



## **FACS 3380 Advanced Nutrition**

**Fall, 2017**

**College of Health Sciences, Department of Family and Consumer Sciences**

**Instructor:** Heather Frazier, RDN, LD  
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**Office Hours:** Tuesday 10:00 am – 1:00 pm; Wednesday 10:00 am – 12:00 pm; by appointment

**Day and Time Class Meets:** Monday/Wednesday 1:00 pm – 2:20 pm

**Location of Class:** Margaret Lea Houston Building, Room 201

**Required Text:** Berdanier, C. D., & Berdanier, L. A. (2015). Advanced Nutrition: Macronutrients, Micronutrients, and Metabolism (2nd Ed.). CRC Press.

**Course Description:** Course focus is on concepts of normal nutrition in relation to the chemistry and physiology of the human body; analysis of methods used in assessing human nutrition status; evaluation of current nutritional problems. Prerequisite: FACS 2362

**Academic Community Engagement:** In this course, students will not only become familiar with the concepts in Advanced Nutrition, but will use this knowledge to make a difference within their community. This ACE experience, it is anticipated, will help students see themselves as positive forces in this world and able to improve the quality of life of individuals in the community.

### **Course Objectives:**

1. Gain factual knowledge on classification, terminology and methods of macronutrients.
2. Discuss the role of cellular proteins in relation to human nutrition.
3. Understand the mechanism of the digestive system in yielding nutrients.
4. Discuss the physiological and biochemical basis for energy yielding nutrients.
5. Understand the needs and sources of vitamins and minerals.
6. Integrate knowledge of digestion and absorption with biological and physiological concepts.
7. Learn fundamental principles of human nutrition.
8. Learn basic concepts of nutritional genomics.

**Accreditation Information/Standards:** This course complies with the Academy of Nutrition and Dietetics Core Knowledge Requirement KRDN 3.5: describe basic concepts of nutritional genomics.

**IDEA Objectives:** In this course, our focus will be on these major objectives (as assessed by the IDEA course evaluation system):

1. Developing specific skills, competencies, and points of view needed by professionals in the field most closely related to this course
2. Learning to apply knowledge and skills to benefit others or serve the public good

**Course Format:** face-to-face

**Course Content:** This is a tentative course schedule and subject to change.

|         |                      |  |
|---------|----------------------|--|
| Week 1  | Aug. 23              | Introduction to Course   |
| Week 2  | Aug. 28<br>Aug 30    | Energy<br>Energy   |
| Week 3  | Sept. 4<br>Sept 6    | HOLIDAY<br>Negative Energy Balance   |
| Week 4  | Sept. 11<br>Sept. 13 | Positive Energy Balance<br>Regulation of Food Intake   |
| Week 5  | Sept. 18<br>Sept. 20 | <b>Exam #1</b><br><i>Let's Talk #1 - About Obesity</i>                                       |
| Week 6  | Sept. 25<br>Sept. 27 | Protein - Amino Acids<br>Protein - Structure & Functions                                     |
| Week 7  | Oct. 2<br>Oct. 4     | Protein - Nutritional Aspects<br>Carbohydrates - Three Major Classes                         |
| Week 8  | Oct. 9<br>Oct. 11    | Carbohydrates - Digestion<br>Carbohydrates - Absorption                                      |
| Week 9  | Oct. 16<br>Oct. 18   | <i>Let's Talk #2 - About Plant Based Diets</i><br>Lipids - Structure & Biological Importance |
| Week 10 | Oct. 23<br>Oct. 25   | Lipids - Sources, Digestion, & Absorption<br>Lipids - Transport & Storage; CVD Risk          |
| Week 11 | Oct. 30<br>Nov. 1    | <b>Exam #2</b><br>Nutrigenomics  |
| Week 12 | Nov. 6<br>Nov. 8     | Fat-Soluble Vitamins - Presentations<br>Water-Soluble Vitamins - Presentations               |

|            |                    |   |
|------------|--------------------|---|
| Week 13    | Nov. 13<br>Nov. 15 | Water-Soluble Vitamins - Presentations<br>Macrominerals - Presentations |
| Week 14    | Nov. 20<br>Nov. 22 | Trace Minerals - Presentations<br>HOLIDAY                               |
| Week 15    | Nov. 27<br>Nov. 29 | <b>Exam #3</b> / Community Engagement Project Due<br>Review             |
| Final Exam | Dec. 6             | Comprehensive Final @ 2:30 pm - 4:30 pm                                 |

