

Biology 3301 (Web-based course) Human Nutrition—3 credits
Fall 2014 Sul Ross State University (Final Draft)

Instructor: Anne Marie Hilscher
Office: WSB 220
Office Hours: M 9-11; W 9-11 & 2-4;
and by appt.

Phone: 432-837-8820
Email: ahilscher@sulross.edu

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REQUIRED TEXT: Byrd-Bredbenner, Carol, Gaile Moe, Donna Beshgetoor, Jacqueline Berning, and Danita Kelley. (2014). *Wardlaw's Perspectives in Nutrition: A Functional Approach* (the textbook "bundle" includes an access code for NutriCalc Plus via CONNECT) [You need to this access code to complete this course.](#) McGraw-Hill Companies, Inc. **ISBN-10:** 0077774515 OR **ISBN-13:** 978-0077774516

Course Description: This course will cover the scientific principles of human nutrition with an emphasis on nutrients, metabolism, and factors affecting utilization in the human body throughout the life cycle. This also includes influence of food selection on health and evaluation of personal diets. A variety of on-line activities are incorporated to enhance learning. These include chapter tests, self-assessment quizzes, threaded discussions, personal nutrition assessment activities, and an individual dietary analysis project.

The students will:

1. Note the history of nutrition as a science and how it relates to current nutrient requirements, diet related diseases and disease prevention.
2. Describe the frontiers of nutrition research and the limitations upon that research.
3. Explain the application of the "scientific method" to the solution of nutrition problems.
4. Identify differences between nutrition facts and misinformation based on current research and knowledge.
5. Recognize the significance of the quantity and quality of the essential nutrients in various foods and how they relate to nutritional status and prevention of disease.
6. Discuss the role of nutrition as it interacts with other environmental and genetic factors to impact human health and well-being.
7. Describe the function of the major nutrients in terms of their chemical properties and influence upon biological systems.
8. Apply nutrition knowledge to the selection of appropriate nutrient-dense foods for the maintenance of optimal health.

Program Learning Outcomes (PLOs):

1. Demonstrate a mastery of aerobic respiration and its significance for living organisms.
2. Be able to identify evolution and the processes that influence it.
3. Be able to identify the components of cell structure and their functions.
4. Compare the fundamental concepts of Mendelian genetics.
5. Compare and contrast the process of photosynthesis to other cellular processes.
6. Be able to identify the processes of molecular biology.

Course Requirements:

1. **Module Tests:** 5 at 60 points each. 300 points

Each module will include one test. The tests can be taken anytime while the module is open but must be completed by the stated due date. Students will be limited to 90 minutes to complete each test.

Course Schedule:

Aug 25-Sep 14: Module 1 (CH 1, 2, 3) and Module Test #1; Discussion Board #1 Intro due 9/07

Sep 15-Oct 5: Module 2 (CH 4, 5, 6) and Module Test #2; Discussion Board #2 due 9/21

Oct 6-Oct 25: Module 3 (CH 7, 8, 10) and Module Test #3; Discussion Board #3 due 10/12

Oct 26-Nov 16: Module 4 (CH 11, 12, 13) and Module Test #4; Discussion Board #4 due 11/09

Nov 17-Dec 10 at NOON: Module 5 (CH 14, 15, 18) and Module Test #5; Discussion Board #5 due 11/30

2. **Diet Analysis:** 100 points (See instructions under **Diet Analysis** on Blackboard.) Don't procrastinate; start this as soon as you can. **DUE FRIDAY, NOV 21**

3. **Discussion Boards** (5 worth up to 20 points each): 100 points

There will be 5 opportunities for participation points worth up to 20 points each. These will consist of threaded discussions. You must post at least TWO responses (except for your Discussion Board Intro) – (1) You must respond to the instructor's statement/questions, AND (2) you must post a response to at least one of your peers' responses. Rather than merely restating information, I expect you to use the following thinking skills: interpret, illustrate, analyze, compare and contrast, criticize, question, examine, synthesize, formulate, generate, organize, evaluate, judge, assess, etc. Click onto the threaded discussion through the **Discussion Board** on Blackboard, and respond to the instructor's statement/question. Due dates will be posted. You are required to include a thoughtful, researched response to each question to receive up to 20 participation points per discussion. ***It is expected that students will adhere to acceptable codes of ethical, personal, and civil conduct when conversing online...just as we would in the classroom.***

