Biomedical Science Program
Project Lead The Way
at
Arlington High School
Riverside Unified School District
Nationally Recognized Program

- Over 400,000 students in more than 4,200 schools in all 50 states and the District of Columbia
- Over 10,500 teachers trained
- 51 University affiliates, including Duke University, University of Minnesota, California State University
- Partnerships with Fortune 100 and 500 companies, and forward thinking philanthropic organizations
California PLTW Partnership and Community Support

- Schools are supported by Regional Centers
  - Coordinating K-12, Community College, University, and Community Groups
  - State Lead: San Diego State University
  - Regional Affiliate: Cal Poly Pomona

- Industry Partners through CCPT include: Parkview Hospital

- Higher education affiliation through CCPT includes: UCR School of Medicine, Riverside City College
PLTW has five programs that are used in schools all over the country.

- **PLTW Launch**
  - Amazing discoveries start here

- **PLTW Gateway**
  - Deep curiosity takes root

- **PLTW Engineering**
  - Design for a successful future awaits

- **PLTW Biomedical Science**
  - Biomedical sciences come alive

- **PLTW Computer Science**
  - Tomorrow's technologies, learned today
Where students learn content in context through:

• Case-based scenarios
• Hands-on learning
• Activities, projects, and problems
• Real world application
• Open-ended problems
TEACHER SERVES AS FACILITATOR (ACTIVATOR), STUDENT IS DIRECTOR OF LEARNING...

...and the classroom becomes a collaboration space
BIOMEDICAL SCIENCE COURSE SEQUENCE

Principles of Biomedical Science (PBS)
UC/CSU a-g approved in lab science (d) category

Human Body Systems (HBS)
UC/CSU a-g approved in lab science (d) category

Medical Interventions (MI)
UC/CSU a-g approved in lab science (d) category

CAPSTONE: Biomedical Innovation (BI)
UC/CSU a-g approved in elective (g) category
PRINCIPLES OF BIOMEDICAL SCIENCE (PBS)

UNITs

1. The Mystery
2. Diabetes
3. Sickle Cell Disease
4. Heart Disease
5. Infectious Disease
6. Post Mortem
10th

HUMAN BODY SYSTEMS (HBS)

UNITS

1. Identity
2. Communication
3. Power
4. Movement
5. Protection
6. Homeostasis
11th MEDICAL INTERVENTIONS (MI)

UNITS

1. How to Fight Infection
2. How to Screen What is in Your Genes
3. How to Conquer Cancer
4. How to Prevail When Organs Fail
SAMPLE PROBLEMS INCLUDE

Designing an effective ER
Design of a medical innovation
Combat a public health issue
Forensic Autopsy

Independent project
## Sample 4-year High School Course Sequence

<table>
<thead>
<tr>
<th>9th grade</th>
<th>10th grade</th>
<th>11th grade</th>
<th>12th grade</th>
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<tbody>
<tr>
<td>PLTW Principles of Biomedical Science</td>
<td>PLTW Human Body Systems</td>
<td>PLTW Medical Interventions</td>
<td>PLTW Biomedical Innovation</td>
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<tr>
<td>Biology/Honors Biology</td>
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<td>English Language Arts</td>
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<tr>
<td>Physical Education</td>
<td>Physical Education</td>
<td>Visual/Performing Arts</td>
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<tr>
<td>Language Other Than English</td>
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<tr>
<td>World History</td>
<td>US History</td>
<td>Government/Economics</td>
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</tbody>
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0-Period, 7-Period, and/or Summer School is required. Students should see their counselor.
• College Board Advanced Placement + Project Lead The Way
• Demonstrates to colleges and employers that student is ready for advanced coursework and interested in careers in this discipline
• Criteria - satisfactorily complete three courses in the pathway
  • one AP course
  • one PLTW course
  • third course, either AP or PLTW
  • earn a qualifying score of 3 or higher on the AP Exam and a score of Proficient or higher on the PLTW End of Course assessment
The College Board and Project Lead The Way are developing a portfolio of **career-focused opportunities** that will allow students to pursue work-based learning with leading industry partners.

Opportunities may include:
- industry-based internships,
- scholarships for two- or four-year degree completion, or
- priority interviews for students with the credential.