21: 160: 336 Organic Chemistry 2 Section 1 Spring 2020

Lectures by Prof. Frank Jordan assisted by Dr. Fina Liotta in some lectures and in recitations.

Lectures Tuesday, Friday 1:00-2:20 in Boyden 100

Recitation Tuesday 11:30 AM in Ackerson 123

**COURSE SCHEDULE**

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<td>Tue MAR 10</td>
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<td>Dienes, Conjugated Systems, and Pericyclic Reactions</td>
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<td>Fri APR 3</td>
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<td>Reactions of Benzene and its Derivatives</td>
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<td>Biological Molecules, Carbohydrates</td>
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Fri MAY 1 Chapter 25
Tue MAY 14 Comprehensive Final Exam (All Chapters)

Course Synopsis:
Fundamental principles in organic chemistry. Synthesis and reactivity of major classes of functional groups, fundamental reaction classes, spectroscopic methods, biological molecules. Special attention is given to reaction mechanisms, stereoelectronic effects and the application of organic chemistry in the synthesis of more complex molecules. Where applicable, the relationship of the reactions to corresponding reactions in metabolism will be mentioned.

Goals of 160:336 include the following topics:
2. Formation of C-C bonds using organometallic methods
3. Chemistry of the carbonyl functional group
   Aldehydes and ketones
   Carboxylic acid derivatives
4. Effect of conjugation on structure: aliphatic and aromatic compounds
5. Effect of conjugation on reactivity: aliphatic and aromatic compounds
6. Introduction to the molecules of life

TEXT/ASSIGNED PROBLEMS

The bookstore version of the text also includes access to an optional online homework system.

Homework Problems (homework will not be collected)
Ch 13: 2,3,5-8,9,12,15,16,19,24
Ch 14: 2-4,8,14,15,16,17,23,25,28,29,31,36
Ch 15: 1-6,7,8,10,12,21,20,22,23
Ch 16: 1-13,14-20,24,29,30,31,32,38,42,43,46,61a,61c
Ch 17: 1-6,8,10,15,17,18-22,26,28,33,35,40,48,50
Ch 18: 1,3-10,12,16,18,19,20,22-25,27,32,35,37,41,64,66
Ch 19: 1-17,18,19,20,22,29,31,33,43,46,50,51,57,78
Ch 20: 1,2-4,5-13,14-17,19,23,28,30,32,36,50,52
Ch 21: 1-7,9 (skip b,g),12,15-17,20,22,23,26,32,36,45,46,52abc
Ch 22: 1-6,8,15,16,19,20,21,22,26,28,32-35,37,40
Ch 23: 1-15,16,18,24,25,33,34,45,47,48
MOLECULAR MODELS
A small molecular model kit made by either Cochrane's of Oxford or Indigo Instruments is available in the bookstore. Note that these inexpensive kits do not include directions, so you may wish to download these online instructions.

OFFICE HOURS
Dr. Jordan
Spring 2020 Office Hours (240 Olson Hall) Tuesday 3:30-4:30 PM (Check the announcements section for occasional changes to these times).
Or by appointment (frjordan@newark.rutgers.edu) The best way to contact Dr. Jordan is through email. He rarely checks voice mail and he is often far from a phone.

Dr. Liotta
Spring 2020 Office Hours (304 Olson Hall) Thu 10-11 AM (Check the announcements section for occasional changes to these times).
Or by appointment (fliotta@newark.rutgers.edu) The best way to contact Dr. Liotta is through email.

GRADES/EXAMS
Three 60-minute exams, of which the two top scores will count for 50% of the course grade, and a comprehensive final exam will count for the other 50% of the course grade. This will avoid any need for make-up exams, for a 60-minute exam missed for any reason.

RECITATION
Recitations on Thursday (11:30-12:50, Ackerson 123) will be used to discuss homework problems and review lecture material.

HELP
If you need assistance, study tips, or have questions about the course material or homework problems, see Dr. Jordan or Dr. Liotta during their office hours, meet with her in the recitation section, make an appointment to see them at times other than their office hours, or contact the Learning Center for other options.

