

SYLLABUS

BILD 10:

Fall 2018

Instructor: Michael Burg, Ph.D.

Office: H&SS 1145LB

mburg@ucsd.edu

Lecture Tue/Thu 6:30-7:50 PM, York 2722

Office Hours: Tue,Thu 3:45 – 4:45 PM (other office hours may be available upon request)

Course Description: This is an introductory course detailing cellular and molecular biology.

Student Learning Outcomes:

Upon completion of BILD10 a successful student should:

1. Understand the major atomic, molecular, and cellular processes which underlie living things
2. Demonstrate mastery of the major principles of cellular structure, cellular physiology, and the flow of genetic information in cells

Recommended Texts, Materials, and Web-Enhancement

- No textbook is required
- *Some readings and videos will be provided via TED*
- All powerpoint lectures, associated handouts, and other relevant material are available on *TED*
- *Check for announcements on TED*
- *Instructional Assistants/Tutors: Names, sections, and contact information will be posted on TED*

Attendance, class ethics, and additional considerations

1. Attendance to class lectures is **not required** but will ensure your success in the class.
 2. **Sections: Attendance : MANDATORY : Several assignments will be given requiring section/attendance**
 3. Exams will be based upon material in class, assigned science articles; Class attendance will be important for success.
 4. Please be respectful to your instructor and other classmates by making sure your cell phones are turned off and by **limiting conversations** within class.
- 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 : not mandatory but can receive extra credit (see below)

Exams

1. There will be three exams each worth 100pts study sheets, text reading, supplementary readings and videos and lectures. All exams count; You must take all exams during the scheduled times. There are no makeup final exams. Exams will include both multiple choice (using scantron) and short answer (must be in pen for possibility of a regrade).
2. There will be an additional 60-100 pts in assignments that will be detailed during the quarter
3. You must show a photo ID when turning in your exams.
4. Exams will not be returned and may not be photographed or copied. They can be reviewed in your IA section in the week after they are graded. If you and your instructional Assistant feel a regrade may be warranted, I will take up the matter. The exams may be compared to a scan on the original exam to ensure no changes have been made
5. An additional 5 bonus points will be added for a greater than 80% Cape response rate
6. An additional 5 bonus points will be added for attendance of 7 or more sections

Letter grades will be assigned as follows:

GRADING

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

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A⁺ = 99% - 100% of the total possible points

A = 90% - 98% of the total possible points

B⁺ = 89% - 90% of the total possible points

B = 80% - 88% of the total possible points

C⁺ = 79% - 79% of the total possible points

C = 70% - 78% of the total possible points

D = 60% - 69% of the total possible points

F = Less than 60% of the total possible

Tentative Lecture Schedule OTHER READINGS TBD

WEEK	Date	Lecture Topic	Readings; videos
Thu	9/27	Introduction, 21st century Medicine Preview	Video:Cracking your genetic code
Tue	10/2	The Basics:DNA to RNA to Protein to us: Part I	Video:Cracking your genetic code
Thu	10/4	The Basics:DNA to RNA to Protein to us: Part II	Video: Cracking the code of life
Tue	10/9	Understanding the human genome project: Past,present,future	Video: Miracle cure?
Thu	10/11	Understanding the human genome project: Past,present,future	Video: Who's afraid of designer babies?
Tue	10/16	Epigenomics	Video: Ghost in your genes
Thu	10/18	CRISPR	TBD
Tue	10/23	Exam 1 (HGP)	Cracking the code assignment due on Wed 10/24
Thu	10/25	Introduction to stem cell biology	See assignment readings
Tue	10/30	Applications of stem cell biology	Stem cell video Video:Fetal fix
Thu	11/1	New developments in stem cell biology IPS cells	
Tue	11/6	New developments in stem cell biology:ASC and others	
Thu	11/8	Stem cell Biology: Putting it together and discussion/review	
Tue	11/13	Exam 2 (Stem cells)	
Thu	11/15	Introduction to Cancer biology	TBD

Tue	11/20	Introduction to Cancer biology	Cancer video 1
Thu	11/22	Holiday	TBD
Tue	11/27	Cancer stem cells	Cancer video 2
Thu	11/29	Gene chips, disease, and personalized cancer treatments TBD	
TUE	12/4	Gene chips, disease, and personalized cancer treatments	Cancer video 3
THU	12/6	Review for final exam	
FinalTue	12/11	FINAL EXAM 7-9:59pm	