

Biology 3301 Human Nutrition (3 credits) Fall 2022 Sul Ross State University

Instructor: Anne Marie Hilscher

Office Hours: MW 9:00-10:00 & 1-3; TR 8:30-9:30 & 10:45-11:30; F 9-10; by appt.

Office: WSB 220

Lecture Time: TR 2:00-3:15 WSB 101

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Optional Print Text: Byrd-Bredbenner, Carol, Gaile Moe, Donna Beshgetoor, Jacqueline Berning, and Danita Kelley. (2019). *Wardlaw's Perspectives in Nutrition: A Functional Approach*, 11th ed.

NOT REQUIRED

Optional Free Textbook online: [An Introduction to Nutrition](https://2012books.lardbucket.org/books/an-introduction-to-nutrition/) <https://2012books.lardbucket.org/books/an-introduction-to-nutrition/>

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.

- **Course Objectives:** Student will state the importance of proper nutrition in maintaining good health.
- Student will state and define the eating disorders that are observed in humans.
- Student will explain the importance and role of carbohydrates, lipids, proteins, and alcohol and their effects on human health.
- Student will explain the importance and role of vitamins and minerals and their effects on human health.
- Student will be able to demonstrate how metabolism and weight management relate to nutritional fitness.
- Student will be able to plan diets based on the nutritional requirements of humans of different ages, genders, and physical conditions (pregnancy, endurance athletes, etc.).

Grading: Grades will be distributed according to the table below. If you have a valid excuse to miss an exam, you must contact me **within 24 hours** of the scheduled exam. Failure to do so will result in a zero – no exceptions. Due dates are posted, so it is your responsibility to complete assignments on time.

Lecture Exams (4 @ 100 pts each)	400	69%
Discussion Forums (4 @ 20 pts each)	80	14%
Diet Analysis	100	17%
TOTAL	580 points	100%

Discussion Forums (DF) (4 worth up to 20 points each): 80 points

I will provide you with four opportunities for discussion points worth up to 20 points each. 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. I require that you include a thoughtful, researched response.

I expect that students adhere to acceptable codes of ethical, personal, and civil conduct when conversing online...just as we would in the classroom.

Diet Analysis: 100 points (See instructions under **Diet Analysis** on Blackboard.) Don't procrastinate; start this as soon as you can. **Due Tuesday, November 15 by midnight**

DATE	TENTATIVE LECTURE TOPIC	CHAPTER IN PRINT TEXT
WEEK 1		
Aug 23	Course Intro.; The Science of Nutrition	1
Aug 25	The Science of Nutrition	1
WEEK 2		
Aug 30	Tools of Healthy Diet	2
Sept 01	Tools of a Healthy Diet, cont.	2
WEEK 3		
Sep 06	The Food Supply	3
Sep 08	The Food Supply, cont. ; DF#1 due	3
WEEK 4		
Sep 13	Human Digestion and Absorption	4
Sep 15	Exam #1	
WEEK 5		
Sep 20	Carbohydrates	5
Sep 22	Lipids	6
WEEK 6		
Sep 27	Proteins	7
Sep 29	Alcohol; DF#2 due	8
WEEK 7		
Oct 04	Alcohol, cont.	8
Oct 06	Energy Balance, Weight Control, etc.	10 (skip Ch. 9)
WEEK 8		
Oct 11	Energy Balance, Weight Control, cont.	10
Oct 13	Exam #2	
WEEK 9		
Oct 18	Nutrition, Exercise, & Sports	11
Oct 20	Nutrition, Exercise, & Sports, cont.	11
WEEK 10		
Oct 25	Nutrition, Exercise, & Sports, cont.	11
Oct 27	Micronutrients: Fat-soluble Vitamins; DF#3 due	12
WEEK 11		
Nov 01	Water-Soluble Vitamins	13
Nov 03	Water-Soluble Vitamins; Water & Minerals	13-14
WEEK 12		
Nov 08	Water & Minerals	14-15
Nov 10	Exam #3	
WEEK 13		
Nov 15	Nutrition through Growing Years DIET ANALYSIS DUE	17 (skip Ch 16)
Nov 17	Nutrition through Growing Years, cont.	17
WEEK 14		
Nov 22	Nutrition through the Adult Years; DF#4 due	18
Nov 24	THANKSGIVING Break—No class	
WEEK 15		
Nov 29	Wrap-up and Review	
Dec 01	NO CLASS – STUDY DAY	
WEEK 16		
	FINAL EXAM WEEK – Exam #4	

STUDENT LEARNING OUTCOMES (SLOS) The biology student graduating with a BS in Biology should be able to:

- 1) The student will be able to demonstrate an understanding of basic biological concepts, including but not limited to evolution via natural selection, cell theory, and the role and function of DNA.
- 2) The student will be able to demonstrate utilization of various field techniques toward addressing scientific questions in the specific discipline. These field techniques can include, but are not limited to, plant collection and processing, various animal collection techniques, ecological surveying and sampling, and biodiversity indexing.
- 3) The student will be able to use biological instrumentation to solve biological problems using standard observational strategies.
- 4) The student will develop writing skills by summarizing and critiquing recent relevant biological literature.

