

**BIBC 120: Nutrition
Winter 2017**

NOTE: All updates are shown in red

Instructor: Lakshmi Chilukuri, Ph.D.
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858-822-2032 (Use **ONLY** if **URGENT** and follow up with email)

Lecture: Peterson 110
Tuesdays/Thursdays 12:30 – 1:50 pm

Office Hours: Monday 10:00 – 11:00 pm, 2300 York Hall

and Wednesday 3:00 – 3:50 pm 2300 York Hall

Office hours begin **Wed Jan 11**

Contacting me: Please put **BIBC 120 in BOLD** in the subject line of any email. I will try to get back to you in one day but given the large number of students in the class, it might take longer. If it is urgent, please put **URGENT** in the subject line. If your question requires a lengthy explanation or discussion, I may ask you to come to office hours.

Course Objectives: The nutritional status of a person depends on a combination of biological factors such as biochemistry, physiology, and anatomy, and socioeconomic factors such as financial status, environment, and culture. We will examine how these factors affect our dietary and lifestyle choices and in turn, how these choices affect our health and productivity. The goals of this course are to understand the relationship between nutrients and the role they play in our metabolism in healthy and disease states, to use sound scientific principles to evaluate the plethora of health and nutritional claims, and to incorporate socioeconomic factors into discussions on nutrition and health.

We are fortunate to have such a diverse group of students in our course, with a variety of cultural and culinary experiences. A subject such as nutrition naturally lends itself to benefiting from the knowledge and opinion of our peers. I would love to have each of you view this course as a community learning opportunity where we learn from each other with curiosity, respect, consideration, and integrity.

Important dates:

Midterm: Tuesday Feb 7, 2017

Nutrition Claim Assignment: Due Tuesday Feb 14, submitted on TritonEd by **noon**

Final Exam: 11:30 – 2:29, Tuesday March 21, 2017, Location TBD

****Please note the exam dates**.** There are NO alternate dates or make up exams so check your schedule now!

Textbook: M. McGuire and K. A. Beerman. Nutritional Sciences: From Fundamentals to Food, 3rd Edition, 2013. Cengage Learning. ISBN: 978-0-8400-5820-1.

I cannot emphasize enough how important it is to read the assigned material. Read before lecture to get familiar with terms and concepts and read after lecture to revisit the material, organize your thoughts, and reinforce your understanding. You have many options for accessing the textbook.

- ***Opt In to the e-book on Redshelf through TritonEd:** Comprehensive e-book 180-day rent option - provides a variety of features not available to traditional eReaders including flashcard creation, in-text and marginal note taking, tools to create personal study guide. **Opt-in begins: Jan 2nd. Opt-out deadline: Jan 21.** Cost: \$51.25. More information available on TritonEd.
- Rent E-book from other sources (Amazon, Google Play Books, etc)
- Hardcopy – New or Used

TritonEd (<https://ted.ucsd.edu>): All course information will be posted on this site. Lecture powerpoints will be posted an hour before class. Check the class Ted site regularly for course materials, updates and announcements. **Check your UCSD email!**

Participation points: To understand and appreciate the nuances and applications of nutrition, it is important that you participate in all aspects of preparation and learning in this course. You will receive participation points for three different learning activities: **Quizzes** (to test reading and understanding lecture), **iClicker** points, and **section** points. In addition, there is a brief survey administered through TritonEd. A total of 143 points is possible, with the points distributed as shown below.

I would love it if each of you participated enthusiastically and completely in every opportunity to learn. However, I realize some of you will have a few conflicts or might miss some points on some quizzes. If you accumulate 80% of the participation points (115 points), you will be given the entire 144 points. If you accumulate less than 80% (115 points or fewer), you will be given the points you accumulate. You are at liberty to choose how you will accumulate your points.

Participation	Number	Points per	Total
Quizzes	9	10	90
Sections	7	2	14
Survey	1	4	4
Clickers	18	2	36
Total			144

Quizzes: 9 weekly quizzes administered through TED beginning week 1. No quiz week 5 (midterm week) ~~or week 10.~~ **There will be a quiz week 10.** Each quiz is

8-10 questions, total 10 points. The quizzes will cover lecture and reading material from the previous week.

Quizzes will be posted on Friday afternoons by **6 pm** and are due the following Tuesday by **9 am**. You will be given 20 minutes and 2 opportunities to take the quiz. If you attempt the quiz twice, I will record the higher score. Having two opportunities cover any unforeseen circumstances such as lack of internet connection, quiz that crashes, poor performance in first attempt, etc. There will be NO make up quizzes or special accommodations.

