Pre-Medical Lab Science

Degree Offered

• Associate of Arts

Nature of the Program

The associate's program in pre-medical lab science fulfills the first two years of undergraduate study required for admittance to the Bachelor of Science degree program in medical laboratory science offered by the West Virginia University School of Medicine. Courses in the program provide all the general education, biology, chemistry, and math courses required for admission and provide the foundations required for success in the bachelor program.

Students accepted into the program complete an additional two years of courses in medical lab science and receive a Bachelor’s degree. Once admitted into the bachelor program, students can choose to emphasis to become a clinical laboratory scientist or histotechnologist.

Career Opportunities

Clinical laboratory scientists analyze, develop and perform medical laboratory tests and evaluate results on blood and bodily fluids. Histotechnologists are responsible for routine and specialized procedures on tissue and autopsy specimens for diagnosis. Both can find employment in labs in hospitals, doctor's offices or private lab facilities.

FACULTY

CHAIR

• Vicki Huffman - Ph.D. Biomedical Science

ADVISORS

• Nikki Chandler - M.S. Mathematics
• Candace Lawrence - M.A. Mathematics

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations

<table>
<thead>
<tr>
<th>General Education Foundations</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1 - Composition &amp; Rhetoric</td>
<td>3-6</td>
</tr>
<tr>
<td>ENGL 101 &amp; ENGL 102 or ENGL 103</td>
<td>Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research Accelerated Academic Writing</td>
</tr>
<tr>
<td>F2A/F2B - Science &amp; Technology</td>
<td>4-6</td>
</tr>
<tr>
<td>F3 - Math &amp; Quantitative Reasoning</td>
<td>3-4</td>
</tr>
<tr>
<td>F4 - Society &amp; Connections</td>
<td>3</td>
</tr>
<tr>
<td>F5 - Human Inquiry &amp; the Past</td>
<td>3</td>
</tr>
<tr>
<td>F6 - The Arts &amp; Creativity</td>
<td>3</td>
</tr>
<tr>
<td>F7 - Global Studies &amp; Diversity</td>
<td>3</td>
</tr>
<tr>
<td>F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)</td>
<td>9</td>
</tr>
<tr>
<td>Total Hours</td>
<td>31-37</td>
</tr>
</tbody>
</table>

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

GEF Elective Requirements (4, 5, 6, and 7) 12

| ENGL 101 & ENGL 102 | Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1) 6 |
| MATH 126            | College Algebra (GEF 3) 3 |
Pre-Medical Lab Science

**STAT 211**  
Elementary Statistical Inference 3

**BIOL 101**  
General Biology 4

& **BIOL 103**  
and General Biology Laboratory (GEF 8)  

**BIOL 102**  
General Biology 4  

& **BIOL 104**  
and General Biology Laboratory (GEF 8)  

**CHEM 115**  
Fundamentals of Chemistry 4  

& **115L**  
and Fundamentals of Chemistry 1 - Laboratory (GEF 2)  

**CHEM 116**  
Fundamentals of Chemistry 4  

& **116L**  
and Fundamentals of Chemistry 2 - Laboratory (GEF 8)  

**CHEM 233**  
Organic Chemistry 4  

& **CHEM 235**  
and Organic Chemistry Laboratory  

**CHEM 234**  
Organic Chemistry 4  

& **CHEM 236**  
and Organic Chemistry Laboratory  

**PALM 200**  
Medical Terminology 3  

**WVUE 191**  
First Year Seminar 1  

**Elective**  
8  

Total Hours 60

**Suggested Plan of Study**

**First Year**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (GEF 1)</td>
<td>3 ENGL 102 (GEF 1)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MATH 126 (GEF 3)</td>
<td>3 BIOL 102 &amp; BIOL 104 (GEF 8)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL 101 &amp; BIOL 103 (GEF 8)</td>
<td>4 CHEM 116 &amp; 116L (GEF 8)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CHEM 115 &amp; 115L (GEF 2)</td>
<td>4 GEF 4</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
| WVUE 191 | 1 Select one of the following:  
UGST 270  
Elective | 1 |

**Second Year**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 233 &amp; CHEM 235</td>
<td>4 CHEM 234 &amp; CHEM 236</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>STAT 211</td>
<td>3 GEF 7</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PALM 200</td>
<td>3 Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GEF 5</td>
<td>3 Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GEF 6</td>
<td>3 Elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

16 14

Total credit hours: 60

**Major Learning Outcomes**

**PRE-MEDICAL LAB SCIENCE**

Upon completion of the associates in pre-medical lab science program, students will be able to:

1. Describe general biological concepts including cell structure and function, physiology and genetics.
2. Use mathematical concepts to solve problems.
3. Use chemical principles and laboratory techniques to describe and analyze the chemical structure and reactivity of organic molecules.
4. Apply for admission into the medical lab science program at WVU School of Medicine or equivalent program.