

Nanomedicines in Oncology PHM382H1/PHC432H1
Leslie Dan Faculty of Pharmacy, University of Toronto

Lecture Schedule (Thursdays 9 – 11am, Haultain Bldg, Rm 316):

Week	Topic	Total Contact Time = 26h	Date/Lecturer
1	Introduction to Nanomedicines in Oncology	Total Time: 2h 2h: lecture and discussion	Thurs Jan 4 9 – 11 am Prof. C. Allen
2	Biological Barriers to Drug Delivery in Oncology	Total Time: 2h 2h: lecture and discussion	Thurs Jan 11 9 – 11 am Prof. C. Allen
3	Targeting Solid Tumors: The EPR Effect Deconstructed	Total Time: 2h 2h: lecture and discussion	Thurs Jan 18 9 – 11 am Prof. C. Allen
4	Heterogeneity in Cancer: Impact on Design and Effectiveness of Nanomedicines	Total Time: 2h 2h: lecture and discussion	Thurs Jan 25 9 – 11 am Prof. C. Allen
5	Nanotechnology Platforms – Polymeric Conjugates, Micelles and Nanoparticles	Total Time: 2h 2h: lecture and discussion	Thurs Feb 1 9 – 11 am Prof. C. Allen
6	Nanotechnology Platforms – Liposomes	Total Time: 2h 2h: lecture and discussion	Thurs Feb 8 9 – 11 am Prof. C. Allen
7	Nanotechnology Platforms – Thermosensitive Liposomes	Total Time: 2h 2h: lecture and discussion	Thurs Feb 15 9 – 11 am Prof. C. Allen
MIDTERM EXAM			FEBRUARY 16
			Fri Feb 16 4:30 – 6:30 pm HA410
READING WEEK			FEBRUARY 20 - 23
8	Nanotechnology Platforms – Other	Total Time: 2h 2h: lecture and discussion	Thurs Mar 1 9 – 11 am Prof. C. Allen
9	Nanotechnology for Delivery of siRNA	Total Time: 2h 2h: lecture and discussion	Thurs Mar 8 9 – 11 am Dr. Jamie Evans
10	Drug Combinations and Nanotechnology for their Delivery	Total Time: 2h 2h: lecture and discussion	Thurs Mar 15 9 – 11 am Dr. Jamie Evans
11	In Class Presentations and Discussion	Total Time: 2h 2h: in-class presentations and discussion	Thurs Mar 22 9 – 11 am Prof. C. Allen
12		Total Time: 2h 2h: in-class presentations and discussion	Thurs Mar 29 9 – 11 am Prof. C. Allen
13		Total Time: 2h 2h: in-class presentations and discussion	Thurs April 5 9 – 11 am Prof. C. Allen

Assessment Format and Schedule

Assessments	
Assessment #1	Midterm Exam* (covers material from lectures 1-5 inclusive) Weighting = 45%
Assessment #2	Oral Presentation* – students will be asked to prepare a 20 min presentation (+ 5 mins for questions) on a drug relying on formulation in an advanced delivery technology that has reached clinical evaluation. In the presentation the students should review method of preparation and physico-chemical characterization of the formulation, pre-clinical pharmacokinetics, biodistribution and efficacy data and discuss clinical data (if any is available) or provide an overview of clinical trials that are ongoing. The students will be expected to discuss shortcomings and strengths of the studies that have been conducted and suggestions for improvements. The students will either work individually or in groups depending on course enrollment. (Presentations in weeks 11,12 and 13 if needed) Weighting = 10%
Assessment #3	Final Exam (covers lectures 6-10 inclusive) Weighting = 45%

Please Note:

Missed Midterm or Final Exam Policy*

Students who miss an examination and who have a valid petition, approved by the Registrar, will be eligible to write a make-up exam. The format of this examination or test will be at the discretion of the course coordinator, and may include, for example, an oral examination.

Missed Oral Presentation*

Students who miss their oral presentation and who have a valid petition, approved by the Registrar, will be given an opportunity to present to the Course Coordinator (and possibly class) at a different time.