Clicker Points: Required. **The frequency in the classroom is AD**. Clicker points begin Thurs Jan 7th. You must register your clicker by Wed Jan 6th using the link provided on the class Ted site. No clickers on midterm day. Clickers on day 1 will be for practice only. You will receive 2 Clicker points for each day where you answer at least 50% of the clicker questions. Clicker points are not based on accuracy of answer. If you answer less than 50% of the questions, you will receive a zero for that day. The flexibility in participation point accumulation removes the need for any special accommodation for any absences, lost clickers, dead battery, or late arrival to class.

Discussion sections: No discussion sections in week 1 or 2 as **Mon Jan 16 is a holiday**; sections **begin week 3**. Discussion sections are not mandatory but are highly recommended. You will receive **2 participation points** for each section you attend. Please attend the section you have signed up for; IAs will take attendance and have the right to turn away students who are not in their section. You will receive your graded midterm at your specific sections only. This is the only way you will be able to pickup your exams.

Sections are also an excellent place to find study partners, to clarify information, and to practice information retrieval. IAs will also work through problems and practice questions of their choosing. Section times and IA information are listed on TritonEd

Survey: ~~Date to be determined~~. **Will be posted on Jan 23 and open till midnight Jan 30. Worth 4 points.**

Exams and assignments: ****There will be NO make up exams or alternative dates so please check your schedule now****. All exams must be taken at the designated time, in the designated room.

Midterm and final will consist of True/False, multiple choice, fill-in-the-blank, and short answer questions. The final will be cumulative with emphasis on the material covered after the midterm. *You must have your photo ID for the midterm and final.*

Any **unavoidable emergency** that prevents you from taking the midterm or final (i.e. death or serious illness or personal tragedy) must be communicated to me (Dr.

Chilukuri) directly and immediately. You will need to provide official documentation.

If you miss a midterm or final without contacting me and without official documentation, you will get a zero in that exam.

If you miss the final with valid reason, having informed Dr. Chilukuri and with documentation, you will receive an incomplete grade for the quarter.

NOTE: If your performance improves by 20% in the final as compared to your performance in the midterm, **I will use your midterm score at 50% of the value and proportionally adjust the score in the finals. This means that your midterm score will be multiplied by 0.5 and your finals score will be multiplied by the appropriate factor to give the finals score more weight.** This calculation will NOT take into account your performance in the participation points. This does NOT apply to students who have not taken the midterm.

Any Nutrition claim assignment submitted 1 day late will lose 50% of the points (-50 points). More than 1 day late receives zero points.

Exam reviews: IAs will conduct reviews before the midterm and final. Information will be posted on TritonEd.

Regrades: It is your responsibility to check your exam for any grading errors. If an error has been made, you should submit a regrade request to me, not to the IAs, at the end of lecture, **in writing**, within **one week** after the exams have been returned. Please identify the error and justify/explain your request with information. No regrades for exams answered in pencil, with non-permanent ink, or with use of Whiteout/Witeout or its equivalent. Please note that any exam submitted for regrade may be (1) regraded in its entirety (the entire exam), and (2) may be compared to a scanned copy of the original exam.

OSD Students: Students requesting accommodations for this course due to a disability must provide a current Authorization for Accommodation (AFA) letter issued by the Office for Students with Disabilities (OSD) which is located in University Center 202 behind Center Hall. Students are required to present their AFA letters to Faculty (please make arrangements to contact me privately) and to the OSD Liaison in the department in advance so that accommodations may be arranged.

Contact the OSD for further information:

858.534.4382 (phone)

osd@ucsd.edu(email)

<http://disabilities.ucsd.edu>(website)

Academic Integrity: Integrity of scholarship is essential for an academic community. The University expects that both faculty and students will honor this principle and in so doing protect the validity of University intellectual work. For students, this means that all academic work will be done by the individual to whom it is assigned, without unauthorized aid of any kind. Clickers must only be clicked in by the student who registered it for this course. Clicking in for another student, collaborating with other students on quizzes, copying assignments, copying from other students during exams are some examples academic integrity violations. Cheating will not be tolerated; any student engaged in academic dishonesty will be failed. All academic integrity cases will be immediately turned over to the campus Academic Integrity Office.