The Learning Resource Center in Conklin Hall can provide various types of assistance:

1. Free Tutoring. If there are enough requests at the Learning Resource Center for tutors, free tutoring will be provided.
2. Learning Assistants. If you would like advice on how to develop better study habits and skills, make an appointment with a learning assistant at the Learning Resource Center.
ADD/DROP/WITHDRAW
ADD/DROP 1/21/20 - 1/29/20
LAST DAY TO DROP 1/28/20
LAST DAY TO ADD 1/29/20
WITHDRAW 1/29/20 - 3/30/20
Spring Recess Begins: 3/14/2020
Spring Recess Ends: 3/22/2020

SPECIAL NOTICES

1. Students are reminded that this is a 4-credit course with three meeting times
   Tue, Fri 1:00-2:20PM and Th 11:30-12:50.
   Attendance of recitations is obligatory, Dr. Jordan reserves the option of lecturing in the
   Th 11:30-12:50 time slot as needed in case of inclement weather requiring make-up
   lecture, personal issues etc.
2. Students are urged to become familiar with the use of Blackboard as messages will be
   sent via Blackboard throughout the semester.

Academic Integrity
As an academic community dedicated to the creation, dissemination, and application of
knowledge, Rutgers University is committed to fostering an intellectual and ethical environment
based on the principles of academic integrity. Academic integrity is essential to the success of
the University’s educational and research missions, and violations of academic integrity
constitute serious offenses against the entire academic community. The entire Academic
Integrity
Policy can be found here: http://academicintegrity.rutgers.edu/academic-integrity-policy/

Rutgers University Accommodation and Support Statement
Rutgers University Newark (RU-N) is committed to the creation of an inclusive and safe learning
environment for all students. RU-N has identified the following resources to further the mission
of access and support:

Students with Disabilities: Rutgers University welcomes students with disabilities into all of the
University's educational programs. The Office of Disability Services (ODS) is responsible for the
determination of appropriate accommodations for students who encounter barriers due to
disability. In order to receive consideration for reasonable accommodations, a student with a
disability must contact ODS, register, have an initial appointment, and provide documentation.
Once a student has completed the ODS process (registration, initial appointment, and
documentation submitted) and reasonable accommodations are determined to be necessary and
appropriate, a Letter of Accommodation (LOA) will be provided to the student. The student must
give the LOA to each course instructor, followed by a discussion with the instructor. This should
be completed as early in the semester as possible as accommodations are not retroactive.

Religious Holiday Policy and Accommodations: Students are advised to provide timely
notification to instructors about necessary absences for religious observances and are responsible
for making up the work or exams according to an agreed-upon schedule. The Division of Student Affairs is available to verify absences for religious observance, as needed: (973) 353-5063 or DeanofStudents@newark.rutgers.edu

**Counseling Services:** Counseling Center Room 101, Blumenthal Hall, (973) 353-5805 or http://counseling.newark.rutgers.edu

**Students with Temporary Conditions/Injuries:** Students experiencing a temporary condition or injury that is adversely affecting their ability to fully participate in their courses should submit a request for assistance at: https://temporaryconditions.rutgers.edu

Students who are Pregnant: The Office of Title IX and ADA Compliance is available to assist students with any concerns or potential accommodations related to pregnancy: (973) 353-1906 or TitleIX@newark.rutgers.edu

**Gender or Sex-Based Discrimination or Harassment:** Students experiencing any form of gender or sex-based discrimination or harassment, including sexual assault, sexual harassment, relationship violence, or stalking, should know that help and support are available. To report an incident, contact the Office of Title IX and ADA Compliance: (973) 353-1906 or TitleIX@newark.rutgers.edu. To submit an incident report: tinyurl.com/RUNReportingForm To speak with a staff member who is confidential and does NOT have a reporting responsibility, contact the Office for Violence Prevention and Victim Assistance: (973) 353-1918 or run.vpva@rutgers.edu.