Syllabus
CPSC 382: Organic Chemistry of Biological Processes

4 credit hours
Fall 2019

Course description
An overview of the structure, properties, and reactions of carbon-containing compounds relevant to biological processes and cellular structure. The chemistry of hydrocarbon, aromatic, as well as oxygen-, nitrogen-, phosphorus-, and sulfur- containing compounds will be examined. Macromolecular structures including biological membranes, carbohydrates, proteins and nucleic acids will also be discussed.

Course Meeting: 11:00a - 12:20p, Tuesday &Thursday
1103 Plant Science Laboratory (PSL) building

Office hours: 12.30-1.00p Tuesday & Thursday or by appointment

Instructor:

Dr. Andrew Margenot Department of Crop Sciences
Office: 1011 Plant Science Laboratory
Email: margenot@illinois.edu

Course Website: The course webpage will be located on the University of Illinois Compass 2g site. To access the course webpage, go to the following web address:

https://compass.illinois.edu

and then log into the Compass 2g section using your University of Illinois net ID and password. Our course website provides important course information and contains PDF files for the **Lecture Outlines** that can be downloaded via the internet to any computer and printed. The lecture outlines contain all the visual materials presented in lecture. The lecture outlines should be downloaded, printed and brought to class. Homework assignments will also be downloaded as PDF files from the course webpage (see subsequent syllabus section).

Textbook: There is no required textbook for the course.

Grading:

Evaluation	No.	Point per item	Subtotal Points
Homework	10 *	40	400
Quizzes	6 *	30	180
Final exam	1	100	100
Extra credit	1	20	-
		Grand total points	680

* Though a total of 7 quizzes and 11 homeworks will be assigned, the lowest score for each will be dropped for a total of 6 graded quizzes and 10 graded homeworks

Homework Assignments: There will be a homework assignment for each topic in the course. The homework assignments are located in a folder on the Compass course website. Homework assignments will be downloaded from the course webpage, completed, and submitted as an email-attached file to the instructor. The homework assignments are in a "Reader-Enabled PDF form" format which can be completed electronically (just click the cursor onto one of the answer blanks and type in the answer) and all work can be saved to the PDF file. Due dates for the homework assignments are shown in the next section.

Homeworks are always **due on Monday at 12.00 noon**. Homeworks can be submitted as paper copies to the instructor's mailbox in PSL mailroom or emailed as a pdf. Points will be deducted if the HW is not mailed as a pdf. The answer key for homeworks will be posted shortly after the homework deadline in order to provide time to study for the quiz on the following day. Because the answer key is posted online, **late homework assignments will not be accepted.**

Quizzes: Quizzes will be online on Compass and will be released on Tuesday afternoon, always following a homework due on Monday (see above). This allow studying of the answer key to the homework due on Monday at noon to prepare for the quiz on Tuesday afternoon. The online quiz is available from 1.00 - 11.59 pm on Tuesday.

Course Schedule: Topics and Evaluations

Week	Dates	Topic	HW	Quiz
1	Aug 27, 29	T1. Review of Gen Chem principles		
2	Sep 3, 5	T2. Hydrocarbons		
3	Sep 10, 12	T3. Making C reactive		
4	Sep 17, 19	T4. Aromatics		
5	Sept 24, 26	T5. Oxygen functional groups		
6	Oct 1, 3	T6. Nitrogen functional groups		
7	Oct 8 (no class 10th)	T7. Sulfur functional groups	**HW 3, 4** T3-4	**Quiz III** T4
8	Oct 15, 17	T8. Quantifying organic components: spectroscopy T9. Sugars		
9	Oct 22, 25	T9. Sugars T10. Carbohydrates and polysaccharides	**HW 5** T5 **HW 6** T6-7	**Quiz IV** T5-7
10	Oct 29, 31	T10. Carbohydrates and polysaccharides	**HW 7** T9	
11	Nov 5, 7	T11. Lipids	**HW 8** T10	**Quiz V** T9-10
12	Nov 12, 15	T12. Amino Acids, Proteins, Enzymes	**HW 9** T11	
13	Nov 19, 21	T13. Ribonucleic acids	**HW 10** T12	**Quiz VI** T11-12
14	*Fall Break (Nov 26, 28)*			
15	Dec 3, 5	T14. "Will I ever need to use this?" Examples in crop sciences: soil, plant, fertilizer, and plant protection chemistry	**HW 11** T13	**Quiz VII** T13
16	Dec 10			
Final Exam: Dec 13, 8.00-11.00a in PSL 1103				

Final Examination: The final examination will be cumulative and will cover all topics discussed during the semester. The final examination is scheduled by the college for our class for Friday, Dec 13 at 8.00 am.

Campus Policies

Academic Integrity: The University of Illinois at Urbana-Champaign *Student Code* should also be considered as a part of this syllabus. Students should pay particular attention to Article 1, Part 4: Academic Integrity. Read the Code at the following URL: http://studentcode.illinois.edu/ .

Academic dishonesty may result in a failing grade. Every student is expected to review and abide by the Academic Integrity Policy: http://studentcode.illinois.edu/. Ignorance is not an excuse for any academic dishonesty. It is your responsibility to read this policy to avoid any misunderstanding. Do not hesitate to ask the instructor(s) if you are ever in doubt about what constitutes plagiarism, cheating, or any other breach of academic integrity.

Students with Disabilities: To obtain disability-related academic adjustments and/or auxiliary aids, students with disabilities must contact the course instructor

as soon as possible. To insure that disability-related concerns are properly addressed from the beginning, students with disabilities who require assistance to participate in this class should contact Disability Resources and Educational Services (DRES) and see the instructor as soon as possible. If you need accommodations for any sort of disability, please speak to me after class, or make an appointment to see me, or see me during my office hours. DRES provides students with academic accommodations, access, and support services. To contact DRES you may visit 1207 S. Oak St., Champaign, call 333-4603 (V/TDD), or e-mail a message to disability@uiuc.edu. http:// www.disability.illinois.edu/.

Emergency Response Recommendations: Emergency response recommendations can be found at the following website: http://police.illinois.edu/ emergency/. I encourage you to review this website and the campus building floor plans website within the first 10 days of class. http://police.illinois.edu/ emergency/floorplans/ .

Family Educational Rights and Privacy Act (FERPA): Any student who has suppressed their directory information pursuant to *Family Educational Rights and Privacy Act* (FERPA) should self-identify to the instructor to ensure protection of the privacy of their attendance in this course. See http://registrar.illinois.edu/ferpa for more information on FERPA.