



**LAMAR INSTITUTE
OF TECHNOLOGY**

BIOL 1322

Nutrition & Diet Therapy Spring 2024

Instructor Contact Information

Instructor	Yunyan Anna Cheng
STARFISH	Found on Blackboard
Email	ycheng@lit.edu
Office Phone	(409) 241-7296
Office Location	MPC 241
Office Hours	Monday: 12pm-4pm Wednesday: 12pm-4pm Thursday: 1pm-4pm Friday: 10am-2:30pm face to face, by phone, or online. Please feel free to contact me outside office hours by phone, email, or raising the "I Need Help" flag in Starfish.

Credit: 3 semester credit hours (3 hours lecture)

Prerequisite/Co-requisite

None- a basic understanding of chemistry and general biology is helpful.

Course Description

This course introduces general nutritional concepts in health and disease and includes practical applications of that knowledge. Special emphasis is given to nutrients and nutritional processes, including function, food sources, digestion, absorption, metabolism, interaction, storage, and excretion. Food safety, availability, and nutritional information, including food labels, advertising, and nationally established guidelines, are addressed.

Course Objectives

Upon completion of this course, the student will be able to:

- Apply nutritional knowledge to analyze personal dietary intakes, to plan nutritious meals using nationally established criteria to meet recommended goals, and to evaluate food labels and the validity of nutritional claims.
- Trace pathways and processes that occur in the body to handle nutrients and alcohol through consumption, digestion, absorption, transport, metabolism, storage and waste excretion.
- Discuss functions, sources, deficiencies, and toxicities of macro-and micronutrients, including carbohydrates, lipids, water, vitamins, and minerals.
- Apply the concept of energy balance and its influences at the physical, emotional, societal, and cellular level to evaluate advantages and disadvantages of various methods used to correct energy imbalances.
- Utilize concepts of aerobic and anaerobic energy systems, and knowledge about macronutrients, vitamins, minerals, ergogenics, and supplements and relate them to fitness and health.

- Describe health and disease related to nutrition throughout the life cycle, including food safety, corrective dietary modifications, and the influence of specific nutrients on diseases.
- Discuss the role nutrition plays in the current health care delivery system and how nutrition can be emphasized to promote health maintenance.

Core Objectives

1. **Critical Thinking Skills:** To include creative thinking, innovation, inquiry, analysis, evaluation and synthesis of information
2. **Communication Skills:** To include effective development, interpretation, and expression of ideas through written, oral, and visual communication
3. **Empirical & Quantitative Skills:** To include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
4. **Teamwork:** To include the ability to connect choices, actions, and consequences to ethical decision-making
5. **Personal Responsibility:** To include the ability to connect choices, actions, and consequences to ethical decision-making

Textbook And Materials

- Smith, A.M., & Collene, A.L. (2022). *Wardlaw's Contemporary Nutrition (12th ed.)*. New York: McGraw Hill. ISBN 978-1-260-69548-9
- Computer with internet access

Policies

1. Online Students must log on to Blackboard a minimum of 3 times a week.
2. Cheating of any type will not be tolerated. This includes copying and pasting information.
3. Late submissions of assignments/quizzes/exams will be accepted with a deduction of 10% for a penalty. Students will receive a zero for assignments not completed.
4. Four quizzes, a midterm exam and a final exam are required with 2 attempts given per quiz/exam. The final score of the quiz/exam will be calculated by averaging all attempts.
5. Make-up Exams: If you are unable to take an exam when scheduled due to unforeseen illnesses, deaths in the family, or other traumatic events, contact me within 24 hours of the event to schedule a make-up exam. Please provide documentation (letters from family are NOT acceptable) of the events that may conflict with exam dates. I will work with you to schedule a makeup exam.
6. Students will complete an individual project and a group project.
7. **If you wish to drop this course, you must drop it administratively. If you stop logging-in to the course and do not complete the course drop process, then you will receive an "F" grade for the course.**
8. Internet usage- students are to use proper netiquette when participating in course email, assignment submissions and online discussions.

Drop Policy

Last day to drop with refund: January 31, 2024.

Last day to drop without academic penalty: February 16, 2024

Last day to drop with academic penalty: April 2, 2024

No exceptions to these dates.

It is the student's responsibility to make sure you are officially enrolled or dropped from this course. If at any point, you decide to drop the class, it is your responsibility to officially drop (i.e., using proper administrative offices/ paperwork). Any student who stops attending class and does not officially drop the course will be given an "F" as the semester grade.

Student Expected Time Requirement

For every hour in class (or unit of credit), students should expect to spend at least two to three hours per week studying and completing assignments. For a 3- credit-hour class, students should prepare to allocate approximately six to nine hours per week outside of class in a 16- week session.