CORE OBJECTIVES ADDRESSED:

- 1) Communication Skills – Students will effectively communicate the results of scientific investigations, using oral, written, and visual communication, either in group discussions or on written exams.
- 2) Critical Thinking Skills – Students will include creative thinking, innovation, inquiry, and analysis required to relate new information with previous information in a way that demonstrates the diversity and similarity due to evolutionary ancestry.
- 3) Empirical and Quantitative Skills – Students will use basic math skills to solve problems (e.g., related to genetic outcomes, cellular energy production, and probability) resulting in informed conclusions.
- 4) Teamwork Skills – Students will work effectively with others to support a shared goal during lab sessions on activities, such as dissections, problem solving, and other experimental procedures.

MARKETABLE SKILLS: A student getting a degree in the biological sciences would be expected to acquire the following marketable skills by graduation.

- 1) Students will be able to organize, analyze, and interpret data.
- 2) Students will be proficient at using presentation software.
- 3) Students will acquire experience in managing time and meeting deadlines.
- 4) Students will gain the ability to speak effectively and write concisely about scientific topics.
- 5) Students will acquire experience and guidance in the development of professional email correspondence.

SRSU Attendance Policy. Roll will be taken during each class meeting. The SRSU catalog states “The instructor may, at their discretion, drop a student from a course when the student has a total of nine absences in lecture and three absences in lab. An absence is defined as non-attendance in fifty minutes of class. Exams must be taken on the scheduled exam date that will be announced at least a week prior unless other arrangements have been made with the instructor. Exams must be made up within a week from the scheduled date. **RULE TO LIVE BY: DON’T MISS ANY CLASSES!** If you absolutely must miss, make sure you let me know before.

Academic Integrity. Students in this class are expected to demonstrate scholarly behavior and academic honesty in the use of intellectual property. A scholar is expected to be punctual, prepared, and focused; meaningful and pertinent participation is appreciated. Examples of academic dishonesty include but are not limited to: Turning in work as original that was used in whole or part for another course and/or professor; turning in another person’s work as one’s own; copying from professional works or internet sites without citation; collaborating on a course assignment, examination, or quiz when collaboration is forbidden.

SRSU Disability Services. SRSU Disability Services. Sul Ross State University (SRSU) is committed to equal access in compliance with Americans with Disabilities Act of 1973. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the student's responsibility to initiate a request each semester for each class. Alpine students seeking accessibility/accommodations services must contact Mary Schwartz Grisham, M.Ed., LPC, SRSU's Accessibility Services Coordinator at 432-837-8203 (please leave a message and we'll get back to you as soon as we can during working hours), or email mschwartz@sulross.edu Our office is located on the first floor of Ferguson Hall (Suite 112), and our mailing address is P.O. Box C-122, SUI Ross State University, Alpine. Texas, 79832.

Technical Support. SRSU 24/7 Blackboard Technical Support: Toll Free: 888.837.6055. Email: blackboardsupport@sulross.edu

SRSU Library Services. The Bryan Wildenthal Memorial Library in Alpine offers FREE resources and services to the entire SRSU community. Access and borrow books, articles, and more by visiting the library's website, library.sulross.edu. Off-campus access requires your LoboID and password. Check out materials using your photo ID. Librarians are a tremendous resource for your coursework and can be reached in person, by email (srsulibrary@sulross.edu), or phone (432-837-8123).

The Southwest Texas Junior College (SWTJC) Libraries at Uvalde, Del Rio, and Eagle Pass offer additional access to library spaces and resources. Del Rio, Eagle Pass, and Uvalde students may also use online resources available through SWTJC website, <https://library.swtjc.edu>. The SWTJC Libraries serve as pick-up locations for Interlibrary Loan (ILL) and Document Delivery from the Alpine campus.

Classroom Climate of Respect. Importantly, this class will foster free expression, critical investigation, and the open discussion of ideas. This means that all of us must help create and sustain an atmosphere of tolerance, civility, and respect for the viewpoints of others. Similarly, we must all learn how to probe, oppose and disagree without resorting to tactics of intimidation, harassment, or personal attack. No one is entitled to harass, belittle, or discriminate against another based on race, religion, ethnicity, age, gender, national origin, or sexual preference. Still, we will not be silenced by the difficulty of fruitfully discussing politically sensitive issues.

Diversity Statement. I aim to create a learning environment for my students that supports a diversity of thoughts, perspectives, and experiences, and honors your identities (including race, gender, class, sexuality, religion, ability, socioeconomic class, age, nationality, etc.). I also understand that the crisis of COVID, economic disparity, and health concerns, or even unexpected life events could impact the conditions necessary for you to succeed. My commitment is to be there for you and help you meet the learning objectives of this course. I do this to demonstrate my commitment to you and to the mission of Sul Ross State University to create an inclusive environment and care for the whole student as part of the Sul Ross Familia. If you feel like your performance in the class is being impacted by your experiences outside of class, please don't hesitate to come and talk with me. I want to be a resource for you.