

**NHS Applied STEM Department**  
**Course Descriptions – PLTW Biomedical Science**

Course Title	Grade	Description
Principles of Biomedical Science (PBS) <ul style="list-style-type: none"> <li>● Project Lead the Way</li> <li>● Full year course</li> </ul>	9-12	<ul style="list-style-type: none"> <li>➤ 1<sup>st</sup> of the Biomed series</li> <li>➤ Introduction to the field</li> <li>➤ Topics include: human medicine, research processes, bioinformatics</li> <li>➤ Investigations include: human body systems &amp; various health conditions</li> <li>➤ Credits 2</li> <li>➤ Science course for General, Core 40, Core 40 w/Academic Honors, Core 40 w/ technical Honors diploma</li> <li>➤ Counts as Career-Technical credit</li> <li>➤ <b>Honors credit:</b> 0.5 added to GPA</li> <li>➤ <b>Prerequisite:</b> <ul style="list-style-type: none"> <li>○ <b>Freshmen: Concurrent Biology 1 Honors</b></li> <li>○ <b>Sophomore: C or higher in Biology 1 &amp; Concurrent Chemistry or ICP</b></li> </ul> </li> </ul>
Human Body Systems (HBS) <ul style="list-style-type: none"> <li>● Project Lead the Way</li> <li>● Full year course</li> <li>● For Jrs. or Srs. HBS &amp; MI may be taken simultaneously</li> </ul>	10-12	<ul style="list-style-type: none"> <li>➤ 2<sup>nd</sup> of the Biomed series</li> <li>➤ Study of basic human physiology with a focus on human health. Students employ a variety of monitors to examine body systems.</li> <li>➤ Credits 2</li> <li>➤ Science course for General, Core 40, Core 40 w/Academic Honors, Core 40 w/ technical Honors diploma</li> <li>➤ Counts as Career-Technical credit</li> <li>➤ <b>Honors credit:</b> 0.5 added to GPA</li> <li>➤ <b>Prerequisite: Principles of Biomedical Science (PBS)</b></li> </ul>
Medical Interventions (MI) <ul style="list-style-type: none"> <li>● Project Lead the Way</li> <li>● Full year course</li> <li>● For Seniors, MI &amp; BI may be taken simultaneously</li> </ul>	11-12	<ul style="list-style-type: none"> <li>➤ 3<sup>rd</sup> of the Biomed series</li> <li>➤ Study of medical interventions to support humans in treating disease and maintaining health</li> <li>➤ Credits 2</li> <li>➤ Science course for General, Core 40, Core 40 w/Academic Honors, Core 40 w/ technical Honors diploma</li> <li>➤ <b>Honors credit:</b> 0.5 added to GPA</li> <li>➤ <b>Prerequisite: Human Body Systems (HBS)</b> <ul style="list-style-type: none"> <li>○ <b>Juniors &amp; Seniors may take concurrent with HBS</b></li> </ul> </li> </ul>
Biomedical Innovations (BI) <ul style="list-style-type: none"> <li>● Project Lead the Way</li> <li>● Full year course</li> <li>● For Seniors, may be taken simultaneously with MI</li> </ul>	12	<ul style="list-style-type: none"> <li>➤ 4<sup>th</sup> of the Biomed series</li> <li>➤ Capstone course               <ul style="list-style-type: none"> <li>○ Semester 1: Advanced topics in Biomed</li> <li>○ Semester 2: Internship or Research Project</li> </ul> </li> <li>➤ Credits 2</li> <li>➤ <b>Honors credit:</b> 0.75 added to GPA</li> <li>➤ <b>Dual credit:</b> BIOT 107 through IvyTech (4 credits)</li> <li>➤ <b>Prerequisite: Medical Interventions (MI)</b> <ul style="list-style-type: none"> <li>○ <b>Seniors may take concurrent with MI</b></li> </ul> </li> </ul>

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