Cisco Webex may be used as an online meeting and conference space throughout the semester. Real-time meetings will be scheduled so that you can meet with and collaborate with your instructor online. More information on this application will be given at the start of the semester.

Grading: Grades will be distributed according to the table below. If you have a valid excuse to miss a test, you must contact me **within 24 hours** of the closing of the test. Failure to do so will result in a zero – no exceptions. Due dates will be posted, so it is your responsibility to participate in discussion boards and complete tests on time.

Module Tests (5 @ 60 pts each)	300	60% (due dates posted in syllabus)
Discussion Boards (5 @ 20 pts each)	100	20% (due dates posted in syllabus)
<u>Diet Analysis</u>	<u>100</u>	<u>20%</u> (due Nov 21)
TOTAL	500 points	100%

Distance Education Statement: Students enrolled in distance education courses have equal access to the university's academic support services, library resources, and instructional technology support. For more information about accessing these resources, visit the SRSU website. Students should submit online assignments through Blackboard, which require secure login information to verify students' identities and to protect students' information. Students enrolled in distance education courses at Sul Ross are expected to adhere to all policies pertaining to academic honesty and appropriate student conduct, as described in the student handbook.

DATE	TENTATIVE LECTURE TOPIC	READ THE FOLLOWING CHAPTERS
WEEK 1		
Aug 25-31	Course introduction; The Science of Nutrition	1
WEEK 2		
Sept 1-7	Tools of a Healthy Diet; Discussion Board #1 Intro due Sept 07	2
WEEK 3		
Sept 8-14	The Food Supply; Module #1 Test due Sept 14	3
WEEK 4		
Sept 15-21	Human Digestion and Absorption; Discussion Board #2 due Sept 21	4
WEEK 5		
Sept 22-28	Carbohydrates	5
WEEK 6		
Sept 29-Oct 5	Lipids; Module #2 Test due Oct 5	6
WEEK 7		
Oct 6-12	Proteins; Discussion Board #3 due Oct 12	7
WEEK 8		
Oct 13-19	Alcohol	8
WEEK 9		
Oct 20-26	Energy Balance, Weight Control Module #3 Test due Oct 26	10 (skip Chapter 9)
WEEK 10		
Oct 27-Nov 2	Nutrition, Exercise, & Sports	11
WEEK 11		
Nov 3-9	Micronutrients: Vitamins and Minerals Discussion Board #4 due Nov 09	12
WEEK 12		
Nov 10-16	Micronutrients in Energy and Amino Acid Metabolism Module #4 Test due Nov 16	13
WEEK 13		
Nov 17-23	Fluid Balance and Blood Health **DIET ANALYSIS DUE FRIDAY, NOV 21 @ 11:59pm**	14
WEEK 14		
Nov 24-25	Bone Health, etc.; Discussion Board #5 due Nov 30	15 (skip Ch 16, 17)
Nov 26-30	THANKSGIVING Break—No classes	
WEEK 15		
Dec 1-7	Nutrition During Adult Years	18
WEEK 16		
Dec 8-10	Module #5 Test due <u>Wednesday, Dec 10 by NOON</u>; this test is <i>not</i> comprehensive.	

Sul Ross State University is committed to equal access in compliance with the Americans With Disabilities Act of 1973. It is the student's responsibility to initiate a request for accessibility services. Students seeking accessibility services must contact Counseling and Accessibility Services, Ferguson Hall, Room 112. The mailing address is P.O. Box C-171, Sul Ross State University, Alpine, Texas 79832. Telephone: 432-837-8203