

# PoND CREATE Module

## Polymer Synthesis for Drug Delivery

### Course Description

*This course is open to students in the PoND program.*

This module will describe the methods to synthesize polymers that can be designed in drug delivery. Not only conventional polymerization methods including step-growth and chain-growth polymerization including living anionic and cationic polymerization, but also modern controlled/living radical polymerization and ring-opening metathesis polymerization (ROMP) will be covered. Furthermore, the synthesis and self-assembly of amphiphilic block copolymers for drug delivery applications will be discussed. Lectures only.

### **Instructor:**

Prof. John Oh, Concordia University, Department of Chemistry and Biochemistry  
John.oh@concordia.ca

### **Lectures:**

*10:30 - 12:00 am PDT (1:30-3:00 pm ET) on*

Tue, Jun 1	Tue, Jun 8
Tue, Jun 15	Tue, Jun 22
Tue, Jun 29	Tue, Jul 6

### **Evaluation:**

20% - Participation in class discussions

80% - Individual report describe a topic of choice by the students, which is related to design and synthesis of functional polymers for drug delivery research.

Four pages long including synopsis (max 1/2 page), Introduction, Description, and Conclusion and Perspectives (max 1/2 page), including max three figures. References will be in the additional page(s).

Format: Single line space (1 inch margin for four sides, 12 font size/Times New Roman)

### **Schedule:**

**Jul 2:** A brief outline including the title, a short description, and major references in a less than a half page will be sent to Dr. Oh to check if it will be appropriate

**Aug 15:** Deadline for submission of report.