# **BIBC102 FALL 2018 SYLLABUS**

Classroom and Time: Cognitive Science Building (CSB 004); Tu/Th 9:30a-10:50a

Instructor: Eric Schmelz
Email: eschmelz@ucsd.edu

Office hours: TBA

Website: <a href="http://ted.ucsd.edu">http://ted.ucsd.edu</a> (click on BIBC102 FA18)

Podcast: Video podcasts of each lecture will be available through TED

# **SCHEDULE**

Lec#	Date	Topic / Title	Lehninger content
1	Th Sept 27	Metabolic concepts and Proteins	Chapter 1-5 rev; Ch 6
2	Tu Oct 2	Enzymes	Chapter 6
3	Th Oct 4	Bioenergetics and Metabolism I	Chapter 13
4	Tu Oct 9	Bioenergetics and Metabolism II	Chapter 13
5	Th Oct 11	Glycolysis	Chapter 14
6	Tu Oct 16	Glycolysis and Pentose Phosphate	Chapter 14, 15
7	Th Oct 18	Krebs Cycle I	Chapter 16
8	Tu Oct 23	Krebs Cycle II	Chapter 16
9	Th Oct 25	Oxidative Phosphorylation I	Chapter 19
	Tu Oct 30	Midterm (in class)	
10	Th Nov 1	Oxidative Phosphorylation II	Chapter 19
11	Tu Nov 6	Photosynthesis & Carbohydrate	Chapter 19
11		biosynthesis	
12	Th Nov 8	Lipid Catabolism	Chapter 17
13	Tu Nov 13	Lipid Anabolism	Chapter 21
14	Th Nov 15	Gluconeogenesis and Glycogen	Ch 14; 568-575; Ch 15
15	Tu Nov 20	Amino Acids	Chapter 18
	Th Nov 22	Thanksgiving	
16	Tu Nov 27	Nucleotides	Chapter 22
17	Tu Nov 29	Cancer and Aging	
18	Tu Dec 4	Exercise	
19	Th Dec 6	Metabolic Regulation, Diabetes and	Chapter 23
		Obesity	Chapter 23
	Th Dec 13	Final (8:00-11:00 AM) Location TBA	

**TEXTBOOK:** Optional. Lectures will cover much of the information in the readings listed on the schedule above. **Exams will be based only on material covered in class and discussion sections.** Available new & used from the UCSD bookstore and other sources.

• Lehninger Principles of Biochemistry (Nelson and Cox) – Any addition

#### **GRADING**

POSSIBLE EARNED POINTS FOR THE QUARTER: GRADING SCALE:					
60 points	In class iClicker questions	≥ 600 points (100%)	A+		
140 points	Discussion section problem sets	≥ 540 points (90%)	Α		
150 points	Midterm	≥ 522 points (87%)	A-		
250 points	Final	≥ 504 points (84%)	B+		
600 points	Total	≥ 480 points (80%)	В		
	ha and an analysis and a	≥ 462 points (77%)	B-		
	be assigned based on points earned	≥ 444 points (74%)	C+		
using the sc	ale listed on the right.	≥ 420 points (70%)	С		
• Curving: If r	ecessary, all point cutoffs will be	≥ 402 points (67%)	C-		
•	wnward so that at least 50% of the	≥ 384 points (64%)	D+		
•	es an A or B. Under no circumstances	≥ 360 points (60%)	D		
will point cu	toffs be adjusted upward.	≥ 336 points (57%)	D-		

## **ASSESSMENT:**

**MIDTERM (150 POINTS):** October 30<sup>th</sup>, in class. Covers material through October 25<sup>th</sup>. Exam questions will only cover material taught in class and the discussion sections. For both the midterm and final exam, you will not be tested on material from either textbook if it was not discussed in class.

**FINAL (250 POINTS):** December 13<sup>th</sup> 8:00 AM – 11:00 AM, Location TBA. This is cumulative, but will emphasize new material covered since the midterm.

