

**Organic Chemistry CHM 212-001& -002**  
**MWF 9:00 am & 1:00 pm, Dobo Hall Room 205, Fall 2009**

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**ACADEMIC HONOR CODE**

The University of North Carolina at Wilmington is committed to the proposition that the pursuit of truth requires the presence of honesty among all involved. It is therefore this institution's stated policy that no form of dishonesty among its faculty or students will be tolerated. Although all members of the university community are encouraged to report occurrences of dishonesty, honesty is principally the responsibility of each individual.

Academic dishonesty takes many forms, from blatant acts of cheating, stealing or similar misdeeds to the more subtle forms of plagiarism, all of which are totally out of place in an institution of higher learning. Reporting and adjudication procedures have been developed to enforce the policy of academic integrity, to ensure justice, and to protect individual rights. Complete details may be found in the current *Student Handbook*, *Code of Student Life* and in the *Faculty Handbook*.

<u>Date</u>	<u>Chapter</u>	<u>Suggested Problems</u>
Wed. Aug. 19	13	<b>C-13 NMR Spectroscopy</b>
Fri. Aug. 21	13	<b>13:</b> 6, 7, 8, 12-21, 32, 33, 37, 38, 44, 48, 50-54, 58.
Mon. Aug. 23	13	<b>Proton NMR Spectroscopy</b>
Wed. Aug. 25	13	
Fri. Aug. 28	13,15	<b>Aromatic Nomenclature 15:</b> 1, 2, 3, 5, 6, 18, 19, 20, 45, 46.
Mon. Aug. 31	15, 16	<b>Benzene and Aromaticity</b>
Wed. Sept. 2	16	<b>16:</b> 1, 2, 4, 6-10, 15, 19, 23-25, 29-37, 48, 49, 54, 55.
Fri. Sept. 4	<i>gla 1</i> , 16	<b>Electrophilic Aromatic Substitution</b>
Mon. Sept. 7	No class	<b>Labor Day Holiday</b>
Wed. Sept. 9	16	
Fri. Sept. 11	17	
Mon. Sept. 14	<b>Test 1</b>	<b>(Chapters 13, 15, &amp; 16, <u>except 16.7 &amp; 16.8</u>)</b>
Wed. Sept. 16	17	<b>17:</b> 1-11, 13, 14, 15, 25-27, 30-33, 41, 60, 61, 63, 64.
Fri. Sept. 18	17	
Mon. Sept. 21	17	<b>Phenols</b>
Wed. Sept. 23	<i>gla 2</i> , 17, 18	
Fri. Sept. 25	18	<b>18:</b> 1, 3, 5, 6, 7, 9, 11, 12, 14, 23, 25-28, 51.
Mon. Sept. 28	18, 19	
Wed. Sept. 30	19	<b>19:</b> 1-4, 10, 13, 16, 18, 22, 24, 30, 32, 33, 34, 37, 69, 70.
Fri. Oct. 2	19	
Mon. Oct. 5	No Class	<b>Fall Break</b>
Wed. Oct. 7	19	
Fri. Oct. 9	19	<b>Spectra of Aldehydes and Ketones</b>
Mon. Oct. 12	20	<b>20:</b> 1, 2, 4, 6, 9, 10-14, 22, 28, 30, 57, 58, 59.
Wed. Oct. 14	<b>Test 2</b>	<b>(Chapters 17, 18 &amp; 19, <u>plus 16.7 &amp; 16.8</u>)</b>
Fri. Oct. 16	20	
Mon. Oct. 19	21	<b>Derivatives of Carboxylic Acids 21:</b> 2-5, 7, 9, 12-14, 17-21, 26, 35-39.
Wed. Oct. 21	22	
Fri. Oct. 23	<i>gla 3</i> , 22	<b>22:</b> 1-3, 7, 13, 16 (a, c, e), 20-23, 26, 27. <b>Alkylation of Enolate Ions</b>
Mon. Oct. 26	22	
Wed. Oct. 28	23	<b>23:</b> 1, 3, 6, 8, 10, 11, 14, 16, 28, 35.
Fri. Oct. 30	<b>Test 3</b>	<b>(Chapters 20, 21 &amp; 22)</b>
Mon. Nov. 2	23	
Wed. Nov. 4	24	<b>Amines</b>
Fri. Nov. 6	24	<b>24:</b> 1-4, 8, 11, 17, 18, 25, 26, 30, 31, 33-36.
Mon. Nov. 9	24	
Wed. Nov. 11	25	<b>25:</b> 1, 2, 3, 16, 17, 30-32, 42, 66.
Fri. Nov. 13	<i>gla 4</i> , 25	
Mon. Nov. 16	25	<b>Oligo- and Polysaccharides</b>
Wed. Nov. 18	26	<b>Amino Acids and Peptides 26:</b> 1, 4, 10, 40, 43, 57.

Fri.	Nov. 20	26	<b>Peptides and Proteins</b>
Mon.	Nov. 23	<b>Test 4</b>	<b>(Chapters 23, 24 &amp; 25)</b>
Wed.	Nov. 25	<b>No Class</b>	<b>Thanksgiving Vacation</b>
Fri.	Nov. 27	<b>No Class</b>	<b>Thanksgiving Vacation</b>
Mon.	Nov. 30	27	<b>Lipids 27: 1, 2, 3, 4.</b>
Wed.	Dec. 2	--	Review for Exam

**9 am section:** Friday, December 4 8:00 am-11:00 am FINAL EXAM (Comprehensive)

**1 pm section:** Monday, December 7 11:30 am -2:30 pm FINAL EXAM (Comprehensive)

**Text:**

Organic Chemistry, 7th ed., McMurry. Also recommended is Study Guide to Organic Chemistry, 7th ed., McMurry. Also is required for this course is CHM 212 Course-Pack; it includes the Group Learning Assignments, tests given a recent year, their answer keys, and printouts of PowerPoint slides used in lecture. PowerPoint presentations, other past tests and their answer keys are available on the course website: <http://www.uncw.edu/chem/Courses/Martinn/chm212martin/index.htm> Molecular model sets are helpful for understanding certain aspects of three-dimensional structure.

