### APPROVED TECHNICAL ELECTIVES FOR THE CWRU BIOCHEMISTRY MAJOR (FALL SEMESTER)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 312</td>
<td>Basic Histology</td>
</tr>
<tr>
<td>BIOC 312</td>
<td>Proteins and Enzymes</td>
</tr>
<tr>
<td>BIOL 301</td>
<td>Biotechnology Laboratory</td>
</tr>
<tr>
<td>BIOL 306</td>
<td>Mathematical Analysis of Biological Models</td>
</tr>
<tr>
<td>BIOL 326</td>
<td>Genetics</td>
</tr>
<tr>
<td>BIOL 346</td>
<td>Human Anatomy</td>
</tr>
<tr>
<td>BIOL 362</td>
<td>Biotechnology Laboratory</td>
</tr>
<tr>
<td>BIOL 373</td>
<td>Introduction to Neurobiology</td>
</tr>
<tr>
<td>BIOL 374</td>
<td>Neurobiology of Behavior</td>
</tr>
<tr>
<td>CHEM 304</td>
<td>Quantitative Analysis Laboratory (2)</td>
</tr>
<tr>
<td>CHEM 311</td>
<td>Inorganic Chemistry I</td>
</tr>
<tr>
<td>CHEM 331</td>
<td>Laboratory Methods in Inorganic Chemistry</td>
</tr>
<tr>
<td>ECHE 340</td>
<td>Biochemical Engineering</td>
</tr>
<tr>
<td>MATH 376</td>
<td>Mathematical Analysis of Biological Models</td>
</tr>
<tr>
<td>NTRN 328</td>
<td>Child Nutrition, Development and Health</td>
</tr>
<tr>
<td>PHRM 309</td>
<td>Principles of Pharmacology</td>
</tr>
<tr>
<td>PHOL 468</td>
<td>Membrane Physiology</td>
</tr>
<tr>
<td>PHYS 320</td>
<td>Introduction to Biological Physics</td>
</tr>
</tbody>
</table>

**Notes to students:**
1. Check the Bulletin for prerequisites and the course schedule for availability.
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3. BIOC 312 and BIOC 334 are both required courses for the B.S. Biochemistry major and neither can serve as a technical elective for Biochemistry B.S. students.
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### APPROVED TECHNICAL ELECTIVES FOR THE CWRU BIOCHEMISTRY MAJOR

**(SPRING SEMESTER)**

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</tr>
<tr>
<td>ANAT 391</td>
<td>Embryology</td>
</tr>
<tr>
<td>ANAT 411</td>
<td>Gross Anatomy (6)</td>
</tr>
<tr>
<td>ANAT 610</td>
<td>Oxygen and Physiological Function</td>
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<tr>
<td>BIOC 334</td>
<td>Structural Biology</td>
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<tr>
<td>BIOC 354</td>
<td>Biochemistry and Biology of RNA</td>
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<tr>
<td>BIOL 300</td>
<td>Dynamics of Biological Systems</td>
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<td>BIOL 316</td>
<td>Fundamental Immunology (4)</td>
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<td>BIOL 319</td>
<td>Applied Probability and Stochastic Processes for Biology</td>
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<tr>
<td>BIOL 325</td>
<td>Cell Biology</td>
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<tr>
<td>BIOL 326</td>
<td>Genetics</td>
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<tr>
<td>BIOL 328</td>
<td>Plant Genomics and Proteomics</td>
</tr>
<tr>
<td>BIOL 340</td>
<td>Human Physiology</td>
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<tr>
<td>BIOL 343</td>
<td>Microbiology</td>
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<td>BIOL 346</td>
<td>Human Anatomy</td>
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<tr>
<td>BIOL 363</td>
<td>Experimental Developmental Biology</td>
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<tr>
<td>BIOL 378</td>
<td>Computational Neuroscience</td>
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<tr>
<td>BIOL 402</td>
<td>Principles of Neural Science</td>
</tr>
<tr>
<td>CHEM 302</td>
<td>Introductory Physical Chemistry II (accepted as elective for B.A. only)</td>
</tr>
<tr>
<td>CHEM 305</td>
<td>Introductory Physical Chemistry Lab</td>
</tr>
<tr>
<td>CHEM 325</td>
<td>Physical Methods for Determining Organic Structure</td>
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<tr>
<td>CHEM 333</td>
<td>Medicinal Chemistry &amp; Drug Development</td>
</tr>
<tr>
<td>CHEM 339</td>
<td>Bioinorganic Chemistry</td>
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<tr>
<td>CHEM 421</td>
<td>Advanced Organic Chemistry I</td>
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<tr>
<td>MBIO 450</td>
<td>Cells and Pathogens</td>
</tr>
<tr>
<td>MPH 464</td>
<td>Obesity and Cancer</td>
</tr>
<tr>
<td>NTRN 434</td>
<td>Advanced Human Nutrition II</td>
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<tr>
<td>PATH 444</td>
<td>Neurodegenerative Diseases</td>
</tr>
<tr>
<td>PHOL 466</td>
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