

Syllabus

Course: CH 223
Section: 002
Meets: M/W 3:00 pm – 4:15 pm, HA G108
Semester: Fall 2009
Credit hours: 3

Instructor: Dr. Kay Sandberg

Face-to-face (F2F) office hours in Dabney 620:

Mondays: 1:00 pm – 2:00 pm
Tuesdays: 2:00 pm – 3:00 pm

Virtual office hours via Eluminate at <http://slms.delta.ncsu.edu>

Wednesdays: 8:00 pm – 9:00 pm

If you need to meet with me outside of these hours, send me a private message via WebAssign "Private Message" with your available time that coincides with my available time. To see my schedule and availability go to:

http://www.webassign.net/userimages/kasandbe@ncsu/CH223_fall_02/My_schedule_fall09.pdf

Useful Material

- | | |
|---------------------------------------|---|
| 1. Text (not required) | <i>Organic Chemistry, 7th Edition</i> , Francis A. Carey (*Any edition will work.) |
| 2. Solutions Manual (not required) | <i>Study Guide and Solutions Manual to Accompany Organic Chemistry, 7th Edition</i> , Carey & Atkins |
| 3. Model Kit (not required) | <i>Chem-Tutor: Student Modeling System for Organic Chemistry (or any model kit)</i> |

Web-based course materials and resources

WebAssign (<http://webassign.ncsu.edu>) will be used for course content management, course communications and course assessment. You will have access to:

- course participation via the message board,
- important class information,
- updates,
- email correspondence.
- HW assignments

When you choose to communicate with me via email, please use the **Ask Your Teacher** link or the **New message for Sandberg, Kay** link via the Private Messages tool from the **Communications** page in WebAssign. **Do NOT send email to my university (or unity) account.** If you do send email to my university account I will ask you to resend your message to my WebAssign account.

For assignment specific inquiries that are not appropriate for the message board, please click the **Ask Your Teacher** link **associated with that assignment**. For other communications that do not involve a specific assignment you should use the *New message for Sandberg, Kay* link. **NOTE – if you have any question about any HW, LW or exam question, use the ASK YOUR TEACHER link of that assignment and indicate the question #.** If you use the *New message for Sandberg, Kay* link for an assignment-specific inquiry, you will be asked to resend it via the *Ask Your Teacher* link.

Grading

Exams

The 3 exams and the final exam will be given in class via WebAssign.

| Activity | Window for activity | % of course grade |
|------------|---------------------|-------------------|
| Exam 1 | M, 9/21 | 16% |
| Exam 2 | W, 10/21 | 16% |
| Exam 3 | M, 11/23 | 16% |
| Final exam | W, 12/9 (1 pm) | 32% |

Only students with **official university-accepted written documentation** for excused absences will be given provisions for replacing the grade of a missed exam. This documentation must be from the agency with whom the absence is directly related. (See http://www.ncsu.edu/policies/academic_affairs/courses_undergrad/REG02.20.3.php for information regarding absences that are considered excused.)

Homework & Lecture work (aka daily grade)

All lectures will have accompanying lecture work questions and all lectures will have an accompanying homework assignment (there are 26 lectures, 26 lecture work (LW) assignments and 26 homework (HW) assignments plus a prerequisite assignment and an introductory assignment). The homework and lecture work assignments will be delivered and graded through WebAssign (<https://www.webassign.net/ncsu/login.html>). The due dates are clearly displayed in WebAssign. Lecture work assignments will typically be due at the end of class. Homework assignments will typically be due by 2 pm the day of the next lecture. (Exceptions may occur during exam weeks and holiday weeks.)

Note: you may request an automatic extension within 2 days of the due date of a HW assignment with a 20% penalty for unanswered questions if you do not have official university-accepted written documentation. If you request the extension from me after the 2 day automatic extension period, there will be a 40% penalty for unanswered questions.

