

PROJECT LEAD THE WAY
BIOMEDICAL SCIENCE

Principles of the
Biomedical
Sciences
1 Credit (9-12)

Human Body
Systems
1 Credit (9-12)

Medical
Interventions
1 Credit (10-12)

Biomedical
Innovations
1 Credit (10-12)

PROJECT LEAD THE WAY
PATHWAYS TO ENGINEERING

Introduction to
Engineering
Design
(IED)

Principles of
Engineering
(POE)

Digital Electronics
(DE)

Civil
Engineering &
Architecture
(CEA)
*Begins 2013-
2014*

Computer Integrated
Manufacturing

Begins 2013-2014 PLTW

Any Two of the Above
Courses

Engineering
Design &
Development
(EDD)

Global Academy-Project Lead the Way (PLTW)

The Global Academy is a new school sponsored by a consortium of local school districts to offer programs not currently available in their high schools. The Middleton-Cross Plains Area School District (MCPASD) has joined these other districts to offer programs in Biomedical Sciences and Engineering. For more information about MCPASD's involvement in the Global Academy, visit the district website.

Global Academy courses are rigorous project based that are also focused on career preparation. These courses will be taught at Middleton High School and they are all part of Project Lead the Way (PLTW) programming.

PLTW middle and high school STEM education programs provide the inspiration for a new generation of innovators, the practical skills and hands-on experience to make students' knowledge count in the real world, and the basis for the next generation of leadership in the sciences, technology, engineering, and mathematics.

PLTW develops motivated, well-rounded students by instilling confidence, stressing the importance of self-discovery, encouraging innovative problem solving and critical thinking, teaching team building, and rewarding creativity. Students will develop skills essential for achievement in the classroom and success in college and at work. Additionally:

- PLTW students achieve significantly higher scores in reading, mathematics, and science.
- PLTW graduates earn higher GPA's as college freshmen and stay in school.
- PLTW graduates are 5 to 10 times more likely to study STEM related fields.

Project Lead the Way is a non-profit organization focused on introducing and preparing high school students for Biomedical, Engineering and Technical careers of the future. PLTW forms partnerships with public schools, higher education institutions and the private sector to increase opportunities for students in engineering and technical fields.

Particularly, PLTW provides a high rigor, project-based curriculum meeting national science and math standards, professional development for teachers and guidance counselors and a comprehensive national support network. PLTW courses are accessible to ALL students, and the initial biomedical courses expose students to multiple career options in the biomedical arena. All of the courses are based on problem-solving, teamwork, communication and leadership as the students also build the math, science and technology skills to prepare for and succeed in tomorrow's careers.

BIOMEDICAL SCIENCE

Project Lead the Way provides numerous courses in Biomedical Science. These courses are provided through the MHS Science Education Department. Please refer to this section for information on the following engineering courses. All biomedical courses can be taken for dual credit.

- Principles of the Biomedical Science (PBS)
- Human Body Systems (HBS)
- Medical Interventions (MI)
- Biomedical Innovations (BI)

PATHWAYS TO ENGINEERING

Project Lead the Way also provides numerous courses in engineering. These courses are provided through the MHS Engineering and Technology Education Department. Please refer to this section for information on the following engineering courses. All engineering course can be taken for dual credit.

- Introduction to Engineering Design (IED)
- Principles of Engineering (POE)
- Digital Electronics
- Civil Engineering and Architecture
- Computer Integrated Manufacturing
- Aerospace Engineering
- Engineering Design and Development (capstone course)