

## **Bi123**

### **The Biology of Cancer**

Cancer has been a recognized ailment for many centuries, but was not considered a serious threat to human health until the 1900s, when advances in medical science began to mitigate the more common forms of morbidity and mortality. Cancer is really a collection of over one hundred diseases that show various clinical differences, but have similar underlying causes and effects: the normal genetic controls of cell division malfunction, allowing a cell to undergo unbridled proliferation, usually leading to undifferentiated masses of cells (tumors), some of which may spread to distant locations in the body. Cancer is thus rightly called a genetic disease. We will focus our attention on the genetics and cell biology of cancer, particularly since tremendous advances in our understanding of the initiation and progression of cancer, and in the promise of effective treatment, have been realized in the past two decades through basic research in genetics and cell biology.

#### **Staff**

##### **Instructor**

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##### **Graduate Teaching Fellow**

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#### **Format**

There will be three 50-minute lectures each week. Attendance is not mandatory, but some of the information that you will be expected to assimilate (and demonstrate on exams) will not be found in the reading. There will also be one 50 minute discussion each week.

#### **Course packet**

A course packet that contains selected readings is required, and can be purchased at the UO Bookstore. If a packet is not available, request one at the Bookstore and they should have it for you within 24 hours.

There are no adequate texts for a course on cancer biology at the introductory level, thus there is no required text for this course. However, some books do address many of the topics that we will cover in a thorough way without overwhelming the reader with technical jargon. A particularly good general book that emphasizes the molecular biology of cancer is *One Renegade Cell*, by Robert Weinberg. For a more detailed treatment of several topics, *The Biological Basis of Cancer*, by Robert McKinnell, et al., is an excellent resource. Copies of both books will be on reserve in the Science Library:

## **Discussions**

Discussion sections are on Thursdays. Attendance is mandatory, and since the course is full you cannot make up an absence by attending a different section. A separate handout describes the work and topics we plan to accomplish in the discussion sections.

## **Grading**

The course grades will be determined based upon the following point distribution:

Midterm exam 1	100 pts
Midterm exam 2	100 pts
Final exam	150 pts
Discussion	200 pts

**No other opportunities for points will be offered.** Early or makeup exams will not be offered. If you miss an exam you will receive no credit unless you can provide written proof of a medical or family emergency. If the excuse is accepted you may receive an average score for the missed exam based upon the remaining two exam scores. A second missed exam will not be excused.

## **Course web site**

The course web site address is <http://biology.uoregon.edu/classes/bi123w07>. It contains the lecture schedule, staff contact information, lecture notes, exam study guides and keys, supplemental material, and related links. Check it regularly, as this is the best mechanism by which we can notify you of schedule changes and updates. Note that this is NOT a Blackboard site.

## **Class conduct**

Class starts promptly at 3:00 and ends at 3:50. Please arrive on time and do not pack up before the conclusion of the lecture. Arriving late and leaving early is disruptive to others around you and to the speaker. Do not talk during lecture in a volume audible to anyone but the intended recipient, or allow cell phones or pagers to ring during lecture or discussion.

Please be familiar with the student conduct code, which can be viewed at [http://studentlife.uoregon.edu/programs/student\\_judi\\_affairs/index.htm](http://studentlife.uoregon.edu/programs/student_judi_affairs/index.htm). Sanctionable offenses include academic dishonesty (cheating, plagiarism, etc.) and disruptive behavior (interference with the process of instruction, unreasonable noise, behavior that results in unreasonable annoyance, etc.). Sanctions can include, but are not limited to, a failing grade in the course.