Only students with **official university-accepted written documentation** for excused absences will have the penalty removed for an extension. *The student should use the automatic extension request link (which states a penalty will be applied) and then get the written documentation to me via one of 2 ways:*

- 1) bring your documentation to my office during one of my office hours.
- 2) scan your documentation and email it to me (you will need to send this to my unity account kay_sandberg@ncsu.edu).

Please blacken out any private information. Upon receipt of the documentation I will remove the penalty. **I will not accept any hard copy homework or lecture work.**

I have given each student 30 free points to fill in for HW/LW points missed due to computer glitches and input format issues. Because of the large number of students I teach, I will not be able to adjust individual scores, give extra submissions or look over your individual answers that you think may be correct. My standard reply to any of these requests is, "That's why I give 30 free points." Homework and lecture work together will account for 16% of the course total.

Students are required to comply with the university policy on academic integrity found in the Code of Student Conduct at

http://www.ncsu.edu/policies/student_services/student_discipline/POL11.35.1.php.

You must be present in class in order to answer the lecture work questions or the clicker questions that were presented during the class period. Students who answer lecture work questions in WebAssign when they were not present in class when the lecture work questions were presented and were not actively participating in the lecture are considered to be cheating. If you choose to cheat and are caught, you will suffer one of the following consequences (in addition to losing my respect, if that is important).

- 1) A final grade that is at least one letter grade lower than the letter grade earned on the final exam.
- 2) A final grade determined when a zero is used for the daily grade in the calculation.

You may also add points to the daily grade by giving **guidance** for homework on the WebAssign message board (WebAssign forum) for a maximum of 20 message board extra credit points. Your daily grade will be determined by dividing your total daily points (including extra credit) by the total assignment points (not including extra credit points). **One caveat, the numerator of your daily grade cannot exceed the denominator.**

Participation

5% of your grade will come from in-class participation via “clicker” questions.

The +/- grading system will be employed and grades will be assigned with the following *approximate* cutoffs:

| | | |
|---------|--------|---------|
| A+ ~ 97 | A ~ 93 | A- ~ 90 |
| B+ ~ 87 | B ~ 83 | B- ~ 80 |
| C+ ~ 77 | C ~ 73 | C- ~ 70 |
| D+ ~ 67 | D ~ 63 | D- ~ 60 |

| <u>Activity</u> | <u>Date ranges</u> | <u>Grade percentage</u> |
|-------------------------|--------------------|-------------------------|
| Exam 1 | M, 9/21 | 16% |
| Exam 2 | W, 10/21 | 16% |
| Exam 3 | M, 11/23 | 16% |
| Final Exam | W, 12/9 (1 pm) | 32% |
| Daily grade (HW & LW) | “Lecturely” | 15% |
| Participation (clicker) | “Lecturely” | 5% |
| Total | | 100% |

Other Grading Policies

Expectations: *I do not give points at the end of the semester to give a student a desired grade. If you want a certain grade, make sure you acquire the requisite points. I will not respond to emails or phone calls made by students or parents at the end of the semester asking me to give the student more points, to give opportunity for more extra credit, to change a grade to an IN (incomplete) or to allow a student to drop the course. There is a deadline for dropping the course. If you do not perform well on the first exam, you should seriously consider dropping this course.*

Credit only: Each student should meet with his or her advisor to find out which S/U courses may count toward graduation. In order to receive a grade of S, students are required to take all exams, complete all assignments, and earn a grade of C- or better.

Incomplete: The burden of fulfilling an incomplete grade is the responsibility of the student. If an extended deadline is not approved by the instructor, an unfinished incomplete grade will automatically convert to an F after either (a) the end of the next regular semester in which the student is enrolled (not including summer sessions), or (b) the end of 12 months if the student is not enrolled, whichever is shorter. Incompletes that change to F will count as an attempted course on transcripts. The university policy on incomplete grades is located at http://www.ncsu.edu/policies/academic_affairs/grades_undergrad/REG02.50.3.php.

Audit: To receive an AU on his or her transcript, a student must attend 80% of the lectures (21 lectures) and participate in the clicker questions. At the end of the semester the student’s clicker participation will be evaluated to see if 21 lectures have been attended. For more details refer to http://www.ncsu.edu/policies/academic_affairs/pols_regs/REG205.00.5.php.

