

**BILD1: The Cell****SYLLABUS****INSTRUCTOR:** Gulcin Pekkurnaz, Ph.D.**LOCATION:** Warren Lecture Hall 2113, MWF 11:00-11:50am**TEXTBOOK:** Campbell Biology, 11<sup>th</sup> edition

<b>DATE</b>		<b>LECTURES</b>	<b>READING</b>
<b>April</b>	<b>2</b>	(1) Introduction and course overview	
	<b>4</b>	(2) Chemical Basis of Life	Chapters 2-4
	<b>6</b>	(3) Small Molecules	Chapters 4-5
	<b>9</b>	(4) Macromolecules	Chapters 4-5
	<b>11</b>	(5) Enzymes	Chapter 8
	<b>13</b>	(6) Enzymes and Metabolism	Chapters 8-9
	<b>16</b>	(7) Bioenergetics	Chapters 8-9
	<b>18</b>	(8) Cellular Respiration	Chapter 9
	<b>20</b>	(9) Photosynthesis	Chapter 10
	<b>23</b>	<b>MIDTERM EXAM 1 (Lectures 1-9)</b>	
	<b>25</b>	(10) Cellular Architecture	Chapter 6
	<b>27</b>	(11) Intracellular Organelles	Chapters 6-7
	<b>30</b>	(12) Membrane Structure and Function	Chapter 7
<b>May</b>	<b>2</b>	(13) Cell Communication	Chapter 11
	<b>4</b>	(14) Cell Cycle	
	<b>7</b>	(15) Cell Cycle/Mitosis/Cancer	Chapter 12 and 18 (concept 18.5)
	<b>9</b>	(16) Meiosis	Chapter 13
	<b>11</b>	(17) Mitosis/Meiosis/Development	Chapters 12-13 and 18 (concept 18.4)
	<b>14</b>	<b>MIDTERM EXAM 2 (Lectures 10-17)</b>	
	<b>16</b>	(18) Mendelian Genetics	Chapter 14
	<b>18</b>	(19) Chromosomes	Chapters 14-15
	<b>21</b>	(20) Chromosomes and Heredity	Chapter 15
	<b>23</b>	(21) Inheritance and Molecular Genetics	Chapters 15-16
	<b>25</b>	(22) DNA/ DNA Replication/ Transcription	Chapter 16-17
	<b>28</b>	<b>Memorial Day Observance (No lecture)</b>	
	<b>30</b>	(23) Transcription and Translation	Chapter 17
<b>June</b>	<b>1</b>	(24) Gene Expression Regulation	Chapter 18
	<b>4</b>	(25) Genome Evolution	Chapter 21
	<b>6</b>	(26) Biotechnology	Chapter 20
	<b>8</b>	Course closure and review	
	<b>15</b>	<b>FINAL EXAM (Comprehensive)</b>	<b>11:30am-2:30pm</b>

## GENERAL INFORMATION:

### Contact:

**Professor:** Dr. Gulcin Pekkurnaz (gpekkurnaz@ucsd.edu)

**Office Hours:** Pacific Hall building, Room 3212B

April 9<sup>th</sup>- June 4<sup>th</sup>, **Mondays 2-3pm** or by appointment

The best way to contact me is by e-mail (**gpekkurnaz@ucsd.edu**). Please remember to put **BILD1** in the subject line.

**Instructional Assistant (IA):** Nolan Baoan Mac

**IA Office Hours:** Office hours and the location will be posted on Triton Ed.

### Required text book:

Campbell Biology, 11<sup>th</sup> edition by Urry, Cain, Wasserman, Minorsky and Reece, Pearson Education Inc.

Please cross check the content if you plan to use the earlier editions of Campbell Biology.

### Grading:

Assignments	5%
Attendance (course and discussion)	5%
Midterm exam 1	15%
Midterm exam 2	20%
Final exam	55%

The class is graded on a curve.

### Lecture Notes:

A pdf of lecture the notes will be posted on Triton Ed the day before each lecture. Lectures will be based on the **Campbell Biology, 11<sup>th</sup> edition** text book. However, essential material will be presented in the class. Attending lectures is key to mastering the material!

If you have questions concerning how to access course materials on Triton Ed, please contact Academic and Computing Services: <http://acms.ucsd.edu/>.

### Discussions:

Discussion sessions will start the week of April 9<sup>th</sup>. There will be no discussion session during the first week. Be sure to attend discussion sessions as they will provide opportunity to ask questions about the lecture material and assignments in a smaller group settings with an IA.

B01 Wed 3:00pm 3:50pm WLH 2110

B02 Wed 4:00pm 4:50pm WLH 2110

### Assignments:

You will receive total 5 assignments (one every two weeks), which will be due the following week. The assignments will contain questions that will help you evaluate your understanding of the material covered in the lectures and prepare you for the exams. After turning assignments in for grading, the answers will be explained at the discussion sessions.

### Clickers:

**We will not be using clickers** in this course. However, during lecture, we will utilize other interactive resources to practice exam questions and cover course material.

### Exam:

Exam questions will be short-answer and very similar to the assignments. The midterms will cover only new material for the indicated lectures. The final exam will be comprehensive and graded on a curve.