### Course Requirements:

- 1. Attendance Policy (see SHSU Class Attendance policy AP 800401):** Regular and punctual class attendance is expected as stated in the latest Sam Houston State University catalog. A record of student's attendance will be kept. Those who miss a substantial number of classes will penalize themselves by missing material that will be discussed in class, that may not appear in the texts, and over which the class will be tested. If a student arrives late for class and roll has been taken, the student is considered absent for the day unless the student signs the roll sheet at the end of class.
- 2. Technical Requirements:** Students must have access to the internet and Blackboard. Students will use Blackboard during this course to access their grades, course assignments, course resources, and to turn in assignments. Blackboard may be accessed at <https://shsu.blackboard.com>. The student's username and password are provided by SHSU. It is recommended that you log in and check Blackboard weekly for updates. For any technical support issues with Blackboard, call 936-294-2780 or email [blackboard@shsu.edu](mailto:blackboard@shsu.edu).
- 3. Presentation:** Detailed instructions for the presentation will be posted in Blackboard.
  - The student must be ready to present on the designated day. If a student misses their presentation day due to an excused absence (i.e. illness, university-related event, etc.), the instructor will designate another day for the student to present.
  - The student must be dressed professionally - no jeans, t-shirts, etc. If a student is not dressed appropriately, they will not be allowed to present and will receive a zero(0).
- 4. Assignments:** There will be a variety of assignments including class discussions and a community engagement project consisting of 9 hours of community service and a two-page self-reflection. Detailed instructions for each assignment will be posted in Blackboard. All assignments must be submitted within Blackboard, and must conform to the following guidelines:
  - All assignments are due at 11:59 pm Central Standard Time (CST) unless otherwise stated.
  - It is advantageous to submit assignments a day early if possible as unforeseen technical difficulties do occur (computer crashes, Blackboard issues, electrical outage, etc.). If you miss the deadline for any reason, it will be considered late, and you will receive a 0 (zero).

3. Please be aware that occasionally it might take a long time to upload some files due to the size of the file or your upload speed. If you wait until the very last minute and try to submit at 11:58 pm, your submission might not go through until 12:00 am or later, making your assignment late.
4. Any assignment e-mailed to the professor will not be graded.
5. Late assignments will not be accepted in this course.

## **5. Examinations:**

1. The student must have a scantron and number 2 pencil for each exam. If a student does not have a scantron or pencil, they will have to go buy one from the bookstore prior to taking the exam.
2. The only calculator allowed during examinations is a four-function calculator.
3. Personal belongings, including electronic devices (cell phones, iPad, laptops, etc.) will be stored at the front of the classroom before class begins. Cell phones should be set on silent or turned off. Students may pick personal items up after turning in the test.
4. A make-up exam may be given for an excused absence (i.e. illness, university-related event, etc.). Requests for make-up exam, along with documentation to support excused absence, must be submitted no later than the day of return to class after the absence. The instructor should be notified prior to missed exam if possible.

## **6. Email Communication Guidelines:** For one-on-one communication, you can e-mail the instructor. Your instructor will typically respond within 24 hours Monday through Friday 8 am until 5 pm CST. Your instructor may respond on the weekend, but no guarantee. When emailing your instructor, provide the following:

1. Provide a meaningful subject to your email to clarify your message.
2. Identify the course you are in if you are not emailing from Blackboard.
3. Address your instructor professionally. For example, begin the email with Dear Professor Frazier, not “Hey”. Unprofessional correspondence may not be answered.
4. Use proper grammar and correct spelling. Do not send an email to the instructor written similar to how you text with friends or family. Avoid using emoticons, all caps, and abbreviations.
5. Sign your name at end of the message.

