

## Biology 3301 Human Nutrition (Web-based 3 credits)

Fall 2025 Sul Ross State University

**Instructor:** Jena Carey

**Office hours:** MW 8-10:30; TR 8-9 a.m.; F by appt.  
WSB 220

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When emailing, please put "BIOL 3301" in the subject header (I have several courses so knowing which course you are needing help with, helps me). I will respond to emails sent during normal business hours usually within 48 hours. I will not respond to emails from 17:00-08:00. Emails sent after 17:00 on Friday will be responded to by the following Monday afternoon.

**Required Textbook online:** [Nutrition: Science and Everyday Application](#)

**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 the influence of food selection on health and evaluation of personal diets.

**Course Objectives (CO): By the end of this course students will:**

**CO1.** State the importance of proper nutrition in maintaining good health.

**CO2.** Explain the importance and role of carbohydrates, lipids, proteins, and alcohol and effects on human health.

**CO3.** Explain the importance and role of vitamins and minerals and their effects on human health.

**CO4.** Demonstrate how metabolism and weight management relate to nutritional fitness.

**CO5.** Plan diets based on the nutritional requirements of humans of different ages, genders, and physical conditions (pregnancy, endurance athletes, etc.).

**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.

**Grading:** Grades will be distributed according to the table below. If you have a valid excuse to miss an assignment, you must contact me **24 hours before** the due date. 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 (5 @ 100 pts each)	500
Concept Maps (15 @ 20 pts each)	300
Diet Analysis	150
<u>Participation/Discussion (5 @ 10 pts each)</u>	<u>50</u>
<b>TOTAL</b>	<b>1000 points</b>

**Module Exams** (5 @ 100 points each): 500 points

Each module will have an online exam to complete on Blackboard. You will have two hours to complete the exam. Exams must be submitted by **midnight on the Saturday** of the week. Exams will usually populate on Friday afternoon, giving students time to take the exam whenever is beset for them. Extensions of time or retakes will not be offered. Once you begin the exam, you must complete it within two hours.

**Concept Maps:** (15 @ 20 points each) 300 points

Each week will include one concept map of that week's material. Any information presented in the week can be up for creating your concept map. Concept maps are a creative, easy way to gather information and formulate it onto one page for easy study and review. I would love to see creative formats, with correct information in a logical order. There are several types of concept maps that students can use and I'm looking forward to seeing the creativity! Maps are due by **Midnight Saturday** of the week. The only request I have, is not to put the information in a "note" or paragraph form; remember that these are to be a VISUAL organizer to illustrate relationships between different ideas/concept/information. Here is an example of some concept map help: [Concept Maps – Learning Center](#). Feel free to do a google search of concept maps, or reach out to me for guidance.

**Diet Analysis:** (1 @ 150 points) 150 points

The personal Nutrition Assessment Project. It will be due by **MIDNIGHT Saturday 22 Nov**

**Module Responses:** (5 @ 10 points each) 50 points

Module responses may be in the form of responses to a video clip, podcast, article, statement, or the like. Rather than merely restating information, I expect you to use the following thinking skills: interpret, analyze, compare and contrast, examine, synthesize, generate, organize, evaluate, etc. I require that you submit a thoughtful, researched response. **I expect that students adhere to acceptable codes of ethical, personal, and civil conduct when posting responses.**

DATE	LECTURE TOPIC	UNIT IN ONLINE TEXT
<b>WEEK 1</b>		
25-30 Aug	The Science of Nutrition; <b>Concept Map 1</b>	1
<b>WEEK 2</b>		
31 Aug- 6 Sept	Tools of Healthy Diet; <b>Concept Map 2</b>	1
<b>WEEK 3</b>		
7-12 Sept	The Food Supply; <b>Concept Map 3</b> Human Digestion and Absorption; <b>Concept Map 4</b>	2 3
<b>*12-13 Sept</b>	<b>Exam #1 (Ch 1-3) Assignment #1 Due 13 Sept</b>	
<b>WEEK 5</b>		
14-20 Sept	Carbohydrates; <b>Concept Map 5</b> Lipids; <b>Concept Map 6</b>	4 5
<b>WEEK 6</b>		
21-27 Sept	Proteins; <b>Concept Map 7</b>	6
<b>WEEK 7</b>		
28 Sept-2 Oct	Alcohol	
<b>*3-4 Oct</b>	<b>Exam #2 (Ch 4-6) Assignment #2 Due 2 Oct</b>	
<b>WEEK 8</b>		
5-11 Oct	The Fat Soluble Vitamins; <b>Concept Map 8</b> Water Soluble Vitamins; <b>Concept Map 9</b>	8 9
<b>WEEK 9</b>		
12-18 Oct	Water & Major Minerals; <b>Concept Map 10</b>	
<b>WEEK 10</b>		
19-23 Oct	Trace Minerals	9
<b>*24-5 Oct</b>	<b>Exam #3 (Ch 8 &amp; 9) Assignment #3 Due 23 Oct</b>	
<b>WEEK 11</b>		
26 Oct-1 Nov	Energy Metabolism; <b>Concept Map 11</b> Energy Balance, Weight Control	7
<b>WEEK 12</b>		
2-8 Nov	Eating Disorders; <b>Concept Map 12</b>	10
<b>WEEK 13</b>		
9-13 Nov	Nutrition, Exercise, & Sports; <b>Concept Map 13</b>	10
<b>*14-15 Nov</b>	<b>Exam #4 (Ch 7 &amp; 10) Assignment #4 Due 13 Nov</b>	
<b>WEEK 14</b>		
16-22 Nov	Nutrition through the Growing Years; <b>Concept Map 14</b>	11
<b>*22 Nov</b>	<b>DIET ANALYSIS DUE</b>	
23-9 Nov	<b>THANKSGIVING!!!!!! TAKE A BREAK FROM CLASS!!</b>	
<b>WEEK 15</b>		
30 Nov-4 Dec	Nutrition through the Adult Years; <b>Concept Map 15</b>	11
<b>WEEK 16</b>		
	<b>FINAL EXAM (Exam #5): 6-8 Dec</b> (final exam will be open during this time for when is best for you!) Assignment #5 Due 6 Dec	

The university online attendance policy is addressed below:

- You are expected to login to Blackboard several times each week. The University policy for attendance in web-delivered courses states that non-participation (not logging in) for more than 3 weeks in a long session, or for 1 week during a summer session, may result in the student being dropped from the course by the professor.
- Any student dropped for non-participation will receive an F in the course dropped.

Inactivity may include the following:

- not logging on to the course, or cessation of logging in
- not submitting assignments by due date
- not participating in scheduled activities
- not communicating with the instructor by phone or email

**SRSU Distance Education Statement.** Students enrolled in distance education courses have equal access to the university's academic support services, such as library resources, online databases, and instructional technology support. For more information about accessing these resources, visit the SRSU website. Students should correspond using Sul Ross email accounts and submit online assignments through Blackboard, which requires secure login. 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. Students in web-based courses must maintain appropriate equipment and software, according to the needs and requirements of the course, as outlined on the SRSU website. Directions for filing a student complaint are in the student handbook.

**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](mailto: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, Sul Ross State University, Alpine, Texas, 79832.

**Technical Support.** SRSU 24/7 Blackboard Technical Support: Toll Free: 888.837.6055. Email: [blackboardsupport@sulross.edu](mailto: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](http://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](mailto: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.

**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.