NOVA SOUTHEASTERN UNIVERSITY
Halmos College of Natural Sciences and Oceanography

CHEM 1100 - Fundamentals of Chemistry

I. Course Information

Course: CHEM 1100 - Fundamentals of Chemistry
Semester Credit Hours: 3.0
Course CRN and Section: 24312 - DA1
Semester and Year: Fall 2017
Course Start and End Dates: 08/21/2017 - 12/10/2017
Building and Room: Mailman/Hollywood - 311

II. Instructor Information

Professor: Mahesh Sambhat Joshi
Email:
Office Hours: By appointment only

III. Class Schedule and Location

Day	Date	Time	Location	Building/Room
TR	08/22/2017 - 10/05/2017	9:15 AM - 10:30 AM	Ft Lauderdale/Davie Campus	Mailman/Hollywood-311
T	10/10/2017 - 10/10/2017	10:30 AM - 12:30 PM	Ft Lauderdale/Davie Campus	Mailman/Hollywood-311
TR	10/17/2017 - 11/30/2017	9:15 AM - 10:30 AM	Ft Lauderdale/Davie Campus	Mailman/Hollywood-311
T	12/05/2017 - 12/05/2017	10:30 AM - 12:30 PM	Ft Lauderdale/Davie Campus	Mailman/Hollywood-311

IV. Course Description

The fundamental laws, principles and theories of atomic structure, molecular structure and bonding, stoichiometry, states of matter/solutions, energy changes, and oxidation-reduction reactions are presented along with an introduction to organic chemistry and biochemistry. Prerequisite: MATH 1040 or higher. Frequency: Every Fall and Winter.

V. Course Objectives / Learning Outcomes

1) Describe the fundamental laws, principles and theories of atomic structure, molecular structure and bonding, stoichiometry, states of matter/solutions, energy changes, and oxidation-reduction reactions.
2) Identify the major organic and biochemical compounds, and their basic chemistry.
3) Apply the concepts from general, organic chemistry and biochemistry to basic problems in health related

fields.

VI. Materials and Resources

Book Url: NSU Book Store
Section Required Texts and Material:

1. CHEMISTRY-MODIFIED MASTERINGCHEMISTRY

REQUIRED |*By TIMBERLAKE*

- **EDITION:** 13TH 18
- **PUBLISHER:** PEARSON **ISBN:** 9780134562254

2. CHEMISTRY:INTRO (LL)-W/MSTRGCHEM.AC >IP

RECOMMENDED |*By TIMBERLAKE*

- **EDITION:** 13TH 18
- **PUBLISHER:** PEARSON
- **ISBN:** 9780134809588

VII. Course Schedule and Topic Outline

Course Schedule: Tentative Course Schedule and TopicOutline

Week	Date	Topic	Ch
1	Aug 21-27	Basic Concepts/ Measurements	1,2
2	Aug 28-S3	EnergyandMatter	3
3	Sep4-10	Atoms andElements.	4
4	Sep11-17	Ionic and Molecular Compounds	6
5	Sep18-24	TEST1 Chemical Reactions	7
6	Sep25-O1	Chemical Quantities	7
7	Oct2-8	Gases	8
8	Oct9-15	Solutions.Acids andBases	9,10
9.	Oct. 16-22	Organic Chemistry.Alkanes	11.1,11.2
10	Oct.23-29	TEST 2; Unsaturatedhydrocarbons.Alkenes,Alkynes	11.3,11.5
11	Oct.30-Nov5	Organic compounds withSulfur andOxygen.Carboxylicacids,Esters.	12,14.1,1
12	Nov.6-12	Amines andAmides.AminoAcids	14.5,14.6
13	Nov.13-19	Proteins and Enzymes	16.3,16.4

14	**Nov.20-26**	**TEST 3. Carbohydrates**	**13**
15	**Nov27-Dec2**	**Lipids**	**15**
16	**Dec4-10**	**Final Exam (cumulative)** Dec 5	

VIII. Assessments

20% + 20% + 20% = 60% for Tests 1,2, and 3
Mastering Chemistry: 10%
30% for Final with a Total Course Grade out of 100%

IX. Grading Criteria

Final Grade:

Please remember that you **earn** your grades; faculty does not "give"grades.

Test 1	20%
Test 2	20%
Test 3	20%
Final exam	30%

Grading Scale:

85and above	A
80-84.9	A-
75-79.9	B+
70-74.9	B
65-69.9	B-
60-64.9	C+
55-59.9	C
50-54.9	D
below50	F

X. Course Policies

General Policy:

- You will be responsible for all the material covered both in lecture sand in the chapters discussed in your textbook (see topic outline below). Material that has not been discussed during lectures but is part of the chapters covered may appear in exams.
- **There will be no makeup exams without an approved excuse.** In the case of an excused absence, a student may arrange to take the missedtest in the testing center at the professor's discretion.
- Academic dishonesty (cheating,plagiarism,bribery,etc.) on exams,assignments, quizzes,and lab reports is UNACCEPTABLE. It willbedealt witha harsh penalty, at minimum, with a failing grade in the course. There is zero tolerance forcheating during any exam. It willresultin a zero on that test

and willbeimmediately referredto the Dean.

