# Course Outline

**Course Title:** General Chemistry I  
**Semester Course Prefix and Number:** CHEM 1522  
**Old Quarter Course Prefix and Number:** CHEM 111 & 112  
**Submitted By:** Jason Slattery  
**Approval Date:**  
**Revision Date:** February 2016  
**Number of Credits:** 4  
**Number of Lecture Credits:** 3  
**Number of Lab Credits:** 1  
**Number of Lab Hours:** 3  
**Semester(s) Offered:**  
**Class Size:** 40/lecture 20/lab  
**Negotiated by AASC on:** (date)  
**Number of Studio/Demonstration/Internship Credits:**  

## Course Purpose Code:
- 0 – Developmental Courses  
- 1 – Non-transferable  
- 2 – Technical course related to career programs  
- 3 – College course which has the primary goal of applying certain concepts (e.g., vocal ensemble)  
- 4 – Other college course not considered a part of MNTC (e.g., computer science, health, physical education)  
- **X** 5 – Course which is intended to fulfill the Minnesota Transfer Curriculum (MNTC) requirements or intended for transfer.  
- 9 – Continuing Education/Customized Training specialized credit course (not occurring in 0-5)  

## Catalog Description:
This course will cover ionic and molecular compounds, stochiometry, aqueous reactions, thermochemistry, electronic structure of atoms, period trends, molecular geometry, and physical properties of gases.

## Prerequisites and/or recommended entry skills/knowledge:
- **Course Prerequisite(s):** None  
- **Reading Prerequisite:** None  
- **Composition Prerequisite:** None  
- **Mathematics Prerequisite:** Placement by CPT score or grade of C or better in MATH 0095

## Career Programs and Transfer Majors Accessing this Course:
All Science Majors

**Minnesota Transfer Curriculum Goal(s) partially met by this course if applicable:**

(Notes: No more than two goals may be met by any one course. AASC review and the Chief Academic Officer’s approval are required.)

<table>
<thead>
<tr>
<th>Goal</th>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>0.</td>
<td>None</td>
<td>The Humanities and Fine Arts</td>
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<tr>
<td>1.</td>
<td>Communications</td>
<td>Human Diversity</td>
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<td>2.</td>
<td>Critical Thinking</td>
<td>Global Perspectives</td>
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<td><strong>X</strong></td>
<td>Natural Sciences</td>
<td>Ethical and Civic Responsibility</td>
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<td>4.</td>
<td>Mathematical/Logical Reasoning</td>
<td>People and the Environment</td>
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<tr>
<td>5.</td>
<td>History and the Social and Behavioral Sciences</td>
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**Learning Outcomes:** (including any relevant competencies listed in the Minnesota Transfer Curriculum)

Upon completion of this course, the student will be able to:

- Demonstrate understanding of scientific theories
- Critically analyze and solve problems with multiple steps
- Formulate and test hypotheses by performing laboratory experiments
- Communicate experimental findings, analyses, and interpretations in writing

**Student Assessment Methods:**

- End of chapter homework problems
- Quiz and exam problems
- Laboratory reports

**Use of Instructional Technology:** (includes software, interactive video and other instructional technologies):

NA

**Additional Special Information:** (special fees, directives on hazardous materials, etc.)

**Transfer Information:** (Please list colleges/majors that accept this course in transfer.)

**Affiliated Mesabi Range College Courses and Programs:**

IRE (Itasca Community College)

**Approvals:**

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<thead>
<tr>
<th>Body</th>
<th>Representative Signatures</th>
<th>Date</th>
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<tbody>
<tr>
<td>Faculty Association</td>
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<td>Academic Affairs Standards Committee</td>
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<td>Chief Academic Officer</td>
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**Distribution:** Original – Instructional Services

**Copies:** Transfer Specialist, Originating Faculty Member, Records

**Revised:** December 2012