

**SYLLABUS (tentative) and more!**  
**BIMM 134: Biology of Cancer Winter 2022**

Prerequisites   Resources   Evaluations						
LE	A00	TuTh	9:30a-10:50a	JEANN	AUD	

Instructor: Michael Burg, Ph.D.

[mburg@ucsd.edu](mailto:mburg@ucsd.edu)

**Office and Office Hours:** TBD

**Course Description:** This course covers basic processes of transformation and tumor formation in a two-part format. The first section is focused on molecular and cellular mechanisms of carcinogenesis. The second section discusses tumor pathology and metastasis. Open to upper-division students only. **Prerequisites:** BILD1

**Recommended Texts, Materials and Web-Enhancement**

**TEXTBOOKS ARE NOT REQUIRED!!!!**

- Molecular Biology of Cancer: Mechanisms, Targets and Therapeutics; Lauren Pecorino; 4<sup>th</sup> edition (2016)
- The Biology of Cancer; Weinberg; 2<sup>nd</sup> Edition (2014). Lectures will be, in part based upon topics covered in these texts. These are available on reserve at Geisel Library
- **Some additional readings will be provided via Canvas**
- All powerpoint lectures, associated handouts, and other relevant material are available **via Canvas**
- *Check for announcements on Canvas*
- *Instructional Assistants/Tutors: Names, sections, and contact information will be posted via Canvas*

**Attendance, class ethics, and additional considerations**

1. Exams will be based upon material in class, assigned science articles;

1- **Academic dishonesty and plagiarism (the unauthorized or uncredited use of someone else's work) will result in a grade of "F" for the assignment. Its continued practice will be reported to the appropriate deans for possible disciplinary action and may result in an "F" for the course.**

**Sections: Attendance Recommended but not required**

**Extra Credit: 4 extra points for >80% CAPE response rate**

***Exams and other assignments***

1. There will be two exams (midterm 100pts; final 150pts) on the material stipulated in the study sheets, text reading, supplementary readings and videos and lectures. All exams count; You must take all exams during the scheduled times. A makeup exam *may* be granted with proper documentation of a hospitalization or death in the immediate family. There are no makeup final exams. Exams will include both multiple choice and short answer
2. There will be several written assignments (worth total 150-200 pts) on material to be explained later

Letter grades will be assigned as follows:

**GRADING**

Your grade is based upon a percentage of the total points you accumulate during the semester.

- A<sup>+</sup> = 99% - 100% of the total possible points
- A = 90% - 98.9% of the total possible points
- B<sup>+</sup> = 89% - 89.9% of the total possible points
- B = 80% - 88.9% of the total possible points
- C<sup>+</sup> = 79% - 79.9% of the total possible points
- C = 70% - 78.9% of the total possible points
- D = 60% - 69.9% of the total possible points
- F = Less than 60% of the total possible**

Tentative Lecture Schedule (*Subject to change*)

WEEK	Date	Lecture Topic	Pecorino Chapter (Weinberg Biology cancer in para)
1	Jan 4 Jan 6	Lecture 1: Introduction Lecture 2: Oncogenes:Cell signaling Ras/MAPK/others	1 (2) + supplemental pdfs
2	Jan 11 Jan 13	Lecture 3:Oncogenes: Myc/BCR/ABL Lecture 4: Oncogenes: Therapeutics	4 (4-6) + supplemental pdfs
3	Jan 18 Jan 20	Lecture 5:Tumor suppressor: Rb and cell cycle Lecture 6: Tumor suppressor: P53;Tumor suppressor: Therapeutics	5-6 (7-9) + supplemental pdfs
4	Jan 25  Jan 27	Lecture 7: Apoptosis: Pathways/mutations/Therapuetics <b>Begin</b> Lecture 8: Cancer immunology	3.7, 3.10 (10) + supplemental pdfs
5	Feb 1 Feb 3	Lecture 8: Cancer immunology (review for exam)	
6	Feb 8 Feb 10	EXAM 1 Lecture 9:Angiogenesis	12 (15) + supplemental pdfs
7	Feb 15 Feb 17	Lecture 10: Metastasis	9 (14) + supplemental pdfs
8	Feb 22 Feb 24	<i>Lecture 11:Cancer experimental methods</i>	9 (14) + supplemental pdfs
9	Mar 1 Mar 3	Lecture 12: Cancer stem cells	supplemental pdfs
10	Mar 8 Mar 10	Finish material and Review for final exam	
<b>Final: Tue</b>	Mar 15	<b>Final:</b> 8am-10:59am	