Welcome to Topics in Organic Chemistry! This course will focus on methods and strategies for complex molecule synthesis. We will use primary literature sources as we embark on a historical perspective into the technology and inspiration that chemists utilize in preparing architecturally dense compounds. These entities may have important biological, material, or agrochemical use or simply be challenging structures that test the state-of-the art in organic synthesis. This course is designed for graduate and advanced undergraduate students.

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Lecture: MWF 10:00 a.m. – 10:50 a.m., FW Olin Hall, Room 103

Office Hours: By appointment. Please e-mail me at least one day in advance.

Textbook: None. Primary literature will be posted on Canvas.

Exams: There will be two 50-minute exams during the quarter worth 100 points each. The final exam will also be worth 100 points. The final exam is not optional.

Exam I – Friday, April 22; Exam II – Friday, May 20; Final Exam – Monday, June 6

Homework: There will be graded problem sets throughout the quarter. These problems are intended to help you understand the lecture material and reading assignments more thoroughly. Homework will be worth 50 total points for the course. The lowest homework score will be dropped.

Take-Home Synthesis Problem: There will be one exercise during the course to design your own synthesis of a complex molecule. This assignment will be worth 50 points.

Final Grade: Your final letter grade will be determined out of 400 points (exams: 3 x 100 points; homework: 50 points; take-home problem: 50 points) and will be determined appropriately based on overall class performance.
**Lectures:** I will cover most material on the whiteboard using three different colors. I would recommend bringing at least 3 colored pens/pencils to class. If PowerPoint slides are periodically incorporated in lecture they will be posted afterwards on Canvas.

**Academic Integrity:** I have high expectations for each and every one of you as students at the University of Denver. While I encourage group study sessions outside of class, I expect you to work independently during in class examinations. Any deviations from this policy will not be tolerated. For more information, please see the University of Denver's official Honor Code at: [http://www.du.edu/studentlife/studentconduct/](http://www.du.edu/studentlife/studentconduct/)

For COVID-19 protocols, see: [https://www.du.edu/coronavirus/operations/protocols](https://www.du.edu/coronavirus/operations/protocols)

*Compounds of Interest – Subject to Change – Not Chronological*

- Longifolene
- Periplanone B
- Penicillin
- Taxol
- Strychnine
- Mitomycin C
- Monensin
- Ginkgolide B
- Erythromycin
- Ecteinascidin 743
- Palau'amine
- Paxlovid