DISCUSSION SECTION PROBLEM SETS (140 POINTS): Discussion sections will begin in week 2 (Wed, Oct. 3<sup>rd</sup>). Required problem sets will be posted each week. These problem sets will be worked through together in discussion sections and handed into the Instructional Assistants at the end of each session. Eight problem sets will be assigned throughout the quarter for a total of 160 points. All students must complete at least 7 of these problem sets, and 140 of these points will be used to calculate final grades. Extra points may be earned for completing all 8 assignments, and will count as extra credit points (meaning you can earn a maximum of 20 additional points beyond the 600 allocated). Credit for completing the assigned problem sets can only be earned by turning your work in to the section in which you are enrolled. It is your responsibility to know your section, so please confirm! If illness or other circumstances prevent your attendance at a discussion section, you may turn in your completed problem set by email to the Instructional Assistant before class.

IN CLASS ICLICKER QUESTIONS (60 POINTS): Questions will be asked in class that will require your response using an iClicker. Answers will begin to count for credit in week 2, at which point you can earn a total of 1 point per question - ½ point will be earned via participation and a second ½ point will be earned for answering correctly. Cumulative totals of your clicker points will be uploaded to TED. After you have achieved the maximum possible 60 points, your point total will not continue to increase.

## **INSTRUCTIONAL ASSISTANTS AND DISCUSSION SESSIONS**

## **DISCUSSION SECTIONS:**

				Instructional
Section	Day	Time	Room	Assistant
		12:00p-	CENTR	
A01	Wed	12:50p	220	<b>Curtis Triebswetter</b>
			CENTR	
A02	Wed	1:00p-1:50p	220	<b>Curtis Triebswetter</b>

**INSTRUCTIONAL ASSISTANT:** Curtis Triebswetter <ctriebsw@ucsd.edu>

Weekly discussion sections are to help you be successful in this course. They will help you develop your familiarity with course content, analysis and problem solving ability that will be evaluated by the exams. Discussion sections also provide you with the opportunity to build relationships with fellow students and your Instructional Assistant. **Students are required to attend the discussion section for which they are registered.** Sections will meet for the first time in week 1 (Oct 1 – Oct 5). Each week a 20 point problem set will be posted online the Friday before the week it will be due. Students are encouraged to work on the problem set prior to attending discussion section for the week. All students must bring a print copy of the problem set to their discussion section and Instructional Assistants will review and explain the problem set each week. Students will hand in their problem set for grading at the end of each section meeting – you will only receive credit for turning in your problem set at the section to which you are registered. There will be a total of 8 problem sets, 7 of which will count towards your grade (the 8<sup>th</sup> will count as extra credit).

## **COURSE POLICIES**

## **EXAMS**

The in-class midterm will be 80 minutes in length, and the final will be 3 hours long. Questions on the midterm will include several types of questions such as multiple-choice, short answer questions, drawing or labeling structures, and other types of questions. The final exam will be entirely multiple-choice and will be graded by Scantron. You must complete exams in non-erasable ink to be eligible for a regrade (see "REGRADES" for more information below). **No calculators, cameras, cell phones or other** 

electronic devices capable of storing information are allowed to be used during the exams. You must present your student ID when turning in your exam.

There will be no make-ups for the midterm exam unless you provide documents for medical or family emergency with contact information. You must contact the instructor about the situation before the exam to discuss your options. Once you have taken an exam (or part of it), you will not be able to drop the score or negotiate a reduction of its impact on your grade for any reason. If you do not take the exam, your grade will be a zero. No student may take the final exam early for any reason.

Once exams have been graded, you will be able to view your score at the course website (Click on "Tools" in the course menu, and then on "My Grades"). After the quarter you will also be able to view your final exam score and final grade at this location.

Students for which the Office of Students with Disabilities have issued exam accommodation letters should present their letter at the beginning of the quarter or as soon as it is available. Please contact me at least one week prior to each exam to arrange for accommodation.

