

Fall 2019
RESEARCH LITERATURE IN MOLECULAR AND CELL BIOLOGY:
MCB 3841W

Course Title: The cytoskeleton in health and disease

Credits: 3

Prerequisites: ENGL 1010 or 1011 and 'C' or better in MCB 2210

When: Tues. and Thurs. 2:00 - 3:15 PM

Where: TLS Room 263

Instructor: Dr. Juliet Lee

Office: BPB, 306

Email: Juliet.lee@uconn.edu

Phone: 860-486-4332

Office hours: By appointment

Text: The Elements of Style, 4th edition,
William Strunk Jr. & E.B. White, Longman Publishers
The pdf is available on the Husky CT site for this course

Other reading material: Reading material associated with each assignment will be posted on HuskyCT in the "reading material" folder and/or handed out in class.

Course description:

This course consists of several themes that relate some function of the cytoskeleton to disease. One of the first topics we cover is the relationship between silicosis and lung disease. We will learn how the normal function of phagocytosis by macrophages can go awry in silicosis. In this disease, alveolar macrophages contribute to the development of silicosis by ingesting asbestos fibers, and can prolong the immune response to promote cancer. In another topic, we examine the plasticity of cell motility and how this can promote metastasis. In a third topic we will learn how a cell's immediate environment, or "niche" regulates tissue regeneration in response to wounding, e.g. muscle regeneration and how in the tumor environment, this can lead to the development of cancer stem cells. Later in the course, we will examine how stem cell biology is contributing to the field of regenerative medicine.

These subjects will be approached in a number of ways, including short lectures (~ 20 mins.), discussions, writing-to-learn (WTL) exercises, research papers, and reviews. For WTLs, and research papers you will work in small groups of 3-4.

Course goals:

- To learn how to write like a scientist. Science writing is unlike the essays you may have written in previous English classes. It is "precision" writing, in that it is based on facts, and therefore, it is not imaginative or emotional. You will learn how to write accurately, concisely and in a logical sequence.
- To write in different science writing styles or formats, such as a summary, short review, and the different sections of research papers.

- To improve your organization and expression of scientific concepts. Use science writing to improve mental discipline, focus and problem solving skills – in other words, **Writing To Learn (WTL)**.
- To learn more about the research being conducted in the following topics: how cells sense and respond to their environment, abnormal host-cancer cell interactions in metastasis, the use of stem cells in regenerative medicine.

Course requirements and grading: A *minimum* of 15 revised and edited pages of writing is a standard requirement for all W courses.

This course, consists of:

- **Five** assignments, four are written and one is a PowerPoint presentation. Written assignments consist of about (~ 3 - 4 pages) based on:
 - a) class lectures and discussions
 - b) assigned papers
 - c) WTLs
- There will be two consecutive rounds of revisions for **each** writing assignment (a peer review followed by an instructor review).
- Your draft must meet a basic class standard before you can work on the final. If your first draft is substandard then you will need to meet with me, and then “redo” your draft to address all deficits.
- For assignment 5, you will give a ~ 10 minute talk about a subject that you chose that is related to class material.

Grading:

- There is **NO FINAL EXAM**
- **All assignments** need to be completed in order to pass the course.
- Your draft will be given a provisional score as follows. 1 = very good, 2 = good, 3 = average, 4 = poor, fails to meet minimum class standard. If you receive a ‘4’ for your draft, then you must “redo” it. The scores you receive for all 5 assignments will count 80% toward your final grade, together with 20% for participation in class, which includes attendance, and the ability to meet all assignment deadlines.

DISABILITIES

Any student with disabilities that he/she would like the faculty to be aware of should communicate that information in confidence to the faculty and any issues arising will be addressed in accordance with the policy of the University.

ACADEMIC MISCONDUCT STATEMENT:

“Academic misconduct in any form is in violation of the University of Connecticut Student Conduct Code and will not be tolerated. This includes, but is not limited to copying or sharing answers on tests or assignments, plagiarism, and having someone else do your academic work. Depending on the act, a student could receive an F grade on the test/assignment, F grade for the course, or could be suspended or expelled.”

Policy on Plagiarism

Plagiarizing is defined as “To steal and pass off (the ideas or words of another) as one's own: use (another's production) without crediting the source”(www.Merriam-Webster.com, 2005)

Plagiarism violates the Academic Misconduct section of “The Student Code” of the University of Connecticut (<http://web.uconn.edu/mcb201/misconduct.html>) and will not be tolerated in MCB courses. The instructors of MCB 241W will adhere to the guidelines laid out in “The Student Code”; therefore, students should read and understand these policies and the consequence of violations.

The definition of plagiarism extends to all aspects of evaluated work in this course.

Copying another student's work is plagiarism. Failure to give full and proper citation to other people's work is plagiarism. Full and proper citation includes putting quotation marks around any quoted passage, including a correct citation to the publication from where the ideas originated and a complete reference to that publication in the "literature cited" section. This applies to all forms of communication including websites or personal communication from someone, such as would occur in verbal discussions of scientific data. Direct quotations are appropriate when the original statements would lose clarity or intent. However, your assignment should not include multiple direct quotations.

Paraphrasing of other authors' work is acceptable given that the ideas contained in the paraphrased passage are properly attributed to the author and the ideas are reworded into the student's own original language.

There are many resources available to students:

PLEASE COMPLETE THE PLAGIARISM MODULE IN HUSKYCT.

Should you need additional information the following web sites may be of help:

<http://www.lib.uconn.edu/using/tutorials/LILT/plagiarism.htm>

http://owl.english.purdue.edu/handouts/print/research/r_plagiar.html

The penalties for copying another student's work are:

1. A "0" for the entire assignment.