requires appropriate work approval.

Additional information:

Districts may use these courses only with the approval of Project Lead The Way. All requirements of Project Lead The Way must be met. Please contact Project Lead The Way directly for these requirements:

Project Lead The Way



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Solution Center
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