Course Outline: CHEM 2OA3 Year: Sept. 2016

Title: Organic Chemistry I

Instructor: Dr. Paul Harrison
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Lab coordinator: Dr. Greg Bahun
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Content: Fundamentals of organic chemistry.

Detailed Description: CHEM 2OA3 studies organic chemistry. The course describes the structures of organic molecules, and the use of spectroscopic (IR, NMR) methods for structure determination. The chemistry of various functional groups, including alkyl halides, alkenes and alcohols, and the reactions that inter-convert these groups will be described. Principles of, and mechanisms for chemical reactions will be discussed, with emphasis on similarities between chemical reactions.

Textbook: Klein. “Organic Chemistry,” Wiley. 2nd ed. (Available in bookstore, hard copy or binder-ready version, with study guide and WileyPLUS which includes e-book and ORION test bank) NOTE: you can use the older first edition but we will not support issues such as the selected problems not matching, and you will need to purchase ORION separately if you wish to participate (see below).

CHEM 2OA3 covers Chapters 1-10 (inclusive), and Chapters 15 & 16; CHEM 2OB3 covers Chapters 11 - ca. 25.

Other Resources: A chemical model kit (strongly recommended; Available in bookstore)

WileyPLUS with ORION: strongly recommended but optional web-based self-assessment tool; students who opt for this may get part of their assignment marks from the ORION quizzes. (available packaged with Klein, or separately from Wiley web site)

Lab manual with duplicate lab notebook (Required; Available in bookstore); (NB you must have the current manual: no copies, substitutes)

Goggles; lab coat (Required; Available in bookstore);
iClicker (strongly recommended but optional; Available in bookstore);

Calculator: ONLY CASIO-FX991 will be allowed in tests: needed if you can’t calculate in your head: 3 \times 10^3 \times 2 \times 10^{-5}

# of Lectures: 3 Lectures/week

# of Labs: 5: Laboratories every other week (3 hours each)
# Tutorials: 5: Tutorials every other week

# of Exams: 2

Evaluation:  
- Homework: 15%
- Assignments: 12% max.
- ORION (on-line): 3% max.
- Class participation: 3% max. (Clickers)

Midterm Exam: 20% (2 h)
Final Exam: 50% (2.5 h, scheduled by registrar)
Laboratory: 15%

**NOTE:** these are totals for each type of activity. Students should see the detailed description of the various options for calculating their mark total within each type of activity (e.g. we will calculate the best of midterm @ 20% and final at 50%, or final at 70%, to determine your total exam mark; assignments total will be calculated based on your optional participation in ORION and/or iClicker, any missed assignment (with msaf, the missed mark will be based on the final exam), etc.)

Times:  
- Lectures: TWF 12:30, MDCL-1305
- Laboratory: ABB, as assigned, morning or afternoon
- Office Hours: Mon. 12:30-2:00
- Midterm test: Fri. Oct. 21, 7 pm, locations: TBA

**NOTE:** The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.

Calculators: The McMaster standard calculator Casio FX-991 is the ONLY calculator that will be allowed in examinations. Molecular models from the Bookstore will also be allowed, but MUST be packaged in clear plastic bags for tests.

Web site: Avenue
Course description, assignments, lab manual, answer keys, lecture slides, etc.
**Note** that there is a second Avenue site for lab marks.

Laboratory: Eye protection in accordance with the McMaster eyewear policy is MANDATORY. This means goggles must be worn at all times in the lab. Lab coats are strongly recommended. Open shoes are not permitted. You must obey all safety instructions; failure to do so may result in loss of marks (negative safety mark) and exclusion from the lab with a grade of zero. Reports are written and submitted during the laboratory period.

Academic Dishonesty: Academic dishonesty is not qualitatively different from other types of Dishonesty: It consists of misrepresentation by deception or by other fraudulent means. In an academic setting this may include any number of forms such as: copying or the use of unauthorized
aids in tests, examinations and laboratory reports; plagiarism, i.e., the submission of work that is not one's own or for which previous credit has been obtained, unless the previously submitted work was presented as such to the instructor of the second course and has been acceptable for credit by the instructor of that course; aiding and abetting another student's dishonesty; giving false information for the purposes of gaining admission or credit; giving false information for the purposes of obtaining deferred examinations or extension of deadlines; and/or forging or falsifying McMaster University documents.

