

211 Spencer Chemistry Building, MW 3:30-4:45 pm

Instructor	Prof. Ekaterina N. Kadnikova
E-mail	KadnikovaE@umkc.edu (you have to start your subject with "Chem 471/571")
Phone	816-235-5937
Office	Spencer Chemistry Building 109B
Office hours	MW 2-3 pm and by appointment
Website and Blackboard	The latest version of this syllabus will be posted at http://k.web.umkc.edu/kadnikovae . All course information, including all announcements, keys to quizzes, problem sets, and exams, and your grades will be posted <u>on the Blackboard</u> (blackboard.umkc.edu). Your Blackboard username and password are the same as those in your UMKC e-mail account (<i>username@umkc.edu</i> e-mail address).
Course announcements	All announcements will be posted only on the Blackboard (blackboard.umkc.edu).
Pre-requisites	Undergraduate Organic Chemistry (CHEM 321 and CHEM 322R). Basic understanding of thermodynamics and kinetics is also required.

About this course and its objectives

The objective of the course is to provide a good understanding of the modern polymer chemistry, including the fundamentals of structure, polymerization reactions and mechanisms, reactions, as well as polymer characterization techniques.

Class attendance

Lecture attendance is strongly encouraged but will not be recorded. Changes to the schedule or to the assignments will be announced in class and posted on the Blackboard. It is the responsibility of the student (not of the Instructor) to obtain the material covered in class and to be aware of the announcements. *As with any science course, it is imperative that you study hard, i.e., 6-9 hours a week for a 3-credit course.*

Class materials

You will need Internet access to use Blackboard

The required text is the 4th edition of *Principles of Polymerization* by George Odian (Wiley-Interscience, ISBN 978-0471274001). You may use a textbook shopping website (i.e., <http://uber-bot.bigwords.com/>) to get the best price for this book. Other class materials, *i.e.*, reviews *etc.* will be posted on the Blackboard

Grading

Class total is 450 points (problem sets (30) + quizzes and presentations (20) + two exams (200) + final exam (200)). The approximate grading scale will be as follows:

85-100 % = A (the highest grade), 70-84 % = B (work of distinction), 55-69 % = C (average work)
40-54 % = D (passing, but unsatisfactory), 0-39 % = F (failure without credit)

The grade cut-offs will not be raised, but may be slightly lowered, depending on the class performance. Plus/minus grading will be used sparingly.

The letter grade definitions are taken from the *UMKC 2009-2010 Undergraduate Catalog* (<http://web2.umkc.edu/catalog/Grading.html>). There is no "extra credit" work.

Examinations (200 points)

Two hour examinations (100 pts each) will be given during the semester. There will be no make-up exams. If you miss one (*and only one*) exam with a valid documented excuse (such as an illness confirmed by a doctor's note or a documented family emergency), the weight of this exam will be transferred to the final (i.e., your missed exam score will be your % score of the final). In all other circumstances, you will receive *zero points* for the missed exam.

A comprehensive final exam (200 pts) will be given on Thursday, Dec 16, 1-3 pm.

Homework problems

The textbook has problems at the end of each chapter. You should work all of them. I would be happy to discuss them during office hours. Problem sets and exam questions may draw from these problems

Problem sets

There will be three problem sets, one before each examination. They will be collected and graded (10 pts each).

Quizzes and presentations

There will be occasional quizzes (in-class and/or take-home). Take your performance on them seriously, since they are designed to prevent you from falling behind.

Graduate students enrolled in CHEM 571 will be expected to give a 15-minute presentation based on a polymer synthesis research article from a recent issue of *Macromolecules*. *Detailed guidelines will be given in class.*

Academic honesty

Cheating and other forms of academic dishonesty shall not be tolerated in this class. It is your responsibility to understand the facets of academic honesty and to uphold the UMKC rules of academic conduct (<http://www.umsystem.edu/ums/departments/gc/rules/programs/200/010.shtml>). Violators will receive an F grade for the course and face disciplinary action from the University.

Academic accommodations for students with disabilities

If you have a documented disability and desire academic accommodations, please contact the Office of Services for Students with Disabilities as soon as possible (<http://www.umkc.edu/disability/>).

Sexual harassment and discrimination

University of Missouri-Kansas City has a zero tolerance policy for sexual harassment, intimidation, or discrimination of any kind. If you (or our peers) have a question or experience anything of this kind, please talk with and/or report this conduct to the Departmental Chair, the Dean, and Affirmative Action Office. UMKC policies and procedures are online at <http://www.umkc.edu/diversity/documents/complaintprocess.pdf>.

Regrade and grievance procedures and conduct of the class

Regrade requests for the exams should be submitted to the Instructor as soon as possible, and no later than within one week of receiving the graded exam back. Any grievance about grading or conduct of the class should be taken first with the Instructor. After contact with the instructor, further comments and complaints may be addressed to the Chemistry Department Chair. This class shall be conducted in a professional and respectful manner and in compliance with UMKC's policies ([http://web2.umkc.edu/catalog/Undergraduate Academic Regulations and Information.html](http://web2.umkc.edu/catalog/Undergraduate_Academic_Regulations_and_Information.html)).

Texting

Texting during class is rude. You may be asked to leave. Texting (or similar activities) during the quizzes and exams is forbidden; it will be considered cheating regardless of the content of the messages.

TENTATIVE SCHEDULE

This schedule is tentative and is subject to change during the course of the semester. Any changes will be announced in class and posted on the Blackboard. It is the responsibility of the student to be aware of the changes.

Monday	Lecture	Wednesday	Lecture etc.
Aug 23	Syllabus, Ch 1	Aug 25	Ch 1
Aug 30	Ch 2	Sept 1	Ch 2
Sept 6	Labor Day	Sept 8	Ch 2
Sept 13	Ch 3	Sept 15	Ch 3
Sept 20	Ch 3	Sept 22	Ch 4
Sept 27	Ch 4, <i>PS I</i>	Sept 29	Exam 1
Oct 4	Ch 4	Oct 6	Ch 4
Oct 11	Ch 5	Oct 13	Ch 5
Oct 18	Ch 5	Oct 20	Ch 6
Oct 25	Ch 6	Oct 27	Ch 6
Nov 1	Ch 7, <i>PS II</i>	Nov 3	Exam 2
Nov 8	Ch 7	Nov 10	Ch 7
Nov 15	Ch 8	Nov 17	Ch 8
Nov 22	Thanksgiving Break	Nov 25	Thanksgiving Break
Nov 29	Ch 8	Dec 1	Ch 9
Dec 6	Ch 9	Dec 8	Ch 9, <i>PS III</i>
Dec 16	FINAL EXAM (1-3 pm)		

Words to the wise:

- Review the material covered in undergraduate Organic Chemistry courses. You are expected to know that material. CHEM 471/571 will build on that knowledge.
- Read the material before the lecture. The lecture should then be easier to follow and lecture notes easier to take. Re-read the material soon after the lecture, review and correct your lecture notes, if necessary.
- Above all, **do not fall behind** and think that you will catch up later. In all likelihood, you will only fall further and further behind.
- Come see the Instructor (during her office hours or make an appointment), especially you are having problems with this class.