### **ADVANCED IMMUNOLOGY (MIIM-7620)**

# Syllabus, Spring 2017

Monday and Thursday, 1:00-2:30 pm

#### Text

Janeway's Immunobiology. 9th Edition. K. Murphy, et al., Garland Publishing, New York, 2017. This is the suggested text and is useful for reviewing key concepts. It is not required.

### **Format**

The class will be broken into 13 blocks consisting of two meetings per week. The first Thursday will consist of an informational session to discuss expectations. The rest of the course will be entirely discussion based. Prior to class, the instructor will email papers for the following week's class. Students are expected to have read and be prepared to discuss any papers that have been sent. The first class of each week will consist of a historically important paper for that week's topic. The second class will be a discussion of a more recent high impact paper from the field and how that works fits into the overall history and our understanding of immunity. Students will be called on in class to discuss specific figures, results, discussion, etc. from each paper.

## Grading

Because the class is largely discussion based, student participation will be an important part of the grading process. As such, 40% of the final grade will be dependent on class discussion. 30% will be based on a midterm take home exam and the remaining 30% of the grade will be based on participation in an NIH styled study section review of R01 immunology grants.

Schedule (likely lecturers are listed but are subject to change)

Week	Topic	Lecturer	Dates	Janeway Chapter
1	Introduction to Adv. Immunology	McLachlan	Jan. 19	
2	Antigen Recognition	McLachlan	Jan. 23 & 26	4; 5.1 – 5.16; 6
3	Innate Immunity	McLachlan	Jan. 30 & Feb. 2	2; 3
4	T cell Development	McLachlan	Feb. 6 & 9	8.7 – 8.26; 8.29
5	B cell Development	McLachlan	Feb. 13 & 16	8.1 – 8.6; 8.27; 8.28
6	RESEARCH DAYS		Feb. 20 & 23	
7	MARDI GRAS BREAK		Feb. 27 & Mar. 3	
8	Primary T cell Response	McLachlan	Mar. 6 & 9	9
9	Primary B cell Response	McLachlan	Mar. 13 & 16	10
10	Immunity to Viruses	Pociask	Mar. 20 & 23	11.1 – 11.12
11	Immunity to Bacteria	Morici	Mar. 27 & 30	11.1 – 11.12
12	Immunity to Parasites	Kelly	Apr. 3 & 6	11.1 – 11.12
13	Regulation of Immune Responses	McLachlan	Apr. 10 & 13	13
14	Mucosal Immunity	Freytag	Apr. 17 & 20	12
15	Immune Memory	McLachlan	Apr. 24 & 27	11.13 – 11.19