Assessments and points

Exam	Date	Time/Location	Point value	Percent
Midterm	Feb 7, 2017 In class	Peterson 110	378 (or 189)	37.8 (or 18.9)
Final	March 21, 2017 11:30 am - 2:29 pm	TBD	378 (or 567)	37.8 (or 56.7)
Nutritional Claim Assignment	Due Feb 14, 2016	Online	100	10
Participation points			144	14.4
Class Point Total			1000	100

* Given as an example. Actual midterm and finals point values will be different and midterm value will be lower than the final

Grading:

A range > 90%
 B range 80% - 89.9%
 C range 70% - 79.9%
 D range 60% - 69.9%
 F below 60%

+/- grades will be awarded within the ranges shown above.

Schedule of Lectures

Date	Lecture	Topic	Assigned reading
Jan 10	Tu 1	Course introduction Redshelf, project, quizzes, clickers Nutrition terms & definitions Nutrition Research	Chapter 1, pp 5-10 13-28
Jan 12	Th 2	Dietary Reference Intakes Food labels; Assessing nutritional claims Digestion: Overview, parts and function	Chapter 2, pp 38-46 Pp 58-64 Chapter 3, pp 81-97
Jan 17	Tu 3	Digestion: Parts, function, and dysfunction of the digestive system Introduction to gut microbiota	Chapter 3, 81-111
Jan 19	Th 4	Carbohydrates – introduction, functions, digestion	Chapter 4, pp 115-135
Jan 24	Tu 5	Carbohydrates + Lactose intolerance + fiber + role of gut microbiota	Chapter 4, pp 115-135 continued Additional Reading TBD
Jan 26	Th 6	Protein – introduction, functions, digestion and absorption	Chapter 5, pp 162 - 192
Jan 31	Tu 7	Proteins + gluten + protein related diseases	Chapter 5, pp 162 – 192 continued, pp193-195 (touched upon, not explored in detail)
Feb 2	Th 8	Lipids – introduction, functions, digestion and absorption	Chapter 6, 218-241, 248-250
Feb 7	Tu 9	Midterm	
Feb 9	Th 10	Energy Metabolism	Chapter 7, pp 279-290
Feb 14	Tu 11	Lipids omega 3 and omega 6 Cholesterol transport, CVD	241-248, 254-264 Nutrition Claim Assignment due
Feb 16	Th 12	Hormonal control of blood glucose, Diabetes	Pp 135-142, 147 - 158
Feb 21	Tu 13	Protein malnutrition Dieting and exercise	Pp 193-195 continued. Additional Reading TBD
Feb 23	Th 14	Energy balance Hormonal regulation of satiety Dieting	Chapter 8, pp 323-336, 340-358
Feb 28	Tu 15	Gut microbiota and health	Reading TBD
Mar 2	Th 16	Exercise/Physical Activity and Health	Chapter 9, 387-412
Mar 7	Tu 17	Water soluble vitamins	Chap. 10, 419-423, and material covered in lecture
Mar 9	Th 18	Fat soluble vitamins	Chap. 11, 461- 470, and material covered in lecture

Mar 14	Tu 19	Alcohol?	Pp 301-316
Mar 16	Th 20	Catch up and review?	
Mar 21	Tuesday	Final: 11:30 - 2:29	Location TBD

Section	Day	Time	Location	IA	Email
A01	Mon	2:00 - 2:50 pm	Centr 220	Jacky Ho	jwh026@ucsd.edu
A02	Mon	3:00 - 3:50 pm	Centr 220	Calvin Tran	cat027@ucsd.edu
A03	Mon	4:00 - 4:50 am	Centr 220	Jane Li	yal122@ucsd.edu
A04	Mon	5:00 - 5:50 pm	Centr 220	Annie Rathore	arathore@ucsd.edu
A05	Mon	6:00 - 6:50 pm	Centr 220	Rachel To	r1to@ucsd.edu
A06	Mon	7:00 - 7:50 pm	Centr 220	Happy Uppal	hkuppal@ucsd.edu
A08	Wed	7:00 - 7:50 pm	Centr 220	Annie Rathore	arathore@ucsd.edu
A11	Fri	8:00 - 8:50 am	Centr 220	Neeraja Vegesna	nevegesn@ucsd.edu
A12	Fri	9:00 - 9:50 am	Centr 220	Neeraja Vegesna	nevegesn@ucsd.edu