Course Evaluation

Final grades will be calculated according to the following criteria:

1. Discussion	10%
2. Quizzes	20%
3. Midterm & Final Exam	30%
4. Individual & Group Project	20%
5. Assignments	20%

100%

Grading Scale

90-100 = A

80-89 = B

70-79 = C

60-69 = D

0 - 59 = F

Academic Dishonesty

Students found to be committing academic dishonesty (cheating, plagiarism, or collusion) may receive disciplinary action. Students need to familiarize themselves with the institution's Academic Dishonesty Policy available in the Student Catalog & Handbook at <http://catalog.lit.edu/content.php?catoid=3&navoid=80#academic-dishonesty>.

Technical Requirements (for courses using Blackboard)

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at <https://lit.edu/online-learning/online-learning-minimum-computer-requirements>. A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of online technology and resources.

Disabilities Statement

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.

<https://lit.edu/student-success/starfish>

Student Code of Conduct

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the LIT Catalog and Student Handbook. The LIT Catalog and Student Handbook may be accessed at www.lit.edu. Please note that the online version of the LIT Catalog and Student Handbook supersedes all other versions of the same document.

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Week:	Weekly Assignments:	Due Date:
Week 1 Jan 16th – 19th	<input type="checkbox"/> Discussion Board: Netiquette for Online Learners <input type="checkbox"/> Discussion Board: Introduction <input type="checkbox"/> Syllabus Quiz/Syllabus Acknowledgement <input type="checkbox"/> Look over instructions for Individual Project: Nutrition Daily Tracking <i>Due</i> 03.22.24 <input type="checkbox"/> Join a group for Group Project: FAD Diets <i>Due</i> 04.12.24	01.21.24
Week 2 Jan 22nd – 26th <u>Module 1</u> A Key to Health Chapter 1: Nutrition, Food Choices & Health	<input type="checkbox"/> Video Quiz: Metabolism & Nutrition: Part I <input type="checkbox"/> Video Quiz: Dietary Reference Intakes <input type="checkbox"/> Work on Individual Project: Nutrition Daily Tracking <i>Due</i> 03.22.24 <input type="checkbox"/> Work on Group Project: FAD Diets <i>Due</i> 04.12.24	01.28.24
Week 3 Jan 29th – Feb 2nd <u>Module 1</u> A Key to Health Chapter 2: Healthy Eating Patterns	<input type="checkbox"/> Video Quiz: What is a Calorie? <input type="checkbox"/> Video Quiz: Serving Size and Portion Size <input type="checkbox"/> Video Quiz: Food Labels <input type="checkbox"/> Video Quiz: How to Spot a FAD Diet <input type="checkbox"/> Work on Individual Project: Nutrition Daily Tracking <i>Due</i> 03.22.24 <input type="checkbox"/> Work on Group Project: FAD Diets <i>Due</i> 04.12.24	02.04.24
Week 4 Feb 5th – 9th <u>Module 1</u> A Key to Health Chapter 3: Human Body	<input type="checkbox"/> Video Quiz: Digestive System – Part 1 <input type="checkbox"/> Video Quiz: Digestive System – Part 2 <input type="checkbox"/> Video Quiz: Digestive System – Part 3 <input type="checkbox"/> Discussion Board: How the Food You Eat Affects Your Gut <input type="checkbox"/> Quiz 1: Module 1 Opens 02.09.24 and due 02.10.24 <input type="checkbox"/> Work on Individual Project: Nutrition Daily Tracking <i>Due</i> 03.22.24 <input type="checkbox"/> Work on Group Project: FAD Diets <i>Due</i> 04.12.24	02.10.24 02.11.24
Week 5 Feb 12th – 16th <u>Module 2</u> Energy Nutrients & Balance Chapter 4: Carbohydrates	<input type="checkbox"/> Video Quiz: Carbohydrates <input type="checkbox"/> Video Quiz: How Do Carbohydrates Impact Your Health? <input type="checkbox"/> Video Quiz: The Deal with Carbs <input type="checkbox"/> Discussion Board: How Sugar Affects Your Brain <input type="checkbox"/> Work on Individual Project: Nutrition Daily Tracking <i>Due</i> 03.22.24 <input type="checkbox"/> Work on Group Project: FAD Diets <i>Due</i> 04.12.24	02.18.24
Week 6 Feb 19th – 23rd <u>Module 2</u> Energy Nutrients & Balance Chapter 5: Lipids	<input type="checkbox"/> Video Quiz: What is Fat? <input type="checkbox"/> Video Quiz: The Deal with Fat <input type="checkbox"/> Video Quiz: Which is Worse – Sugar or Fat? <input type="checkbox"/> Work on Individual Project: Nutrition Daily Tracking <i>Due</i> 03.22.24 <input type="checkbox"/> Work on Group Project: FAD Diets <i>Due</i> 04.12.24	02.25.24
Week 7 Feb 26th – Mar 1st <u>Module 2</u> Energy Nutrients & Balance Chapter 6: Proteins	<input type="checkbox"/> Video Quiz: The Deal with Protein <input type="checkbox"/> Video Quiz: What are Proteins? <input type="checkbox"/> Work on Individual Project: Nutrition Daily Tracking <i>Due</i> 03.22.24 <input type="checkbox"/> Work on Group Project: FAD Diets <i>Due</i> 04.12.24	03.03.24

