



LOYOLA

UNIVERSITY CHICAGO

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**CHEM 101 – 003: GENERAL CHEMISTRY A Lec/Disc
SUMMER SESSION I 2018
Loyola University Chicago**

Instructor: Dr. Angela Mahaffey

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Office Hours: (BVM HALL 907) **Tuesdays 12pm - 1pm; and always by appointment.**

Class Meeting Location and Times:

Cuneo Hall Rm 302; Mon/Tues/Wed 830am – 1110am (May 21 – June 29).

Prerequisites: MATH 117 or equivalent. A year of high school chemistry is recommended

Co-requisite: CHEM 111 and MATH 118

Course Description (LOCUS):

This non-majors course deals with the development of basic chemical principles. Multiple perspectives of matter will be used to describe and explain characteristics, properties, and relationships across the following topics: atomic structure, nuclear chemistry, periodicity, molecular structure, chemical bonding, chemical reactions, thermochemistry, aqueous solutions, gases.

Outcome:

Students will learn the foundational concepts of chemistry in these topic areas and develop skills in scientific problem solving and critical thinking.

Required Textbook and Online Source:

- (1) T.L. Brown et al. (2018). *Chemistry: The Central Science (with MasteringChemistry)*, 14th ed.
- (2) www.masteringchemistry.com *Mastering Chemistry Website will be used for Homework assignments and Exams. Course ID: **MCMAHAFFEY50697SU2018**
- (3) CHEM 101: General Chemistry A (Summer) Discussion Sheets to be provided in class.

Attendance, Discussion Participation and Exam Policy:

Lecture/Discussion attendance is Mandatory for this General Chemistry A course. Participation in Discussion and completion of Discussion worksheets is also a requirement. No Discussion worksheets will be assigned on “Exam Days”. Exams will cover previously detailed lecture materials. **Calculators are allowed. NO cellphone/laptop (or other electronics) use during Exams. Each student must complete his/her own Discussion Sheet and Exam. Violation of either results in automatic loss of ALL possible Discussion E.C. points and Exam points.**

Academic Honesty (“Integrity”):

Plagiarism on the part of a student in academic work or dishonest examination behavior will result minimally in the instructor assigning the grade of "F" for the assignment or examination.

In addition, all instances of academic dishonesty must be reported to the chairperson of the department involved. [...] Academic cheating is another serious act that violates academic integrity. Obtaining, distributing, or communicating examination materials prior to the scheduled examination without the consent of the teacher; providing information to or obtaining information from another student during the examination; attempting to change answers after the examination has been submitted; and falsifying medical or other documents to petition for excused absences all are violations of the integrity and honesty standards of the examination process. (http://www.luc.edu/academics/catalog/undergrad/reg_academicintegrity.shtml)

Harassment/Bias Reporting

It is unacceptable and a violation of university policy to harass, discriminate against or abuse any person because of his or her race, color, national origin, gender, sexual orientation, disability, religion, age or any other characteristic protected by applicable law. Such behavior threatens to destroy the environment of tolerance and mutual respect that must prevail for this university to fulfill its educational and health care mission. For this reason, every incident of harassment, discrimination or abuse undermines the aspirations and attacks the ideals of our community. The university qualifies these incidents as incidents of bias. (<http://www.luc.edu/hr/biasreporting.shtml>)

Services for Students with Disabilities

If you require special accommodations for testing procedures, please obtain a completed SSWD form from Services for Students with Disabilities (6339 N. Sheridan Rd., Chicago, IL 60660 · 773.508.3700 (ph) - <http://www.luc.edu/sswd/register.shtml>)

Tutoring Services

Loyola University Chicago's Center for Tutoring and Academic Excellence Offers Tutoring Services, details can be found here: <http://luc.edu/tutoring/> *Additionally, during the Spring and Fall Semesters LUC's ACS (American Chemical Society) chapter offers tutoring in Flanner Hall (Rm 129) Time and Dates TBD (see Chemistry Office Personnel for updates).

