BIO496
Special Topics Seminar
Spring 2010

Instructor: **Dr Helen Turner**
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Class meetings Tuesday 830-920
Henry Hall 106

Course Description.
This Special Topics Seminar is an advanced lecture/discussion course on the subject of human immunology. The immune system is an information supersystem that defends us against pathogenic, environmental and spontaneous challenges. In this course we will develop a number of central ideas:

- Self/Non-self discrimination as a fundamental step in evolution;
- Immunity as a success of self-/non-self, friend/foe discrimination;
- Disease as a failure of self-/non-self, friend/foe discrimination;
- The immune system as a reactive information supersystem.

Course Learning Outcomes for BIO496:

At the conclusion of this course of study the student will demonstrate:

1. the ability to identify the primary components of the human immune system at the organ and cell level (link to PLO#1,3);
2. an understanding of the mechanism of self-/non-self and friend/foe discrimination (link to PLO#1,3);
3. an understanding of disease as a failure of these mechanisms (link to PLO#1,3);
4. the information transfer processes that initiate, maintain, and terminate and immune response (PLO#1,3).

Course Structure:

Class meetings will be scheduled approximately every week. Lecture and discussion materials, and assignments will be distributed at the classes.

Assignments and Grading:

Grading for this class will be calculated as follows;

Class participation/reading		50 points
Assignment 1 (team powerpoint)	DUE WEEK 3	50 points
Assignment 2 (written paper)	DUE WEEK 6	100 points
Assignment 3 (written paper)	DUE WEEK 14	100 points

A total of 300 points are available. Grades attainable are

A (>240 points, 80%)
B (>210 points, 70%)
C (>180 points, 60%)
D (>150 points, 50%)
F (<150 points)

Class policies.

Attendance is mandatory at scheduled sessions and it will not be possible to make up assignments or discussion materials. All academic polices of CUH apply, you are urged to consult the Student Handbook and University Catalog for a review of these polices. ADA accommodations will be discussed upon receipt of a written request from Dr June Yasuhara (available through Dean of Student's Office). No cell phone calls or texting may occur during class, and students who violate this will be asked to leave the class session.

Written Papers:

A portion of the grade for written papers will be assigned to professional scientific standard of formatting. Follow the guidelines below.

Written papers are to be at least 2000 words, produced doubled spaced with 1" margins using Times New Roman 11 point font. Each paper is to have the following subheadings: *Abstract* (200-250 word summary), *Discussion* (narrative material, divided into appropriate sub-headings), *Summary* (100-200 word overview). Each paper should cite 15 or more primary references (peer-reviewed review or research papers that are listed in the PubMed database). References are required to be cited in the text and bibliography using the style approved by the Journal of Immunology (see below for examples). Abbreviations should be defined in a glossary or in the text.

Periodicals: Wells, A. D., M. C. Walsh, D. Sankaran, and L. A. Turka. 2000. T cell effector function and anergy avoidance are quantitatively linked to cell division. *J. Immunol.* 165: 2432–2443.

Books: McIntyre, T. M., and W. Strober. 1999. Gut-associated lymphoid tissue: regulation of IgA B-cell development. In *Mucosal Immunology*, 2nd ed. P. L. Ogra, J. Mestecky, E. Lamm, W. Strober, J. Bienenstock, and J. R. McGhee, eds. Academic Press, San Diego, CA. p. 319–356.

The syllabus may be subject to change.