EAST TENNESSEE STATE UNIVERSITY — COLLEGE OF ARTS AND SCIENCES 
DEPARTMENT OF CHEMISTRY
CHEMISTRY MAJOR—BIOCHEMISTRY CONCENTRATION

Name: _______________________________    E#: ______________________________  Catalog Year: _________________________________

TBR Requirements: See other check sheet

<table>
<thead>
<tr>
<th>Biochemistry Concentration Core (22 cr)</th>
<th>Two of the Following (4 cr)</th>
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<tbody>
<tr>
<td>CHEM 1110: General Chemistry I Lecture</td>
<td>CHEM 4611: Advanced Integrated Lab—Dynamics (F/S) 2 cr</td>
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<tr>
<td>CHEM 1111: General Chemistry I Lab</td>
<td>CHEM 4621: Advanced Integrated Lab—Structures (S) 2 cr</td>
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<tr>
<td>CHEM 1120: General Chemistry II Lecture</td>
<td>CHEM 4631: Adv. Integrated Lab—Analytical Tech (F) 2 cr</td>
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<tr>
<td>CHEM 1121: General Chemistry II Lab</td>
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<tr>
<td>CHEM 2010: Organic Chemistry I Lecture</td>
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<tr>
<td>CHEM 2011: Organic Chemistry I Lab</td>
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<tr>
<td>CHEM 2020: Organic Chemistry II Lecture</td>
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<tr>
<td>CHEM 2220: Quantitative Analysis Lecture</td>
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<tr>
<td>CHEM 2221: Quantitative Analysis Lab</td>
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Pick one of the following

- BIOL 3141: Genetics Lab (F/S) 2 cr
- BIOL: 4597: Recombinant DNA Lab (S) 3 cr

Select one from the following (3-5 cr)

- BIOL 3150: Cell Biology Lecture (F/S) 3 cr
- BIOL 3151: Cell Biology Lab (F) 2 cr
- BIOL 4647: Molecular Biology (F) 3 cr
- HSCI 3320: General Microbiology Lecture (F/S) 4 cr
- HSCI 3321: General Microbiology Lab (S) 0 cr
- HSCI 3540: Immunology (S) 3 cr

Other Required Courses (16-18 cr)

- MATH 1910: Calculus I (F/S) 4 cr
- MATH 1920: Calculus II (F/S) 4 cr
- PHYS 3510: Biophysics (F/S) 3 cr
- PHYS 2110: Technical Physics I-Calculus Based (F) 5 cr
- PHYS 2120: Technical Physics II-Calculus Based (S) 5 cr

Other Bachelor of Science Required Courses

- PHIL 2640: Science and the Modern World (F/S) 3 cr
- SPCH 2320: Argumentation and Debate (F/S) 3 cr
- PHIL 2030: Practical Reasoning (F/S) 3 cr

Elective Requirements 0-4 cr

<table>
<thead>
<tr>
<th>Subject</th>
<th>Course #</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM</td>
<td>4010</td>
<td>Seminar in Chemistry - Recommended Only</td>
<td>2 cr</td>
</tr>
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</table>

Electives may include one or more of the following recommended courses during the last semester of study:

- BIOC 5100: Protein Structure and Function
- BIOC 5350: Molecular Immunology
- BIOC 5600: Genetics and Molecular Biology
- BIOC 5700: Macromolecular Interactions
- BIOL 2992 Research Orientation
- BIOL 4900 Special Topics in Biochemistry
- BIOL 4900: Independent Study
- CHEM 4900: Research in Chemistry

Student Signature:_____________________________________________________________________________________

Advisor Signature:_____________________________________________________________________________________

Advisor Printed Name:___________________________________________________________________________________