Prerequisites

The prerequisite for CH223 is a C- or better in CH221.

Co-requisites

The lab class CH224 is a co-requisite for those students needing another credit hour. All lab questions/concerns should be addressed to Dr. Maria Gallardo-Williams.

Disability Information

Reasonable accommodations will be made for students with verifiable disabilities. Students are required to first register with Disability Services Office (<http://www.ncsu.edu/dso/>) and to then contact the instructor to discuss options for accommodation. For more information on NC State's policy on working with students with disabilities, please see the Academic Accommodations for Students with Disabilities Regulation at http://www.ncsu.edu/policies/academic_affairs/courses_undergrad/REG02.20.1.php.

Other policies

NC State University provides equality of opportunity in education and employment for all students and employees. NC State's policies and regulations covering discrimination, harassment, and retaliation may be accessed at http://www.ncsu.edu/policies/campus_environ or http://www.ncsu.edu/equal_op.

Where relevant to the course, students may be required to disclose personally identifiable information to other students in the course, via electronic tools like email or web-posting. Examples include online discussions of class topics, and posting of student coursework. All students are expected to respect the privacy of each other by not sharing or using such information outside the course.

Expenses

The only required course expense is WebAssign which is \$15.95 for single term access.

Course Overview

CH223 covers the chemistry of aromatic compounds, compounds containing the carbonyl group, amines, biomolecules and their various chemistries.

Course Objectives:

Students will learn to:

- 1) distinguish various organic functional groups,
- 2) name molecules of the various functional groups
- 3) describe the physical properties of the various functional groups
- 4) devise schemes for preparing the various functional groups
- 5) show how the various functional groups can be used in synthesis
- 6) draw mechanisms for the various transformations
- 7) identify and draw various biomolecules

Tentative Course Schedule

| Lecture # | Day | Date | Chapter |
|-----------|----------|---------------------|-----------------------------------|
| 1 | W | 19-Aug | Chapter 11 |
| 2 | M | 24-Aug | Chapter 11 |
| 3 | W | 26-Aug | Chapter 12 |
| 4 | M | 31-Aug | Chapter 12 |
| 5 | W | 2-Sep | Chapter 12 |
| | M | 7-Sep | Labor Day |
| 6 | W | 9-Sep | Chapter 14 |
| 7 | M | 14-Sep | Chapter 14 |
| 8 | W | 16-Sep | Chapter 15 |
| | M | 21-Sep | Exam 1: Lectures 1 – 7 |
| 9 | W | 23-Sep | Chapter 15 |
| 10 | M | 28-Sep | Chapters 15 & 17 |
| 11 | W | 30-Sep | Chapter 17 |
| 12 | M | 5-Oct | Chapters 17 & 18 |
| 13 | W | 7-Oct | Chapter 18 |
| 14 | M | 12-Oct | Chapters 18 & 19 |
| 15 | W | 14-Oct | Chapter 19 |
| 16 | M | 19-Oct | Chapter 20 |
| | W | 21-Oct | Exam 2: Lectures 8 - 15 |
| 17 | M | 26-Oct | Chapter 20 |
| 18 | W | 28-Oct | Chapters 20 & 21 |
| 19 | M | 2-Nov | Chapter 21 |
| 20 | W | 4-Nov | Chapter 22 |
| 21 | M | 9-Nov | Chapter 22 |
| 22 | W | 11-Nov | Chapters 22 & 23 |
| 23 | M | 16-Nov | Chapters 23 & 24 |
| 24 | W | 18-Nov | Chapters 24 & 25 |
| | M | 23-Nov | Exam 3: Lectures 16 - 23 |
| | W | 25-Nov | Thanksgiving |
| 25 | M | 30-Nov | Select biochem topics |
| 26 | W | 2-Dec | Select biochem topics |
| | W | 9-Dec (1 pm) | Final Exam Lectures 1 - 26 |