SYLLABUS

Chem 2541 - ORGANIC CHEMISTRY I LECTURE, Summer 2018 May 14 - June 29

CLASS TIME: M, W, F 8:00 to 10:10 am, Chem 150

INSTRUCTORS:

Dr. Viktor V. Zhdankin, Office: Chem 341, Phone: 726-6902 e-mail: vzhdanki@d.umn.edu; web page: http://www.d.umn.edu/~vzhdanki

Dr. Peter Grundt, *Office*: Chemistry 319, Phone: 726-6939 *e-mail:* pgrundt@d.umn.edu; *web page:* http://www.d.umn.edu/~pgrundt/2541/

Office hours: M, W, F 10:10 to 11:00 am (after lecture) or by appointment

COURSE PREREQUISITES: Chem 1152 or 1162; or 1155 and 1156; or 1175 and 1176

STUDENT LEARNING OUTCOMES:

In Chem 2541 students will learn basic concepts and language of Organic Chemistry. Upon successful completion of this course, students will develop good level of understanding of basic principles of structure and bonding of organic molecules, reactions of organic acids and bases, isomerism and conformations of alkanes and cycloalkanes, stereochemistry and chirality, mechanisms of nucleophilic substitution and β -elimination reactions, electrophilic addition reactions, radical reactions, and general features of the chemistry of alkanes, alkenes, alkynes, and alcohols. Students will learn how to draw structural formulas of organic molecules, including three-dimensional structures, solve organic chemistry problems and propose mechanistic explanation to basic organic reactions.

COURSE MATERIALS:

- 1. "Organic Chemistry: a Two-Semester Course of Essential Organic Chemistry" by Zhdankin and Grundt (*required*). The book is available from UMD Bookstore or can be purchased from <u>https://students.universityreaders.com/store/</u>.
- 2. "Solutions Manual and Additional Problems for Organic Chemistry" by Grundt, Mereddy, and Zhdankin (*required*). This manual can be purchased from <u>https://students.universityreaders.com/store/</u>.
- 3. Organic Molecular Model Kit (*required*). This kit is available from UMD Bookstore or can be purchased from http://www.andruseducation.com.

COURSE WEB PAGE:

The class materials and important links are posted and periodically updated on the following web page: <u>http://www.d.umn.edu/~vzhdanki/2541/</u>.

GRADING:

Five Quizzes (20 min) Three Midterm Exams (50 min) Final Exam (2 hours) 150 points (5x30 pts) 300 points (3x100 pts) 200 points

Total

650 points

EXAM SCHEDULE:

First Midterm Exam Second Midterm Exam Third Midterm Exam Final Exam (Ch. 1-8) May 30 (Wednesday), 9:20 to 10:10 am June 15 (Friday), 9:20 to 10:10 am June 27 (Wednesday), 9:20 to 10:10 am June 29 (Friday), 8:00 to 10:10 am

QUIZ SCHEDULE (tentative):

May 18 (F), May 23 (W), June 4 (M), June 8 (F), June 20 (W), 9:40 to 10:10 am

The University of Minnesota Duluth policies related to teaching and learning apply for this course. For details see: http://www.d.umn.edu/academic-affairs/academic-policies

Students with Disabilities: It is the policy and practice of the University of Minnesota Duluth to create inclusive learning environments for all students, including students with disabilities. If there are aspects of this course that result in barriers to your inclusion or your ability to meet course requirements please notify the instructor as soon as possible. You are also encouraged to contact the Office of Disability Resources to discuss and arrange reasonable accommodations. Please call 218-726-6130 or visit the DR website at <u>www.d.umn.edu/access</u> for more information.

UMD is committed to providing a positive, safe, and inclusive place for all who study and work here. A central mission of the university is to educate students through the offering of courses and programs leading to the conferral of degrees. Teaching and learning at the university take place in a variety of educational settings including on-campus lecture halls and classrooms, laboratories, field sites, and online. Instructors and students have mutual responsibility to ensure that the environment in all of these settings supports teaching and learning, is respectful of the rights and freedoms of all members, and promotes a civil and open exchange of ideas. Making hostile, threatening, discriminatory or disparaging remarks toward or about the instructor, other members of the class or groups of people will not be tolerated.