Week 8 March 4th – 8th <u>Module 2</u> Energy Nutrients & Balance Chapter 7: Energy Balance	<input type="checkbox"/> Video Quiz: Metabolism & Nutrition Part 2 <input type="checkbox"/> Video Quiz: How do Vitamins Work? <input type="checkbox"/> Video Quiz: Minerals <input type="checkbox"/> Discussion Board: Why 2000 Calories a Day? <input type="checkbox"/> Quiz 2: Module 2 Opens 03.08.24 and due 03.09.24 <input type="checkbox"/> DUE SOON → Work on Individual Project: Nutrition Daily Tracking Due 03.22.24 <input type="checkbox"/> Work on Group Project: FAD Diets Due 04.12.24	03.09.24 03.10.24
Week 9 MARCH 11th – 15th SPRING BREAK	<input type="checkbox"/> Sleep, rest, relax <input type="checkbox"/> Enjoy time with family and friends <input type="checkbox"/> Netflix, etc. <input type="checkbox"/> Exercise <input type="checkbox"/> Read a good book	
Week 10 March 18th – 22nd Midterm Exam <u>Module 3</u> Beyond the Nutrients	<input type="checkbox"/> Midterm Exam (Modules 1 & 2) Opens 03.22.24 and due 03.23.24 <input type="checkbox"/> DUE → Individual Project: Nutrition Daily Tracking 03.22.24 <input type="checkbox"/> Work on Group Project: FAD Diets Due 04.12.24	03.22.24 03.23.24
Week 11 March 25th – 28th <u>Module 3</u> Beyond the Nutrients Chapter 10: Fitness & Sports	<input type="checkbox"/> Video Quiz: What do Performance-Enhancing Drugs Do to Your Body? <input type="checkbox"/> Video Quiz: Performance Enhancing Drugs <input type="checkbox"/> Discussion Board: Sports Nutrition & Ergogenic Aids <input type="checkbox"/> Work on Group Project: FAD Diets Due 04.12.24	03.31.24
Week 12 April 1st – 5th <u>Module 3</u> Beyond the Nutrients Chapter 11: Eating Disorders	<input type="checkbox"/> Video Quiz: 6 Types of Eating Disorders <input type="checkbox"/> Video Quiz: Why are Eating Disorders so Hard to Treat? <input type="checkbox"/> Video Quiz: Eating & Body Dysmorphic Disorders <input type="checkbox"/> Discussion Board: Gallery Walk -Post 2 Comments on Individual Projects <input type="checkbox"/> Work on Group Project: FAD Diets Due 04.12.24	04.07.24
Week 13 April 8th – 12th <u>Module 3</u> Beyond the Nutrients Chap. 12: Protecting Our Food Supply	<input type="checkbox"/> Video Quiz: Food Borne Illness <input type="checkbox"/> Video Quiz: Infection and Intoxication <input type="checkbox"/> Video Quiz: CDC in Action – Foodborne Outbreaks <input type="checkbox"/> Work on Group Project: FAD Diets Due 04.12.24	04.12.24 04.14.24
Week 14 April 15th – 19st <u>Module 3</u> Beyond the Nutrients Chap. 13: Global Nutrition	<input type="checkbox"/> Video Quiz: Hunger & Health <input type="checkbox"/> Video Quiz: Food Stamps, Hunger, and How Nutrition Assistance Works <input type="checkbox"/> Video Quiz: Why is there Uneven Access to Food? <input type="checkbox"/> Quiz 3: Module 3 Opens 04.19.24 and due 04.20.24	04.20.24 04.21.24

<p>Week 15 April 22nd – 26th</p> <p><u>Module 4</u> A Focus on Life Stages Chap 14&15</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Video Quiz: Nutrition Tips: Pregnancy and Nutrition <input type="checkbox"/> Video Quiz: Live it: Importance of Nutrition during Pregnancy <input type="checkbox"/> Video Quiz: The Benefits of Breastfeeding <input type="checkbox"/> Video Quiz: Infants, Childhood and Adolescence 	<p>04.28.24</p>
<p>Week 16 April 29th – May 3rd</p> <p><u>Module 4</u> A Focus on Life Stages Chap 16: Nutrition in Adulthood</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Video Quiz: Nutrition through the Ages: Young Adulthood <input type="checkbox"/> Video Quiz: Adulthood and Later Years <input type="checkbox"/> Discussion: Nutrition through the Life Cycle <input type="checkbox"/> Quiz 4: Module 4 Opens 05.01.24 and due 05.02.24 <input type="checkbox"/> Review for Final Exams <input type="checkbox"/> Complete missing work 	<p>05.01.24 05.02.24</p>
<p>Week 17 May 6th – May 8th</p> <p>Final Exam</p>	<ul style="list-style-type: none"> <input type="checkbox"/> FINAL EXAM (Modules 3 & 4) Opens 05.03.24 and due 05.04.24 <input type="checkbox"/> Congratulations!! You made it!! Celebrate 😊 	<p>05.04.24</p>