OFFICIAL SYLLABUS WILL BE PROVIDED IN THE COURSE

EAST TENNESSEE STATE UNIVERSITY

College of Arts and Sciences

Department of Chemistry

CHEM 2020: Organic Chemistry II

Instructor	Dr. Aleksey Vasiliev Brown Hall 361, Phone: 423-439-4368, e-mail: vasiliev@etsu.edu Office hours: MW 10:30-11:30
Course Description	The basic course in the study of compounds of carbon. Three (3) hours of lecture per week. Must be taken in proper sequence.
Objectives	The purpose of this course is to enable you to understand the basic principles of organic chemistry. To succeed you will need to know and use the nomenclature of organic chemistry and you will need to be able to understand structural drawings and draw structures of some simple organic compounds yourself. You will need learn about the dynamics and reactivity of organic molecules and master sufficient spectroscopy to convince yourself that regions outside the visible portion of the spectrum can be utilized to facilitate our understanding of structure as well as what transpires during reactions.
Textbook	*Organic Chemistry: Principles & Mechanisms*, by Joel Karty, 2nd Ed. It is vital that you listen carefully to the lectures and write down good notes. These notes, and corresponding segments from the text, will be important resources to learn the material and prepare for exams.
Supplemental items	- ***Smartwork® online homework***: It is mandatory and it is free with the textbook. - Student Study Guide and Solutions Manual for the same book. This is included free with the textbook when you purchase it. - Organic Molecular Models set. This is optional but highly recommended.
Homework	After the first lecture, visit smartwork.wwnorton.com to register, so that you can complete the online homework assignments. To do that you need: (1) the access code which comes with the text book, (2) a valid email address, and (3) your enrollment key provided byme.
Prerequisites	Organic Chemistry I (CHEM 2010). Although CHEM 2021 (Lab) is a separate course from CHEM 2020 (Lecture), the lab is a co-/pre-requisite for the lecture.

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Safety training

If you have not done this (on line) in the last year, before lab starts you are required to go to https://healthsafety.etsu.edu/training/list and login using your complete e mail address (i.e. doej@goldmail.etsu.edu) and your ETSU network password. The site will welcome you, and then you will need to click on the "Training Modules" link on the left side of the page. A list will appear telling you which modules you are registered for. Click on the "Take" option next to Chemistry Safety. Please watch the video and then read all the safety information in the module. When complete, click on the Take Training Quiz link at the bottom of the module and take the quiz. You must complete the safety training or you will be purged from both the laboratory and lecture. If you are purged, you will not be able to add the courses back until you have completed the safety training. Further, you will not be allowed in the laboratory until you have added back the courses.

Attendance policy

Students are expected to attend lectures. Attendance will be checked on a random basis.

Note: The lowest of the three regular exams (provided all exams are taken) will be dropped, if and only if, the student attends lecture at least 80% of the time.

Grading

There will be three midterm exams during the regular class and a final cumulative ACS exam. Make up exams are not available. All exams are closed book and model sets are prohibited. Exam dates and point values are given below. If you miss one regular exam for a documented legitimate reason, the grade for that exam will be zero and that will be the grade that will be dropped. If you miss one regular exam because you were not prepared, you will get zero and that grade will not be dropped. If two or more regular exams are missed, or if the final exam is missed, you will receive an "F" grade for the whole course.

The course final average will be calculated as follows:

Homework: 15%

Exams: 60%

ACS Final Exam (cumulative): 25%

Grading Scale

A = 93-100%	**B** = 84-87%	**C** = 74-77%	**D** = 50-60%
A- = 90-93%	**B-** = 80-84%	**C-** = 70-74%	**F** = ‹ 50%
B+ = 87-90%	**C+** = 77-80%	**D+** = 60-70%	

Lecture schedule

8/26-8/30	Nucleophilic Substitution and Elimination Reactions 2: Reactions That Are Useful for Synthesis (Chapter 10)
9/04-9/09	Organic Synthesis 1: Beginning Concepts (Chapter 13)
9/11-9/16	Orbital Interactions 2: Extended π-Systems, Conjugation and Aromaticity (Chapter 14)
9/18-9/23	Nucleophilic Addition to Polar Bonds 1: Addition of Strong Nucleophiles (Chapter 17)
9/25	**Exam 1 (Chapters 10,13,14,17)**

9/27-10/02	Nucleophilic Addition to Polar Bonds 2: Addition of Weak Nucleophiles and Acid and Base Catalysis (Chapter 18)
10/04-10/09	Organic Synthesis 2: Intermediate Topics of Synthesis Design, and Useful Reduction and Oxidation Reactions (Chapter 19)
10/11-10/18	Nucleophilic Addition-Elimination reactions 1: The General Mechanism Involving Strong Nucleophiles (Chapter 20)
10/21-10-25	Nucleophilic Addition-Elimination reactions 2: Weak Nucleophiles (Chapter 21)
10/28	**Exam 2 (Chapters 18-21)**
10/30-11/04	Electrophilic Aromatic Substitution 1: Substitution on Benzene: Useful Accompanying Reactions (Chapter 22)
11/06-11/13	Electrophilic Aromatic Substitution 2: Substitution Involving Mono- and Disubstituted Benzene and Other Aromatic Rings (Chapter 23)
11/15-11/20	The Diels-Alder Reaction and Other Pericyclic Reactions (Chapter 24)
11/22	**Exam 3 (Chapters 22-24,26)**
11/25-12/2	Polymers (Chapter 26)
12/4	Review session (all chapters)
12/9	**ACS cumulative final exam (8:00 am)**

Disability services statement

It is the policy of ETSU to accommodate students with disabilities, pursuant to federal law, state law, and the University's commitment to equal educational access. Any student with disability who needs accommodations, for example arrangement for examinations or seating placement, should inform the instructor at the beginning of the course. Faculty accommodation forms are provided to students through Disability Services in the D.P. Culp center, tel. 439-8346.

Mental health statement

There are many resources available on the ETSU campus, including ETSU Counseling Center (432) 439- 4841; ETSU Behavioral Health & Wellness Clinic (432) 439-7777; ETSU Community Counseling Clinic

(423) 439-4187. If you or your friend are in immediate crisis, call 911. Available 24 hours per day is the National Suicide Prevention Lifeline 1-800-273-TALK (8255).

Academic integrity

All members of the department (faculty, staff, and students) have an affirmative responsibility to maintain the highest standards of academic integrity in all activity. At its most basic, academic misconduct is a violation by an act of commission or omission of one of these fundamental values (Please see Academic Integrity Policy).

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