## **7. Course Materials:** Additional course reading materials, webinars and videos will be available in Blackboard. Students are responsible for reading and watching these assigned materials.

## **Course Evaluation:**

|                                 |                   |
|---------------------------------|-------------------|
| Let's Talk (2 @ 50 points each) | 100 points        |
| Presentation                    | 100 points        |
| Community Engagement Project    | 150 points        |
| Exams (3 @ 100 points each)     | 300 points        |
| <u>Final Exam</u>               | <u>150 points</u> |
| Total                           | 800 points        |

- The instructor reserves the right to implement pop quizzes and other additional assignments.
- The instructor may take up to 2 weeks to return grades.

**Grading Scale:** (grades will not be curved or rounded)

|   |               |                  |
|---|---------------|------------------|
| A | 90.0% - 100%  | 720 – 800 points |
| B | 80.0% - 89.9% | 640 – 719 points |
| C | 70.0% - 79.9% | 560 – 639 points |
| D | 60.0% - 69.9% | 480 – 559 points |
| F | < 60%         | < 480 points     |

**Student Syllabus Guidelines:** You may find online a more detailed description of the following policies. These guidelines will also provide you with a link to the specific university policy or procedure: <http://www.shsu.edu/syllabus/>

**Academic Dishonesty (AP 810213):** All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in their academic experiences. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action as described in the student handbook. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials. Plagiarism includes, but is not limited to, copying the work of another student, copying published work without appropriate citations, and allowing someone else to complete an assignment or work for the student.

**Students with Disabilities (AP 811006):** It is the policy of Sam Houston State University that no otherwise qualified disabled individual shall, solely by reason of his/her disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any academic or Student Life program or activity. Disabled students may request help with academically related problems stemming from individual disabilities from their instructors, school/department chair, or by contacting the Director of the Office of Services for Students with Disabilities, Lee Drain North Annex, or by calling 936.294.3512, TDD 936.294.3786. **NOTE: No accommodation can be made until the student registers with the Office of Services for Students with Disabilities (SSD).**

**Cell Phone and Electronic Devices (AP 100728):** The use by students of electronic devices that perform the function of a telephone or text messenger during class-time may be prohibited if deemed disruptive by the instructor to the conduct of the class. Arrangements for handling potential emergency situations may be granted at the discretion of the instructor. Failure to comply with the instructor's policy could result in expulsion from the classroom or with multiple offenses, failure of the course. Cell phones may not be using for taping or photography without the consent of the professor. Any use of a telephone or text messenger or any device that performs these functions during a test period is prohibited. Even the visible presence of such a device during the test period will result in a zero for that test. Use of these devices during a test is considered de facto evidence of cheating and could result in a charge of academic dishonesty.

**Religious Holy Days (AP 861001):** Section 51.911(b) of the Texas Education Code requires that an institution of higher education excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence. "Religious holy day" means a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20, Tax Code. Students remain responsible for all work, and any missed work must be made up in a reasonable amount of time.

**Academic Grievance Procedures for Students (AP 900823):** The purpose of this academic policy statement is to provide for the resolution of student academic grievances in a prompt and equitable manner. Academic grievances include disputes over course grades, unauthorized class absences or tardiness, and/or an instructor's alleged unprofessional conduct related to academic matters. If the dispute is determined to be based upon professional judgment, the aggrieved student is entitled to have, as appropriate and in turn, the department/school chair, College Academic Review Panel, academic dean, Dean of Graduate Studies (for graduate student issues), and Provost and Vice President for Academic Affairs form an opinion about the dispute and so advise the individual(s) involved.