

**EAST TENNESSEE STATE UNIVERSITY — COLLEGE OF ARTS AND SCIENCES**  
**DEPARTMENT OF CHEMISTRY**  
**CHEMISTRY MAJOR—CHEMICAL PHYSICS CONCENTRATION**

Name: \_\_\_\_\_ E#: \_\_\_\_\_

**TBR Requirements: See other check sheet**

<p><b>Chemical Physics Concentration Core (22 cr)</b></p> <p>CHEM 1110/11: General Chemistry I Lec/Lab <input style="width: 50px; height: 20px;" type="text"/></p> <p>CHEM 1120/20: General Chemistry II Lec/Lab <input style="width: 50px; height: 20px;" type="text"/></p> <p>CHEM 2010: Organic Chemistry I Lecture <input style="width: 50px; height: 20px;" type="text"/></p> <p>CHEM 2011: Organic Chemistry I Lab <input style="width: 50px; height: 20px;" type="text"/></p> <p>CHEM 2020: Organic Chemistry II Lecture <input style="width: 50px; height: 20px;" type="text"/></p> <p>CHEM 2021: Organic Chemistry II Lab <input style="width: 50px; height: 20px;" type="text"/></p> <p>CHEM 2220: Quantitative Analysis Lecture <input style="width: 50px; height: 20px;" type="text"/></p> <p>CHEM 2221: Quantitative Analysis Lab (I) <input style="width: 50px; height: 20px;" type="text"/></p>	<p><b>Grade</b></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p>
<p><b>Additional Required Courses (27 cr)</b></p> <p>CHEM 3110: Descriptive Inorganic Chemistry <input style="width: 50px; height: 20px;" type="text"/></p> <p>CHEM 3611: Introductory Integrated Lab (W) <input style="width: 50px; height: 20px;" type="text"/></p> <p>CHEM 3750: Physical Chemistry I <input style="width: 50px; height: 20px;" type="text"/></p> <p>CHEM 3760: Physical Chemistry II <input style="width: 50px; height: 20px;" type="text"/></p> <p>CHEM 4010: Seminar in Chemistry (O) <input style="width: 50px; height: 20px;" type="text"/></p> <p>CHEM 4110: Advanced Inorganic Chemistry <input style="width: 50px; height: 20px;" type="text"/></p> <p>CHEM 4200: Principles of Instrumental Analysis <input style="width: 50px; height: 20px;" type="text"/></p> <p>CHEM 4611: Advanced Integrated Lab— Dynamics (W) <input style="width: 50px; height: 20px;" type="text"/></p> <p>CHEM 4621: Advanced Integrated Lab— Structures (W) <input style="width: 50px; height: 20px;" type="text"/></p> <p>CHEM 4631: Adv. Integrated Lab— Analytical Tech. (W) <input style="width: 50px; height: 20px;" type="text"/></p> <p>CHEM 4147/57: Biochem. Of Macromolecules Lec/Lab <input style="width: 50px; height: 20px;" type="text"/></p> <p style="text-align: center;">OR</p> <p>CHEM4167/77: Biochem. Of Metabolism Lec/Lab <input style="width: 50px; height: 20px;" type="text"/></p>	<p><b>Grade</b></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p>
<p><b>Pick one of the following (3 cr)</b></p> <p>CHEM 4817: Introduction to Industrial Chemistry <input style="width: 50px; height: 20px;" type="text"/></p> <p>CHEM 4900: Research (must take 3 hrs to satisfy requirement) <input style="width: 50px; height: 20px;" type="text"/></p> <p>CHEM 4957: Special Topics <input style="width: 50px; height: 20px;" type="text"/></p> <p><b>Other Required Courses (14 cr)</b></p> <p>MATH 1910: Calculus I <input style="width: 50px; height: 20px;" type="text"/></p> <p>MATH 1920: Calculus II <input style="width: 50px; height: 20px;" type="text"/></p> <p>PHYS 2110: Technical Physics-Calculus Based <input style="width: 50px; height: 20px;" type="text"/></p> <p>PHYS 2120: Technical Physics-Calculus Based <input style="width: 50px; height: 20px;" type="text"/></p>	<p><b>Grade</b></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p>
<p><b>Required Physics courses beyond first year (5-6cr)</b></p> <p>PHYS 3010: Classical Mechanics <i>or</i> <input style="width: 50px; height: 20px;" type="text"/></p> <p>PHYS 3610: Introduction to Atomic and Nuclear Physics <input style="width: 50px; height: 20px;" type="text"/></p> <p>PHYS 3410: Modern Physics Lab <input style="width: 50px; height: 20px;" type="text"/></p> <p><b>Pick two of the following (6-8)</b></p> <p>PHYS 3510: Biophysics <input style="width: 50px; height: 20px;" type="text"/></p> <p>PHYS 3710: Electricity and Magnetism <input style="width: 50px; height: 20px;" type="text"/></p> <p>PHYS 4007: Computational Physics <input style="width: 50px; height: 20px;" type="text"/></p> <p>PHYS 4117: Kinetics and Statistical Thermodynamics <input style="width: 50px; height: 20px;" type="text"/></p> <p>PHYS 4617: Quantum Physics <input style="width: 50px; height: 20px;" type="text"/></p> <p><b>Choice 1:</b> <input style="width: 50px; height: 20px;" type="text"/> Grade: <input style="width: 50px; height: 20px;" type="text"/></p> <p><b>Choice 2:</b> <input style="width: 50px; height: 20px;" type="text"/> Grade: <input style="width: 50px; height: 20px;" type="text"/></p> <p><b>Other Bachelor of Science Required Courses</b></p> <p>PHIL 2640: Science and the Modern World <input style="width: 50px; height: 20px;" type="text"/></p> <p>SPCH 2320: Argumentation and Debate <input style="width: 50px; height: 20px;" type="text"/></p>	<p><b>Grade</b></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p> <p><input style="width: 50px; height: 20px;" type="text"/></p>

(W) denotes course that satisfies a writing intensive course. (O) denotes course that satisfies an oral intensive course. (I) denotes a course that satisfies a technology intensive course.

Elective Requirements			3-6 cr	
Subject	Course #	Title	Hours	Grade

Student Signature: \_\_\_\_\_

Advisor Signature: \_\_\_\_\_