Medical Interventions

8381 36 weeks

Acknowledgments

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Course Description

Suggested Grade Level: 11 or 12

Prerequisite: 8380

In this specialization course for Project Lead the Way (PLTW), students are taught concepts in fighting infections, understanding genetics, and preventing, detecting, and treating cancer and organ failure.
Entrepreneurship Infusion Units

Entrepreneurship Infusion Units may be used to help students achieve additional, focused competencies and enhance the validated tasks/competencies related to identifying and starting a new business venture. Because the unit is a complement to certain designated courses and is not mandatory, all tasks/competencies are marked “optional.”

Appendix: Credentials, Course Sequences, and Career Cluster Information

Industry Credentials: Only apply to 36-week courses

- College and Work Readiness Assessment (CWRA+)
- National Career Readiness Certificate Assessment
- Project Lead the Way End-of-Course Assessments
- Workplace Readiness Skills for the Commonwealth Examination

Concentration sequences: A combination of this course and those below, equivalent to two 36-week courses, is a concentration sequence. Students wishing to complete a specialization may take additional courses based on their career
pathways. A program completer is a student who has met the requirements for a CTE concentration sequence and all other requirements for high school graduation or an approved alternative education program.

- Biomedical Innovation (PLTW) (8382/36 weeks)
- Principles of the Biomedical Sciences (PLTW) (8379/36 weeks)

### Career Cluster: Health Science

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Occupations</th>
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| **Biotechnology Research and Development** | Biochemist  
Cell Biologist  
Medical, Clinical Laboratory Technician  
Research Assistant |
| **Diagnostics Services**          | Cardiovascular Technologist  
Computer Tomography (CT) Technologist  
Medical, Clinical Laboratory Technician  
Medical, Clinical Laboratory Technologist  
Nuclear Medicine Technologist  
Phlebotomist  
Radiologic Technologist, Radiographer  
Radiologist |
| **Health Informatics**            | Bioinformatics Technician  
Epidemiologist |
| **Support Services**              | Communications Equipment Operator  
Environmental Sampling and Analysis Technician  
Medical, Clinical Laboratory Technologist |
| **Therapeutic Services**          | Athletic Trainer  
Audiologist  
Certified Nurse Aide  
Dental Assistant  
Emergency Medical Technician, Paramedic  
Exercise Physiologist  
Home Health Aide  
Licensed Practical Nurse  
Massage Therapist  
Medical Assistant  
Occupational Therapist  
Occupational Therapist Aide  
Optician  
Pharmacy Technician  
Physical Therapist  
Physical Therapist Assistant  
Physician  
Recreation Therapist  
Registered Nurse  
Surgical Technologist  
Veterinary Assistant  
Veterinary Technologist |
### Career Cluster: Human Services

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Occupations</th>
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| Counseling and Mental Health Services | Career Counselor  
Dietitian, Nutritionist  
Educational/School Counselor  
Marriage and Family Therapist  
Mental Health Counselor  
Nutritional Counselor  
Rehabilitation Counselor  
Social and Human Service Assistant  
Substance Abuse and Behavioral Disorder Counselor  
Volunteer Coordinator |

### Career Cluster: Science, Technology, Engineering and Mathematics

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Occupations</th>
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</thead>
<tbody>
<tr>
<td>Engineering and Technology</td>
<td>Biomedical Engineer</td>
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</tbody>
</table>
| Science and Mathematics     | Animal Scientist       
Biologist  
Materials Scientist  
Microbiologists  
Toxicologist |