#### **REGRADES**

If you discover an error in the grading of your exam, you may request a regrade by submitting your exam in class to either Dr. Schmelz or the Instructional Assistant for your section within one week of when the graded exams are made available. To be eligible for a regrade, the exam must have been completed in non-erasable ink and you must attach and sign a cover page explaining the grading error. No requests will be considered after one week, except for correction of point addition errors. Exams will be photocopied prior to returning them to students, and any exam handed in for a regrade will be checked against the original.

#### **CLICKERS**

You will need an iClicker for this class - any iClicker model is OK, but other clicker brands will not work. You can buy a new or used one at the UCSD Bookstore or another source. Your iClicker will need to be registered on TED to get credit for your in-class responses. To register, login and select BIBC102. In the menu block on the left side of the screen click on "iClicker Registration". Enter the identification (Serial) number from the back of your iClicker. If the serial number is illegible, bring your clicker to the instructor after class for help. iClickers only need to be registered once on TED - so you do not need to register again if you have already registered and used your iClicker for another class at UCSD. **Do not register at iClicker.com – this won't enter you into the TED database for UCSD classes!** 

Don't switch your iClicker mid-quarter unless it's absolutely necessary - if you must use a new iClicker, notify the instructor because the response records in TED won't sync with one another and will need to be manually reconciled.

The grading system already includes some allowances (you do not need 100% participation in iClicker questions to get the full credit). For this reason, no additional allowances will be given for occasional forgotten or malfunctioning clickers (e.g. dead batteries), absence from class (regardless of the reason), or for students who add the class late and missed some classes. It's your responsibility to make sure that your clicker works properly. There will be sufficient "extra" clicker questions for everyone to have the opportunity to earn the maximum of 60 clicker points even given any of the above circumstances.

#### **ADMINISTRATIVE QUESTIONS**

To drop/add a class or with other similar questions/issues, please go to the Biology Undergraduate Student Affairs Office, Pacific Hall, Room 1129.

#### **UCSD POLICY ON ACADEMIC INTEGRITY**

Cheating or academic dishonesty will not be tolerated and all academic work will be completed by the student to whom it is assigned without assistance. As defined by UCSD policy, academic dishonesty includes:

- Taking an exam for another student or allowing another student to take an exam for you
- Copying another student's work on an exam or allowing another student to copy your work
- Altering graded exams or assignments and submitting them for a regrade
- Responding to clicker questions in class using another student's clicker
- Bringing answers or cheat sheets to the exam in note form or using a calculator, phone or other electronic device

If an IA sees a student using more than one clicker, both clickers will be confiscated immediately for the remainder of the class period.

Submitted exams will be photocopied before being returned to students. All exams handed in for regrading will be compared to the original.

Any student caught or suspected of cheating by doing one of the things on the list above (including those found using two or more clickers in class) will be reported to the UCSD Academic Integrity Coordinator and the Dean of the student's college. Confirmed cases of cheating on exams or altering an exam and submitting it for a regrade will result in the student receiving an automatic F as their final grade as well as other disciplinary actions determined appropriate by the Academic Integrity Coordinator.

# **UCSD STUDENT RESOURCES (not specific to this course)**

## **ACADEMIC SUPPORT RESOURCES:**

- Teaching and Learning Commons at UCSD: http://commons.ucsd.edu/students/index.html
- <u>Supplemental Instruction</u>: Scheduled sessions to support students in classes that many UCSD students find challenging. A list of supported classes and schedules may be found at: https://commons.ucsd.edu/students/supplemental-instruction/index.html
- <u>Triton Achievement Partners</u>: Drop-in tutoring for lower division math and chemistry courses. <u>https://commons.ucsd.edu/students/math-science%20tutoring/index.html#Math-and-Chemistry-Tutoring</u>
- Writing and Critical Expression Hub: See <a href="http://commons.ucsd.edu/students/writing/index.html">http://commons.ucsd.edu/students/writing/index.html</a>.
   Writing mentors on staff (including some biology expertise and training in science writing) work with students to improve their writing skills while working on class writing assignments (e.g. lab reports!) and other writing projects. See their drop-in hours, and options for appointments.

