

Georgian College Academic and Career Preparation Program

ACE Chemistry, AACE 1008

Course Description

In this course, students develop knowledge of chemistry as it applies to health, industry and environmental issues. Students analyze problems, perform laboratory exercises and communicate scientific information to develop the skills necessary for post-secondary programs, such as health sciences and environmental sciences.

Learning Outcomes

Upon successful completion of this course the student will have reliably demonstrated the ability to:

- 1. practice the skills and strategies required for scientific inquiry and problem solving;
- 2. apply foundational concepts and principles of chemistry;
- 3. use observational and critical thinking skills to solve laboratory questions;
- 4. perform laboratory activities using appropriate safety procedures and guidelines;
- 5. use appropriate numeric, symbolic, graphical, and linguistic modes of representation to communicate scientific ideas, plans, and experimental results.

Course Materials, Content, and Evaluation

The primary textbook for Chemistry, *Chemistry 2e*, is an open educational resources (OER) and is provided at no cost to students. You will also find the course content, assignments, quizzes, etc. on Blackboard, the college's learning management system (LMS). Course modules are listed in the chart on the next page.

The passing grade for this course is 50%, and ALL modules must be completed to receive a final mark. Please note that students who are pursuing post-secondary programs are responsible to find out the prerequisite(s) needed for acceptance, including any required grades. Admission requirements can change from one year to another, so it is important to make sure you have the most up to date information.

Course Modules

MODULES	ASSESSMENT TYPE	WEIGHT
Assignments	3-5 Assignments	15%
Experiments	5-7 Experiments	25%
Unit 1: Nature of Matter	Test	9%
Unit 2: Trends and Bonding	Test	9%
Unit 3: Nomenclature	Test	9%
Unit 4: Chemical Calculations 1	Test	9%
Unit 5: Chemical Calculations 2	Test	9%
Unit 6: Organic Chemistry	Test	9%
Unit 7a: Chemistry in the Environment (Option A*)	Test	9%
Unit 7b: Electrochemistry (Option B*)	Test	9%
*Faculty will select either Option (A) or (B) for Unit 7	Experiments 25% Tests 60% Assignments 15%	100%