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| <p style="text-align: center;">CHEMISTRY 440F/1004F 2019 THE SYNTHESIS OF MODERN PHARMACEUTICAL AGENTS</p> |
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Instructor

Professor Mark Lautens (mark.lautens@utoronto.ca)
Office: Davenport Wing Rm. 359, Phone: 416-978-6083
Lectures to be held in LM158 from 3-4pm on Tuesday and Thursday
Office hours: 4-5pm after most classes, 9-10am on Wednesday or by appointment

Prerequisite CHM 342 or equivalent course

Text:

Organic Chemistry, Clayden, J. et al (either edition)

Reference Texts

Classics in Total Synthesis, Nicolaou, K.C. Vol 1 and 2
Color Atlas of Pharmacology, Lüllman et al
Synfacts, Thieme Verlag
Pharmaceutical Substances, Kleeman and Engel

Topics: This course provides an overview of the structures of the different pharmaceutical agents that are used for the treatment of human disease. Within each therapeutic area, representative drugs currently on the market or in advanced clinical trials are discussed with a focus on their method of synthesis. A combination of reactions learned in previous courses and new reactions will be used to understand the strategy and the synthetic routes that are presented.

I will use a mixture of PowerPoint and lecture on the board. I will not necessarily provide notes on Quercus for all material so I expect everyone to attend all classes and take notes.

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| Grading 440: | Hour Tests - October 10 and November 14, 2019 | 30% |
| | • 10% and 20% with better score weighted more | |
| | Final Examination | 50% |
| | Assignment (compare & contrast syntheses + oral) | 20% |
| | • oral exams in final two weeks of the term | |
| Grading 1004: | Hour Tests - - October 10 and November 14, 2019 | 35% |
| | • 15% and 20% with better score weighted more | |
| | Final Examination | 40% |
| | Assignment (compare & contrast + retrosynthesis + oral) | 25% |
| | • oral exams in final two weeks of the term | |

Term test held in the usual lecture theatre starting at 3pm (regular class time)

Academic Integrity: www.artsci.utoronto.ca/osai/students

The University of Toronto treats cases of academic misconduct very seriously. Academic integrity is a fundamental value of learning and scholarship at the UofT. Participating honestly, respectfully, responsibly, and fairly in this academic community ensures that your UofT degree is valued and respected as a true signifier of your individual academic achievement.

The University of Toronto's [Code of Behaviour on Academic Matters](#) outlines the behaviours that constitute academic misconduct, the processes for addressing academic offences, and the penalties that may be imposed. You are expected to be familiar with the contents of this document.

Note: Last date to drop the graduate version of the course without penalty is October 28, 2019.

Accommodations for Disability

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or Accessibility Services at (416) 978 8060; accessibility.utoronto.ca