**PowerPoints:**

The titles in bold under Suggested Problems in the course calendar above are topics that are covered using a PowerPoint presentation. A copy of the slides of all of the PowerPoint presentations is in their Course-Pack, which is arranged chronologically (in the same order as the topics and tests occur in the semester). Please be sure to bring to class the slides of the PowerPoint presentation on the scheduled day, unless you are told in class that it will be covered a different day. It will be essential for myou to have the slides in order to keep up during the lecture.

**Attendance Policy:**

Although not officially monitored, attendance at every lecture is expected and will be to your distinct advantage. No makeup tests will be given for missed hour tests; the score on the final exam section corresponding to that hour test will be used for a missed test.

**Group Learning Assignments:**

Each student will participate in a group of three or more students who will meet at least once a week to discuss questions/problems they have related to the course and to work together on the Group Learning Assignments, which are graded assignments (found in the CHM 212 Course-Pack and on the course website) to be turned in according to the schedule above (*gla* denotes when each **Group Learning Assignment** is due.) Only one copy of the worked assignment should be turned in; it must be signed (alphabetically) by all students in the group (each of whom will be given the same grade on the assignment).

**Grading Policy:**

Best score on four 60-point Hour Tests or those sections on the Final Exam	240 points
Final Exam section 5 (Chapters 26 & 27)	60 points
Final Exam section 6 (Comprehensive)	60 points
4 Group Learning Assignments	<u>40 points</u>
Total	400 points

The Final Exam will be divided into four sections corresponding to the Hour Tests; a fifth section will correspond to material in Chapters 26 & 27; section 6 (comprehensive) covers material from the entire course. If you improve on any section(s) of the Final Exam relative to the corresponding Hour Test, the higher score will replace the Hour Test grade(s). If you are satisfied with your score on any of the four Hour Tests, you need not take the corresponding sections of the Final Exam.

93% = A, 90% = A-, 87% = B+, 84% = B, 80% = B-, 77% = C+,  
74% = C, 70% = C-, 67% = D+, 63% = D, 60% = D-, <60% = F

***Study Hints:***

The best way to study Organic Chemistry is to **work problems**. The next best way to learn is to **work more problems**. Discussing problems/questions in a group of classmates is also very helpful. The problems listed by each chapter on this syllabus are representative of the types of problems with which you should be familiar and which may appear on tests. These will not be collected or graded, but you should check your own work by looking up answers to selected problems in Appendix E in the text, or more detailed solutions in the Study Guide. If you do not understand an answer given in the Study Guide, or if your Learning Group has a question or cannot agree on a solution, do not hesitate to ask the instructor.

At the beginning of each lecture period, the instructor will ask if you have any questions from the previous lecture, your reading, or working problems. Do not hesitate to ask if there is anything you do not understand....probably several of your classmates have the same question, but unless you ask, the instructor will not know that you need further explanation. If you are unsure, ASK! You are also encouraged to go to the instructor's office (Dobo 242E) to ask questions, or to ask questions by email.

***Learning Outcomes:***

Students are expected to have working knowledge of the language of organic chemistry (including nomenclature and structure symbols), fundamental chemical reactions of the major classes of organic molecules (aromatic hydrocarbons, alcohols, phenols, ethers, aldehydes, ketones, carboxylic acids and their derivatives, amines, carbohydrates and lipids) including multi-step syntheses, and spectroscopic determination of organic structures. The assessment measure of these outcomes is success on the hour tests and/or the final exam.

***Academic Integrity:***

All members of UNCW's community are expected to follow the academic Honor Code. Please read the UNCW Honor Code carefully (as covered in the UNCW Student Handbook). Academic dishonesty in **any** form will not be tolerated in this class.

***Students with Disabilities:***

Students with diagnosed disabilities should contact the Office of Disability Services (962-7555). Please give me a copy of the letter you receive from Office of Disability Services detailing class accommodations you may need. If you require accommodation for test-taking please make sure I have the referral letter no less than three days before the test.

***Violence and Harassment:***

UNCW practices a zero tolerance policy for any kind of violent or harassing behavior. If you are experiencing an emergency of this type contact the police at 911 or UNCW CARE at 962-2273. Resources for individuals concerned with a violent or harassing situation can be located at <http://www.uncw.edu/wsrc/crisis.html>

***Campus Respect Compact:***

UNCW has recently instituted a Respect Compact to affirm our commitment to a civil community, characterized by mutual respect. That Compact will soon be affixed to the wall of each classroom and can be accessed at: <http://www.uncw.edu/stuaff/pdc/documents/SeahawkRespectCompact.pdf> Individuals wanting more information about the respect Compact can contact the Office of Institutional Diversity and Inclusion.

***Use of electronic devices during class:***

Cell phone use will not be tolerated in this class. Turn off your cell phones prior to class. If your cell phone rings, Dr. Martin will answer it for you. You do not want this to happen. No ipods or other listening devices may be used during class or exams. Laptops may be used in this class, but only for following PowerPoint presentations or note-taking. No web surfing or email access is allowed during class time.