

## SC/CHEM 3020 3.0 F15 – Intermediate Organic Chemistry I

# Course Outline & Tentative Schedule

### Lectures

MWF 11:30-12:30 R S137

### Tutorials

T 18:00-19:00 R S137

### Tentative Schedule

Oct 12 Thanksgiving

Oct 29-Nov 1 Cocurricular Days

drop deadline: Nov 9

test 1: Oct 9

test 2: Nov 6

test 3: Dec 2

exams: Dec 9-23

### Text & Materials

*also handy: Organic Chemistry, 6<sup>th</sup>/7<sup>th</sup>/8<sup>th</sup> or York Custom ed., L. G. Wade, Jr. with accompanying Solutions Manual by J. W. Simek*

Steacie stacks:

QD 251.3 W33 2006 (Wade 6<sup>th</sup>) & QD 251.3 W33 2006 (Simek 6<sup>th</sup>)

Steacie reserves:

QD 251.3 W33 2010 (Wade 7<sup>th</sup>) & QD 251.3 S55 2013 (Simek 8<sup>th</sup>)

one of several alternatives:

*Organic Chemistry*, Clayden J. QD 251.3 O64 2001

**Web Site** *moodle.yorku.ca*

**Help** *pgpotvin@yorku.ca* anytime  
in 406 CB: MWF 12:45-14:00  
other times by appointment set by email  
(check *www.yorku.ca/pgpotvin/Availability.htm*)

### Evaluation

3 One-hour in-class tests = 20% each; one three-hour final examination 30%; participation 10%

Missed test policy: no excuses, no make-ups; value of missed test gets shifted to part of the final exam.

### Course Content

**Carbanion & Related Chemistry** (10 hours): alkylations and acylations of carbanions, C-H acids, enols, enolates, condensation and  $\beta$ -eliminations, Michael additions, tandem reactions, biochemical examples, kinetic & thermodynamic control

**Spectroscopy** (22 hours): advanced MS (new fragmentations, rearrangements, HRMS, ionization methods), advanced NMR (chemical shift factors, complex coupling, second-order effects, diastereotopicity, magnetic inequivalence, introduction to advanced techniques, applications to structure determination, conformational analysis and other problems)

**Heterocyclic Chemistry** (8 hours): survey of heterocycles, including biochemically relevant examples, synthesis and reactivity

### Participation

Attendance at lectures & tutorials is important and improves performance. Participation will be assessed as a combination of attendance and participation at tutorial and performance on the best 10 of 11 on-line quizzes. On-line performance will be counted as follows: full credit for scores of 80% or better; half-credit for scores of 70-80%. For each quiz, a single attempt or the average of two attempts will be considered.

### Other Essential Information

Students must make themselves aware of university policies on Academic Honesty/Integrity, Access/Disability, Student Conduct, Religious Observance and other matters. A periodically updated *Information Sheet* summarizing this information can be downloaded\* and printed, and the Registrar's Office issues a *list of Religious Observance Days*.‡

\* <http://www.yorku.ca/secretariat/senate/committees/ascp/documents/CourseInformationForStudentsAugust2012.pdf>

‡ <http://www.registrar.yorku.ca/enrol/dates/religious.htm>