

BME 695K/IPPH 690W
(3-Credit)

Polymers in Biomedical & Pharmaceutical Systems

Instructor: Professor Kinam Park (kpark@purdue.edu) Office: MJIS 2070

Lectures Tue, Thr. 6:00 pm – 8:50 PM. MJIS 1083

Objective: This course is designed to provide backgrounds in basic polymer chemistry, properties and characterization, and recent advances in smart polymers for applications in pharmaceuticals, biomaterials, tissue engineering and nanotechnology.

Grading: The grading will utilize the plus/minus grading system, and thus the highest grade of the course will be A⁺. Students will determine their own grades in consultation with the instructor. Students are expected to read all handout materials, do homework, and prepare a written report at the end of the semester. Each student will be required to present the contents of the written report in a 20-min presentation during the last two class hours. Each student can choose a special topic of their choice upon consultation with the instructor. The research report and presentation are designed to train students how to utilize information obtained in the class to certain research topics and to improve their presentation skills.

Lecture Materials:

Lecture materials will be posted in PDF format and you can download them from your Blackboard.

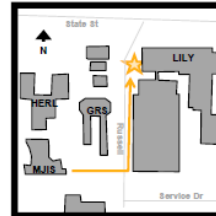
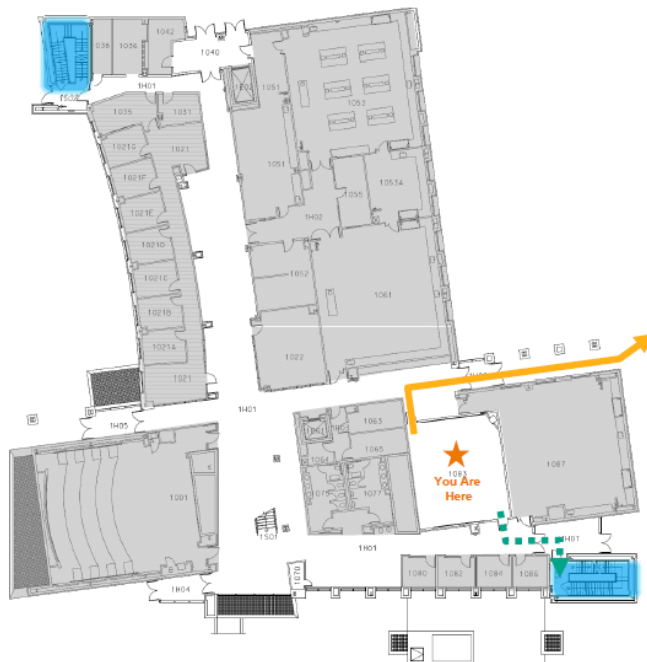
Emergency: In the event of a major campus emergency, course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances. You will be notified by e-mails from the instructors.

Course Outline

#	Date	Lecture Contents
1.	1/12	Introduction to Polymers: History
2.	1/14	Introduction to Polymers: Basics I
3.	1/19	Introduction to Polymers: Basics II
	1/21	(No Class)
	1/26	(No Class)
4.	1/28	Smart Polymers and Hydrogels
5.	2/2	Biomedical Polymers and Biocompatibility
6.	2/4	Controlled Drug Delivery I
7.	2/9	Controlled Drug Delivery II
8.	2/11	Manuscript, Proposal, Report, Patent, Proposal Review
9.	2/16	Targeted Drug Delivery
10.	2/18	Tissue Engineering
11.	2/23	Biotechnology
12.	2/25	Nanoscience
13.	3/1	Nanotechnology I
14.	3/3	Nanotechnology II
15.	3/8	Student Report Presentation I
16.	3/10	Student Report Presentation II

Note: The lecture schedule may change.

Evacuation and Shelter-In-Place Procedures



Emergency Assembly Area

In case of Violence:

If incident is occurring in your building, call 911 if possible.

If possible, seek shelter in a lockable or securable room, preferably without windows.

In case of Fire:

Calmly follow the solid gold path to exit the building, assemble 100ft from the NORTHEAST end of the building. (In case of inclement weather assemble in the Northeast hall of LILY)

In case of fire, elevators will not operate.

In case of Shelter-in-Place-Weather-Related Emergencies:

Calmly follow the dotted teal path to the closest stairwell, take it to the BASEMENT and find a shelter location

Evacuation Procedures

- You are in a facility used for research; it is possible that the evacuation horn will sound.
- This is a very loud INSIDE alarm.
- Please walk calmly out of the building and gather outside near the Northwest end of LILLY.
- Stay in West of Russell St. until a police officer gives the all clear.
- It is extremely dangerous to enter a building in the middle of an emergency.
- It is the responsibility of the faculty and staff to execute this emergency plan upon hearing the evacuation siren.

All Hazards Emergency Warning Sirens

- A weather emergency, such as a tornado, will activate the “shelter in place” siren.
- This is a less audible OUTSIDE, area-wide siren.
- Please seek shelter in the basement area.