NS 207 - ORGANIC CHEMISTRY SYLLABUS

(2022-2023 FALL SEMESTER)

INSTRUCTOR & TAs:

Instructor:

Assist. Prof. SERKAN ÜNAL Phone: 0 (216) 300 1313

E-mail: serkan.unal@sabanciuniv.edu Office: FENS G022 or KTMM/TÜMER

Teaching Assistants:

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LECTURE HOURS:

Monday: 09:40-11:30

Wednesday: 08:40-09:30

Location: FASS 1103

OFFICE HOURS:

Instructor: TBA or by e-mail appointment

TAs: During laboratory hours or by e-mail

appointment

GRADING:

Midterm Exam I	15%
Midterm Exam II	15%
Final Exam	25%
Laboratory	35%
Attendance & Quizzes (Top-Hat)	10%
TOTAL	100%

All classes, exams and laboratory sessions will be held face-to-face.

COURSE OUTLINE:

Week	Date	Con	tont	
week	Date	Content		
1	Oct 03, 05	Introduction	The Basics	
2	Oct 10, 12	The Basics		
3	Oct 17, 19	Structure of Molecules		
4	Oct 24, 26	Families of Organic Compounds Infrared Spectroscopy		
5	Oct 31, Nov 02	Acids and Bases	Organic Reactions and Mechanisms	
6	Nov 07, 09	Nomenclature		
7	Nov 14, 16	Conformations of Alkanes and Cycloalkanes		
8	Nov 21, 23	Midterm I	Stereochemistry	
9	Nov 28, 30	Stereochemistry		
10	Dec 05, 07	Nucleophilic Reactions		
11	Dec 12, 14	Nucleophilic Reactions	Alkenes and Alkynes: Elimination Reactions	
12	Dec 19, 21	Alkenes and Alkynes: Elimination & Addition Reactions		
13	Dec 26, 28	Midterm II	Alkenes and Alkynes: Addition Reactions	
14	Jan 02, 04	Alkenes and Alkynes	Radical Reactions	
	Jan 07 - 20	Final exam	L	

COURSE TEXTBOOK: Organic Chemistry, Solomons, T. W. Graham, and Craig B. Fryhle. *12th edition,* John Wiley.

ATTENDANCE and QUIZZES:

Attendance and Quizzes Grading:

Minimum of 60% attendance is required for all students

- 0.5 points for each course attendance and 0.5 points for each correct quiz answer
- 10 pts is given if a student's sum of collected points from the attendance and quizzes is greater than 80%
- If less than 80%, the grade will be 10 x (collected points)/(total points)

Top Hat:

Online response system TopHat will be used in lectures, please pay attention to TopHat invitations from your instructor

LABORATORY:

Laboratory grades will make up 35% of a student's total grade and the distribution will be as follows:

- Pre-lab report and lab performance (10 out of 35)
- Lab reports (25 out of 35)

Pre-lab reports: You will be provided the manual of the experiment a week before each lab session. You must be prepared before each experiment. For us to assess your preparedness and knowledge, you must prepare and hand-in a pre-lab report before each experiment.

Lab performance: Each student is expected obey and will be graded based on the following:

- Following all instructions
- Being punctual

- Contribution to group work
- Proper attitude in group work

Lab Reports: Each student must prepare a lab-report and deliver via SUCourse+ within four days following each experiment. Late reports are NOT accepted.

Laboratory Schedule*:

WEEK	DATE	EXPERIMENT	
1	Week of	No labs	
	Oct 03		
2	Week of	No labs	
	Oct 10		
3	Week of	Lab intro & problem solving	
	Oct 17	(PS) session	
4	Week of	Exp 1: Recrystallization &	
	Oct 24	Melting point	
5	Week of	PS	
	Oct 31		
6	Week of	Exp 2: Acid- Base	
	Nov 07	Extraction	
7	Week of	PS	
	Nov 14		
8	Week of	PS	
	Nov 21		
9	Week of	Exp 3: Isolation of Caffeine	
	Nov 28	from Tea	
10	Week of	PS	
	Dec 5		

WEEK	DATE	EXPERIMENT
11	Week of	Exp 4: Synthesis of Soap
	Dec 12	
12	Week of	PS
	Dec 19	
13	Week of	Exp 5: Nucleophilic
	Dec 26	Substitution Reactions
14	Week of	PS
	Jan 02	

LAB SESSIONS:		
NS207L - A: Tuesdays 11:40 – 14:30		
NS207L - B: Tuesdays 08:40 – 11:30		
NS207L - C: Tuesdays 14:40 – 17:30		
NS207L - D: Mondays 14:40 – 17:30		
NS207L - E: Mondays 11:40 – 14:30		

^{*}Subject to change anytime due to health regulations or room availability

- Laboratory manual of each experiment will be available on SUCourse+ one week before the experiment.
- Pre-lab reports that are due just before each experiment should be hand-written.
- Students are expected to bring and submit the pre-lab report to TAs before each session.
- Lab-reports should be uploaded on SUCourse+ within 4 days from the experiment.
- All lab-reports will be checked by Turnitin.
- Students must follow "<u>Guidelines for working in FENS Laboratories</u>" uploaded on SUCourse+ during laboratory experiments.
- A detailed introduction session will be held with TAs during Week 3 in each individual lab. Section.

MAKEUP POLICY:

Students who miss a midterm, laboratory session or the final exam must present an official, acceptable excuse (i.e., health report certified by the Sabanci University Health Center) to the instructor within one week.

ACADEMIC INTEGRITY:

Investigation procedures for academic integrity violations:

Violations of academic integrity include cheating in classroom examinations, plagiarism in take-home examinations, homework assignments, essays, thesis and artistic work, fabrication and misrepresentation of facts and data, as well as assistance to others in commission of these acts, spontaneous or premeditated. These violations undermine values of fairness, honesty and trust in the academic environment and distort the process by which knowledge is shared and evaluated. The academic integrity investigation procedure is a fundamental component of our commitment to maintain a productive climate of learning and a vibrant academic life.

A student whose work or behaviour is considered to have contravened the principles of academic integrity faces academic consequences. These are determined by the course instructor or the thesis supervisor in accordance with our academic norms. The academic integrity policy for each course is appended to the syllabus and announced to the students at the beginning of the course.

The disciplinary procedure outlined below is independent from the academic consequences of the violation.

The students, teaching assistants and proctors in a learning module or course must communicate any information and observation about academic integrity violations to the main instructor.

The main instructor personally reports all incidences with preponderance of evidence for violations of academic integrity, **without exceptions**, to the Dean or the Director's office. The report consists of a written statement of facts and evidence. The case is recorded. Please use the attached form.

If necessary, the Dean/Director interviews the parties involved and decides on whether to initiate further disciplinary investigation.

Further disciplinary investigation is carried out according to the regular procedures of the university.

The duty to report violations, highlighted in the above procedure, is inseparable from our responsibility to take action against wrongdoing, even in situations involving peer pressure, fear or compassion. The requirement that all cases be reported to the Dean/Director's office ensures fairness through a uniform application of rules across all cases. It also strongly signals our community's determination to defend the academic values of honesty and mutual trust.