

## Syllabus

## CHM 4272 - Organic Chemistry of Polymers; Section 2993; Spring 2015

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**Instructor & Contact Information.** Prof. Brent S. Sumerlin; [sumerlin@chem.ufl.edu](mailto:sumerlin@chem.ufl.edu); PH: 352-392-0563; Office: Sisler 301

**Class Time & Location.** Monday, Wednesday, 1:55PM-2:45PM; Classroom: Leigh 207

**Office Hours.** Thursday 8:30AM-9:20AM (Sisler 301) – subject to change - or by appointment

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**Course Description.** Classification of polymerization types and mechanisms from a mechanistic organic point of view. The structure of synthetic and natural polymers and polyelectrolytes. Reaction of polymers. Practical synthetic methods of polymer preparation.

**Prerequisites.** CHM 2200, 2210, or equivalent.

**Learning Outcomes/Objectives.** Upon completion of this course, a successful student will be able to:

- Discuss the basic concepts of organic polymer chemistry;
  - Identify the nomenclature, structure, architecture, physical/chemical properties, and reactivity of macromolecules;
  - Demonstrate clear understandings of step-growth and chain-growth polymerization, living polymerizations, and basic polymer characterization techniques used to determine molecular weights;
  - Explain how polymer chemistry is relevant in living organisms and to the world at large.
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**Required Textbook.** *Polymer Chemistry: An Introduction*, 3<sup>rd</sup> Edition by Malcolm P. Stevens (ISBN: 0195124448) and handouts

**Supplementary Sources.** *Principles of Polymerization*, 4<sup>th</sup> Edition by George Odian (ISBN: 0471274003); *Textbook of Polymer Chemistry* by Fred W. Billmeyer; *Principles of Polymer Chemistry* by Paul J. Flory; *Contemporary Polymer Chemistry* by Harry R. Allcock; *Introduction to Physical Polymer Science* by L. H. Sperling.

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**e-Learning Website.** All students have access to the e-Learning Sakai website: <https://lss.at.ufl.edu/>

Login with your Gatorlink account username and password. The site will be used for making announcements, recording grades, and listing practice problems. Most importantly, the site will be used for posting lecture videos. See “**Online Content**” section below.

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### Class Requirements.

Four in-class exams (100 points each)

**Total = 400 possible points**

### Exam Dates.

- Exam 1: February 4 (in class)
- Exam 2: February 25 (in class)
- Exam 3: March 30 (in class)
- Exam 4: April 22 (in class)

**Note:** For reasons of privacy, grades will not be discussed by email. All grades will be posted on e-Learning. If you have questions about your grade, you should come to office hours to discuss your questions/concerns with me.

Current UF grading policies for assigning grade points: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

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**Exams.** There will be no make-up exams given for an unexcused absence (see section titled “Exam Absence Policy” for the limited definition of what qualifies as an excused absence).

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**Exam Absence Policy.** This course administers all conflicts with scheduled assessments and examinations in accord with University policy. As such, certain unavoidable absences by students from examinations are allowed, if properly documented and disclosed to Dr. Sumerlin at least one week before the anticipated conflict. Such allowed absences include, but are not limited to, religious observances, sanctioned sporting events, military obligations, and court-imposed legal obligations. In such cases, provided documented notice was made to Dr. Sumerlin one week in advance of the exam date, students will be given the opportunity to take a *conflict exam*, which takes place shortly before the scheduled assessment for the class.

No written exams will be administered to absent or otherwise compromised students for a grade *after* the established and scheduled assessment time. Written exams for credit given to excused students after the rest of the class is given their exam are herein defined as *makeup exams*; no written makeup exams are given in this course.

Unpredicted absences due to medical emergencies are not covered under the above conflict exam policy. If the time and severity of the emergency is severe enough to make continuation in scholastic activity impossible for the rest of the term, a medical withdrawal is strongly advised. If the condition warranting the absence at a scheduled exam is unexpected, relatively minor, and can be recovered from in short order, the student must provide verifiable documentation of the medical emergency to Dr. Sumerlin within a timely fashion of the scheduled assessment date. If proper verifiable documentation of the medical emergency is acceptable to Dr. Sumerlin at the time the student is ready to restart his/her academic pursuits, the instructor and student together decide to either: 1) allow the Exam 4 score to count as the score for the missed exam (for Exams 1-3) or have an alternative oral exam that will take the place for a missing Exam 4 (Exam 4 *only*); or 3) begin the process for the request of a medical withdrawal from the course by the student. No written makeup exams (as defined above) are ever given.

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**Final Examination.** There is no final exam for this class.

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**Online Content.** In many respects, this course will be a combined version of an in-class and online course. There will frequently be video lectures posted to e-Learning. These videos will *not* be recordings or duplicates of the in-class lectures. Rather, the videos will be used as a mechanism for “catching up” or in lieu of a class during a regularly scheduled time. It is your responsibility to download these videos, watch them on your own time, write your notes from the material provided in the video, and come to the next class prepared to move on to new material. While you may obviously ask questions in class about the material in the videos, we will not review the lecture notes from the videos during class.

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**Homework.** Stay on top of all reading and notes.

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**Regrading.** If you have a question concerning the grading of an assignment, you may submit the entire assignment for complete regarding, provided no part of your answers was written in pencil or erasable ink. Your score may increase or decrease accordingly. The exam must be submitted for regrading by the end of the first class meeting after the date the assignment was returned to the class. This means that exams handed back on Tuesday should be submitted for regrading by the end of class on Thursday. Please note that your graded exams may be photocopied prior to being returned to you.

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**Attendance.** Attendance for lectures is not mandatory. However, this is fast-paced course where low attendance will almost certainly lead to your demise.

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**Classroom etiquette.** Cell phone use/text messaging is strictly prohibited in the lecture hall at all times.

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**Accommodations for students with disabilities.** Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

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**UF Honor Code.** We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.

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On all work submitted for credit by students at the university, the following pledge is either required or implied: **"On my honor, I have neither given nor received unauthorized aid in doing this assignment."** “The university requires all members of its community to be honest in all endeavors. A fundamental principle is that the whole process of learning and pursuit of knowledge is diminished by cheating, plagiarism and other acts of academic dishonesty. In addition, every dishonest act in the academic environment affects other students adversely, from the skewing of the grading curve to giving unfair advantage for honors or for professional or graduate school admission. Therefore, the university will take severe action against dishonest students. Similarly, measures will be taken against faculty, staff and administrators who practice dishonest or demeaning behavior.”

**Cheating and Plagiarism.** Cheating and/or plagiarism will not be tolerated. The minimum penalty will be an automatic zero on the assignment in question. You will not be allowed to drop this zero as your lowest exam grade. It will count toward your average. Suspension from the University may also result. Do not risk it. It is not worth it. Plagiarism consists of passing off as one's own the ideas, words, writings, etc. that belong to someone else. You are committing plagiarism if you copy the work of another person and turn it in as your own, even if you have that person's permission. See:

<http://www.dso.ufl.edu/sccr/honorcodes/honorcode.php>

<http://www.dso.ufl.edu/sccr/honorcodes/conductcode.php>

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