 OASIS: Office of Academic Support and Instructional Services also offers tutoring, writing and mentoring support – see <a href="https://students.ucsd.edu/sponsor/oasis/">https://students.ucsd.edu/sponsor/oasis/</a> Each year, OASIS serves 3,000 students in language, math, science, study skills, and writing as well as peer counseling and peer mentoring. Located on the third floor of Center Hall, (858) 534-3760, oasis@ucsd.edu.

## **HEALTH AND COMMUNITY RESOURCES (IN ALPHABETICAL ORDER):**

- Black Resource Center: a campus community center that serves everyone at UC San Diego while
  emphasizing the Black experience. Promotes scholarship, fosters leadership, and cultivates
  community through the committed, collaborative effort and support of faculty, staff, and the
  broader UC San Diego community. http://brc.ucsd.edu/
- <u>Counseling and Psychological Services</u>: (CAPS) provides FREE, confidential, psychological counseling and crisis services for registered UCSD students. CAPS also provides a variety of groups, workshops, and drop-in forums. See <a href="http://caps.ucsd.edu/">http://caps.ucsd.edu/</a> and/or call (858) 534-3755.
- <u>Cross-Cultural Center</u>: strives for meaningful dialogues and context across all cultures, particularly
  those of underrepresented or underprivileged backgrounds. Offers supportive and educational
  services through art, social and educational programs, workshops, and outreach. Welcomes
  creative venues for enhancing social consciousness and equity. http://ccc.ucsd.edu/
- <u>LGBT Resource Center</u>: provides a visible presence on campus and enhances a sense of connection and community among LGBT faculty, staff, students, alumni and the UC San Diego Community. http://lgbt.ucsd.edu/
- Office for the Prevention of Harassment & Discrimination (OPHD): provides assistance to students with concerns about bias, harassment, and discrimination. UCSD is committed to upholding policies regarding nondiscrimination, sexual violence and sexual harassment. Students have options for reporting incidents of sexual violence (e.g. sexual assault, dating violence, domestic violence, and stalking) and sexual harassment. Information about reporting options may be obtained at OPHD at (858) 534-8298, ophd@ucsd.edu, or <a href="http://ophd.ucsd.edu">http://ophd.ucsd.edu</a>. Students may also receive confidential assistance at the Sexual Assault Resource Center at (858) 534-5793, <a href="mailto:sarc@ucsd.edu">sarc@ucsd.edu</a> or <a href="http://care.ucsd.edu">http://care.ucsd.edu</a>.
- Office for Students with Disabilities (OSD): works with students who have documented disabilities to provide reasonable accommodations. See <a href="https://disabilities.ucsd.edu/about/index.html">https://disabilities.ucsd.edu/about/index.html</a> or call 858.534.4382 and/or email osd@ucsd.edu. Students in need of disability accommodations for a UCSD course must provide their instructor with a current Authorization for Accommodation (AFA) letter issued by OSD. If you have an AFA, please arrange to meet privately with me during the first week of the quarter so we can discuss your accommodation. If you have any questions or concerns about a disability, please discuss with me!
- Raza Resource Centro: a lively space where students study, meet, write, get tutoring, and most
  importantly are in community. It is a space where Latina/Chicano organizations hold meetings,
  events and where culture, art, and academics interconnect. <a href="http://raza.ucsd.edu/">http://raza.ucsd.edu/</a>
- Student Veterans Resource Center (SVRC): supports military-affiliated students in making the transition to campus life and facilitating their progress toward degree completion. The Center also provides opportunities for peer-to-peer support, mentoring and social networking. See https://students.ucsd.edu/sponsor/veterans/

• <u>Women's Center</u>: serves as a resource for the entire campus community while placing the experiences of diverse women at the center through resources provided, programming and learning opportunities facilitated, and dynamic community space. <a href="https://women.ucsd.edu/">https://women.ucsd.edu/</a>

There are many other resources available to you on campus. If you want to know more about where you can go for support, please let me know and we'll work together to identify useful resources!