Academic dishonesty can result in serious consequences, e.g. a grade of zero, loss of credit with a notation on the transcript, and/or suspension or expulsion from the University. It is YOUR responsibility to understand what constitutes academic dishonesty.

Cases of dishonesty that we regularly look for include: verbatim copying of assignments: you can consult on problems together for the purpose of learning but you should write your answers on your own; selecting random answers to on-line ORION problems for the purpose of obtaining unearned marks; entering iClicker answers that are not for your own credit, or having another student enter iClicker answers for you; and of course any and all forms of cheating on exams.

For more information, see: http://www.mcmaster.ca/senate/academic/ac_integrity.htm

In CHEM 20A3, ALL cases of academic dishonesty will be prosecuted to the maximum penalty allowed.

Late work: Late assignments will not be accepted under any circumstances. If you miss the deadline you will receive a mark of 0 unless an MSAF is filed.

Missed work: In the event of an absence for medical or other reasons, students should review and follow the Academic Regulation in the Undergraduate Calendar “Requests for Relief for Missed Academic Term Work”. Please note these regulations have changed beginning Fall 2015. In brief: If you are absent from the university for any reason, lasting no more than 3 days, you may report your absence, once per term, without documentation, using the McMaster Student Absence Form (MSAF). Absences for a longer duration must be reported to your Faculty/Program office, with documentation, and relief from term work may not necessarily be granted. Please note that the MSAF may not be used for term work worth 25% or more, nor can it be used for the final examination.

NOTE: When using the MSAF, send the report of your absence to bahungj@mcmaster.ca. Do NOT send MSAFs to the instructor.

For missed labs, if possible sign up on the sheet provided outside Greg Bahun’s office to indicate when you are available to make up the lab (which other regular section of the SAME experiment you can make). We cannot accommodate make-up labs when a different experiment is running, so if you cannot perform the make-up lab while it is still running, you will have to make up the lab after the end of regular labs: in that case, sign up on the sheets provided outside Greg Bahun’s office AND contact bahungj@mcmaster.ca by email.

For MSAFs that are not for labs, you may assume your MSAF has been accepted, but you will not get a response. However, you should check the avenue “grades” web site before
the final exam to ensure that “MSAF” or similar notation has been recorded there, to avoid a mark of zero.

For any missed iClicker sessions or ORION assignments, please do NOT file an MSAF as you can still obtain a mark of 100% for these components, or have that work automatically replaced by term/exam work. We will NOT accept MSAFs for these items! Provided you file the MSAF (or obtain other, equivalent relief from your program office):

- if you miss one or more than one assignment, then you will receive relief; this is based on your participation in Orion, iClicker, and other assignments, and may include a component equivalent to your mark for the final; you are strongly recommended to see the detailed scheme outlined in lecture 1.

- if you miss the mid-term, then you will write the deferred exam;
- if you miss both regular and deferred midterm FOR VALID REASON FOR BOTH (per your Dean’s office) you will receive relief equivalent to your mark for the final exam.
- If you miss a lab, then the lab MUST be made up as soon as possible, and in NO cases will a make-up be permitted after the writing of the final exam. Completion of the labs is required to complete the course. Failure to complete all the labs will result in a grade of F for the course. Students who miss a lab should follow the procedure described above.

Students who do not submit an MSAF (or other allowance made by the appropriate office (e.g. Associate Dean’s office) as required if the MSAF has already been used) will receive a mark of zero for the missed work and no allowance will be given. Again, students are advised that an incomplete lab will result in a grade of F.

Academic Accomodations: Students who require academic accomodations must contact Student Accessibility Services to make arrangements with an appropriate Disability Services Coordinator. In order to contact the Student Accessibility Services (SAS) office, phone 905-525-9140 ext. 28652, or email sas@mcmaster.ca. Academic accomodations must be arranged for each term of study. For further information, consult McMaster University’s Academic Accomodation for Students with Disabilities.

Should you require this outline in an alternate/accessible format please contact pharriso@mcmaster.ca