

Syllabus Chemistry 101/103
Introduction to Modern Chemistry/Chemical Science in a Modern Society

Professor: Kimi S. Hatton, Ph. D.
Office: Planetary Hall, Rm 309
Phone: 7039931078
Email: shatton@gmu.edu

Required:

Textbook: 1) Chemistry for Changing Times + 2) **Calculator** 1\$ type)

This course meets the Natural science requirement CORE, one of the requirements of the University General Education program.

Topics

Chapter 1	Chemistry
Chapter 2	Atoms
Chapter 3	Atomic Structure
Chapter 4	Chemical Bonds
Chapter 5	Chemical Accounting
Chapter 6	Gasses, Liquids and Solids and Intermolecular Forces
Chapter 7	Acids and Bases
Chapter 8	How Water Behaves
Chapter 9	Oxidation and Reduction

Examinations: Exam 1, Exam 2, Exam 3, Exam 4, Final Exam

Please note that the schedule can change. Attendance and participation is required in this course.

Grading

Your grade for Chemistry 103 will be derived from the following categories with the indicated percentage points:

Exams (best 3 from 4)	50%
Other activities	5%
Final Exam	20 %
Laboratory	25%

Your grade for Chemistry 101 will be derived from the following categories with the indicated percentage points:

Exams (best 3 from 4)	66%
Activities	7%
Final Exam	27 %

Course Policies:

- 1) A student in 104 must complete 75% of the laboratory sessions (which include lab attendance and submission of a laboratory report). A grade of F will be entered for those not completing this requirement.
- 2) The Honor Code operates during all aspects of the course. Familiarize yourself with the honor code.
- 3) No make-up exams or alternatively scheduled final exams are permitted. Plan your schedule in advance of taking this course.

Overall goals for General Education in the Natural Sciences

The general education natural sciences courses intend to engage students in scientific exploration; foster their curiosity; enhance their enthusiasm for science; and enable them to apply scientific knowledge and reasoning to personal, professional and public decision-making. To achieve these goals, students will:

1. Understand how scientific inquiry is based on investigation of evidence from the natural world, and that scientific knowledge and understanding:
 - evolves based on new evidence
 - differs from personal and cultural beliefs.
2. Recognize the scope of science, and its limits.
3. Recognize and articulate the relationship between science and society and the application of science to societal challenges (eg. health, conservation, sustainability, energy, natural disasters, etc.).
4. Evaluate scientific information (e.g., distinguish primary and secondary sources, assess credibility and validity of information)
5. Participate in scientific inquiry and communication, including:
 - Making careful and systematic observations
 - Developing and testing a hypothesis
 - Analyzing evidence
 - Interpreting results

The topics of this course include basic concepts in Chemistry, atomic structure, molecular structure, reactions and acid base chemistry.

Additional information is included here from the **Office of the Provost:**

ACADEMIC INTEGRITY

Mason is an Honor Code university; please see the University Catalog for a full description of the code and the honor committee process (<http://oai.gmu.edu/themason-honor-code-2/>). The principle of academic integrity is taken very seriously and violations are treated gravely. What does academic integrity mean in this course? Essentially this: when you are responsible for a task, you will perform that task. When you rely on someone else's work in an aspect of the performance of that task, you will give full credit in the proper, accepted form. Another aspect of academic integrity is the free play of ideas. Vigorous discussion and debate are encouraged in this course, with the firm expectation that all aspects of the class will be conducted with civility and respect for differing ideas, perspectives, and traditions. When in doubt (of any kind) please ask for guidance and clarification from the professor.

MASON EMAIL ACCOUNTS

Students must use their MasonLIVE email account to receive important University information, including messages related to this class. See <http://masonlive.gmu.edu> for more information.

OFFICE OF DISABILITY SERVICES

If you are a student with a disability and you need academic accommodations, please see me and contact the Office of Disability Services (ODS) at 993-2474. All academic accommodations must be arranged through the ODS. <http://ods.gmu.edu>

OTHER USEFUL CAMPUS RESOURCES:

WRITING CENTER: A114 Robinson Hall; (703) 993-1200;
<http://writingcenter.gmu.edu>

UNIVERSITY LIBRARIES "Ask a Librarian"
<http://library.gmu.edu/>

COUNSELING AND PSYCHOLOGICAL SERVICES (CAPS): (703) 993-2380;
<http://caps.gmu.edu>

UNIVERSITY POLICIES

The University Catalog, <http://catalog.gmu.edu>, is the central resource for university policies affecting student, faculty, and staff conduct in university academic affairs. Other policies are available at <http://universitypolicy.gmu.edu/>. All members of the university community are responsible for knowing and following established policies