Course Grade & Points Distribution

		Percentage of Points	Letter Grade
Discussion (D.S.)/ Attendance	+0.5pts. Extra Credit per D.S. (Due day of lecture – in class.)	≥ 90%	A
MASTERING CHEMISTRY (Homework)	Best 5 of 6 (10pts each) = 50pts (10%) *All M.C. HW should be completed no later than Aug. 10 th .	88 – 90%	A-
EXAMS	3 x 100pts (60%)	87 – 85%	B+
FINAL EXAM	150pts (30%)	84 – 80%	B
TOTAL	500 pts	79 – 77%	B-
		76 – 74%	C+
		73 – 69%	C
		68 – 66%	C-
		65 – 63%	D+
		62 – 58%	D
		*57 – 55%	*D-
		54% and below	F

Tentative Lecture/Discussion Schedule and Assignments Dates

WEEK 1	May 21-23	Chp. 1: Introduction: Matter, Energy, and Measurement Chp. 2: Atoms, Molecules, and Ions, <i>Discussion Sheets (D.S.) #1-2 (Due 5/23)</i> <i>*M.C. Homework (Chp. 2) Available 5/23</i>
WEEK 2	May 29-30 June 1	Chp. 3: Chemical Reactions and Reaction Stoichiometry Chp. 4: Reactions in Aqueous Solution, <i>D.S. #3-4 (Due 5/30)</i> <i>*M.C. Homework (Chp. 3) Available 5/30</i> <i>*M.C. Homework (Chp.4) Available 5/30</i> EXAM #1 (M.C.) avail. 830a (5/30, WEDNESDAY) – Chapters 1-3
WEEK 3	June 4-6	Chp.5: Thermochemistry Chp. 6: Electronic Structure of Atoms, <i>D.S. #5-6 (Due 6/11)</i> <i>*M.C. Homework (Chp. 6) Available 6/5</i> EXAM #2 (M.C.) avail. 830a (6/6, WEDNESDAY) – Chapters 4-6
WEEK 4	June 11-13	Chp. 7: Periodic Properties of the Elements Chp. 8: Basic Concepts of Chemical Bonding <i>D.S. #7-8 (Due 6/13) *M.C. Homework (Chp. 8) Available 6/13</i>
WEEK 5	June 18-20	Chp. 9: Molecular Geometry and Bonding Theories Chp. 10: Gases, <i>D.S. #9-10 (Due 6/20)</i> <i>*M.C. Homework (Chp. 10) Available 6/20</i> EXAM #3 (M.C.) avail. 830a (6/22, FRIDAY) – Chapters 7-10
WEEK 6	June 25-27	Chp. 21: Nuclear Chemistry *REVIEW *DEADLINE for All M.C. Assignments (6/28) FINAL (PARTS A-B) [COMPLETE BOTH FOR FULL CREDIT] (M.C.) avail. 830a (6/27, WEDNESDAY) - CUMULATIVE

IDEA Objective:

At the end of the Summer Session I semester, you will receive an email with link for the electronic course evaluation noting the IDEA objectives for this course. Those IDEA objectives are noted online.

Laptops, Notebooks/Computers, Tablets/iPads, Cell Phones and Recording Devices:

- All laptops, notebooks/computers, tablets/iPads and cellphones (or any categorically befitting electronic) must be muted prior to the beginning of class – and ONLY utilized for the purposes of CHEM 101 or making an emergency/medical related phone call.
- Absolutely NO social media usage or streaming is permitted.
- No audio or video recordings of the class lectures/discussions are allowed.
- Any violation of this policy will result in an automatic failure.

It is in the best interest of the student to:

- Take “good” (useful) Lecture Notes.
- Read/Review course material prior to Lecture and Exams.
- Complete Discussion worksheets in class, day of lecture – **NO EXCEPTIONS.**
- Meet during Office Hours, if more explanation of Lecture/Discussion materials is needed.
- Complete Mastering Chemistry (online) Homework Assignments.
- Review Key Equations and Terms (suggestion: create study guides using index cards).