I encourage questions during lecture so as to clearly understand the concepts beings taught. If a conflict shouldarise, pleasecome and speakwithme as soon as possible to resolve the issue at hand.

ATTENDANCE

Attendance is required at all lectures and exams and will be taken during every lecture using a sign-in sheet. Absence from class will adversely affect your grade because you will miss important course information.

USE OF ELECTRONICS IN CLASS

The use of electronic devices,e.g. cellphones,smart phones,pagers,computers,etc.,is **strictly prohibited**. The use of computers to take notes will be permitted at my discretion after you request my permission to do so. It is discourteous and disrespectful to use electronic devices for non-class purposes while attending lecture. This also distracts you from the material being presented and reduces your ability to perform on assignments and exams.

ACADEMIC HONESTY

In order to ensure the highest standardsof academic honesty and ethical behavior,the statements on student conduct in the student catalog regardingthe academic integrity of the college willbe strictly enforced. I willbe patrolling the roomduringexams to watch for cheating. I amempowered by the policy to penalize a student suspected of academic dishonesty,plagiarism,or otherwise misrepresentingworkand I willdo so and report that studentto the Dean. A statedbelow, the Certification of Authorshipwillbe requiredwiththe finalsubmissionof the paper.

KEYS TO SUCCESS

In order to maximize your performance in this course, I suggest that you attend every lecture and laboratory session,pay close attention,take good notes,and ask questions. Later,rewrite your class notes in order to ensure that you understandeverything. Do not hesitate to come to me withquestions or concernsabout past lecture material.

It is generally a good idea to read the appropriate chapters in the textbooks prior to the lecture. Even if you just have time to look at the pictures and read the big or boldfaced type,it willfacilitate your comprehension and organization of the lecture material. When rewritingyour lectures,refer again to the textbook to check the correct spelling of terms,thelogicalsequence of events,and/ordifficult concepts.

For some of you,studying together in groups willbe a very productive approach. Talking about the material,quizzingeach other about the material,and sharing time exploring the materialbuildsyour interest and comprehension,and makes learningfun.

1. Mastering Chemistry (required by the due dates)
2. Practice in textbook (not required and not graded)

In addition to Mastering Chemistry (required), additional homework is assigned for every chapter at the end of the syllabus. This additional homework is not collected or graded, but the extra practice will greatly help you to perform better during exams. If you are having problems, you can always come to me for help.

To Register for Mastering Chemistry

1. Go to www.pearsonmylabandmastering.com.
2. Under Register, select Student.
3. Confirm you have the information needed, then select OK! Register now.
4. Enter **your instructor's course ID: joshi86395**, and Continue.
5. Enter your existing Pearson account username and password to Sign In. You have an account if you have ever used a Pearson MyLab & Mastering product, such as MyMathLab, MyITLab, MySpanishLab, MasteringBiology or MasteringPhysics. If you don't have an account, select Create and complete the required fields.
6. Select an access option. Enter the access code that came with your textbook or was purchased separately from the bookstore. Buy access using a credit card or PayPal account. If available, get temporary access by selecting the link near the bottom of the page.
7. From the You're Done! page, select Go To My Courses.
8. On the My Courses page, select the course name Timberlake, Chemistry: An Introduction to General, Organic, and B to start your work.

XI. **University Policies**

Students should visit http://www.nova.edu/academic-affairs/nsu-syllabus-policy.html to access additional required college-wide policies. It is your responsibility to access and carefully read these policies to ensure you are fully informed. As a student in this class, you are obligated to follow these college-wide policies in addition to the policies established by your instructor.
The following policies are described on this website:

- Academic misconduct
- Last day to withdraw
- Email policy
- Student course evaluations
- Student responsibility to register
- Student responsibility for course prerequisites

Academic Resources

Nova Southeastern University offers a variety of resources that may aid in student success. Among these resources are:

Accommodations for students with documented disabilities: For more information about ADA policy, services, and procedures, students may call the Office of Student Disability Services at 954-262-7189 or visit http://www.nova.edu/disabilityservices.

Tutoring and testing center:

Students are encouraged to use the free, individualized tutoring services offered by the Tutoring and Testing Center (TTC). TTC provides a supportive atmosphere in which tutors and students work collaboratively on improving students' writing, math and/or science skills. http://www.nova.edu/tutoring-testing/index.html