



**LAMAR INSTITUTE  
OF TECHNOLOGY**

## **BIOL 1322**

### **Nutrition & Diet Therapy Spring 2024**

**Credit:** 3 semester credit hours (3 hours lecture)

#### **Instructor Contact Information**

<b>Instructor</b>	Yunyan Anna Cheng
<b>STARFISH</b>	Found on Blackboard
<b>Email</b>	ycheng@lit.edu
<b>Office Phone</b>	(409) 241-7296
<b>Office Location</b>	MPC 241
<b>Office Hours</b>	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.

#### **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* (12<sup>th</sup> ed.). New York: McGraw Hill. ISBN 978-1-260-69548-9
- Computer with internet access

### Policies

1. Cheating of any type will not be tolerated. This includes copying and pasting information.
2. 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.
3. 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.
4. If you miss assignments due to unforeseen illnesses, deaths in the family, or other traumatic events, please provide documentation (letters from family are NOT acceptable) of the events that may conflict with course work.
5. Students will complete an individual project and a group project.
6. Assignments include video quizzes on Blackboard and random in-class assignments. In-class assignments will be due before the end of the class.
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](http://www.lit.edu). Please note that the online version of the LIT Catalog and Student Handbook supersedes all other versions of the same document.

**Starfish**

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.

Week	Assignments	Due Dates
<b>Week 1</b> <b>Jan 16<sup>th</sup> – 19<sup>th</sup></b> <u>Module 1</u> A Key to Health	<input type="checkbox"/> Syllabus Quiz <input type="checkbox"/> Discussion: Netiquette in Online Classes <input type="checkbox"/> Chapter 1: Nutrition, Food Choices & Health Notes & Activities <input type="checkbox"/> Work on Individual Project: Nutrition Daily Tracking Due 03.22.24 <input type="checkbox"/> Join a group for Group Project: FAD Diets Due 04.12.24	01.21.24
<b>Week 2</b> <b>Jan 22<sup>nd</sup> – 26<sup>th</sup></b> <u>Module 1</u> A Key to Health	<input type="checkbox"/> Chapter 1: Nutrition, Food Choices & Health Notes & Activities <input type="checkbox"/> Work on Individual Project: Nutrition Daily Tracking Due 03.22.24 <input type="checkbox"/> Work on Group Project: FAD Diets Due 04.12.24	
<b>Week 3</b> <b>Jan 29<sup>th</sup> – Feb 2<sup>nd</sup></b> <u>Module 1</u> A Key to Health	<input type="checkbox"/> Chapter 2: Healthy Eating Patterns Notes & Activities <input type="checkbox"/> Work on Individual Project: Nutrition Daily Tracking Due 03.22.24 <input type="checkbox"/> Work on Group Project: FAD Diets Due 04.12.24	
<b>Week 4</b> <b>Feb 5<sup>th</sup> – 9<sup>th</sup></b> <u>Module 1</u> A Key to Health	<input type="checkbox"/> Chapter 3: Human Body & Nutrition Notes & Activities <input type="checkbox"/> Discussion Board 1: 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 Due 03.22.24 <input type="checkbox"/> Work on Group Project: FAD Diets Due 04.12.24	02.10.24 02.11.24
<b>Week 5</b> <b>Feb 12<sup>th</sup> – 16<sup>th</sup></b> <u>Module 2</u> Energy Nutrients & Balance	<input type="checkbox"/> Chapter 4: Carbohydrates Notes & Activities <input type="checkbox"/> Discussion Board 2: How Sugar Affects Your Brain <input type="checkbox"/> Work on Individual Project: Nutrition Daily Tracking Due 03.22.24 <input type="checkbox"/> Work on Group Project: FAD Diets Due 04.12.24	02.18.24
<b>Week 6</b> <b>Feb 19<sup>th</sup> – 23<sup>rd</sup></b> <u>Module 2</u> Energy Nutrients & Balance	<input type="checkbox"/> Chapter 5: Lipids Notes & Activities <input type="checkbox"/> Work on Individual Project: Nutrition Daily Tracking Due 03.22.24 <input type="checkbox"/> Work on Group Project: FAD Diets Due 04.12.24	
<b>Week 7</b> <b>Feb 26<sup>th</sup> – Mar 1<sup>st</sup></b> <u>Module 2</u> Energy Nutrients & Balance	<input type="checkbox"/> Chapter 6: Proteins Notes & Activities <input type="checkbox"/> Work on Individual Project: Nutrition Daily Tracking Due 03.22.24 <input type="checkbox"/> Work on Group Project: FAD Diets Due 04.12.24	
<b>Week 8</b> <b>March 4<sup>th</sup> – 8<sup>th</sup></b> <u>Module 2</u> Energy Nutrients & Balance	<input type="checkbox"/> Chapter 7: Energy Balance Notes & Activities <input type="checkbox"/> Discussion Board 3: Why 2000 Calories a Day? <input type="checkbox"/> Quiz 2: Module 2 Opens 03.08.24 and due 03.09.24 <input type="checkbox"/> <b>DUE SOON →</b> 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

<b>Week 9</b> <b>MARCH 11<sup>TH</sup> – 15<sup>TH</sup></b> <b>SPRING BREAK</b>	<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 <input type="checkbox"/> Do something nice for someone	
<b>Week 10</b> <b>March 18<sup>th</sup> – 22<sup>nd</sup></b> <b>Midterm Exam</b> <u>Module 3</u> Beyond the Nutrients	<input type="checkbox"/> <b>Midterm Exam</b> Opens 03.22.24 and due 03.23.24 (Modules 1 & 2) <input type="checkbox"/> Chapter 10: Fitness & Sports Notes & Activities <input type="checkbox"/> <b>DUE:</b> 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
<b>Week 11</b> <b>March 25<sup>th</sup> – 28<sup>th</sup></b> <u>Module 3</u> Beyond the Nutrients	<input type="checkbox"/> Chapter 10: Fitness & Sports Notes & Activities <input type="checkbox"/> Discussion Board 4: Sports Nutrition & Supplements <input type="checkbox"/> Work on Group Project: FAD Diets Due 04.12.24	03.31.24
<b>Week 12</b> <b>April 1<sup>st</sup> – 5<sup>th</sup></b> <u>Module 3</u> Beyond the Nutrients	<input type="checkbox"/> Chapter 11: Eating Disorders Notes & Activities <input type="checkbox"/> Discussion Board 5: Gallery Walk - Post 2 Comments on Individual Projects <input type="checkbox"/> <b>DUE SOON →</b> Work on Group Project: FAD Diets 04.12.24	04.07.24
<b>Week 13</b> <b>April 8<sup>th</sup> – 12<sup>th</sup></b> <u>Module 3</u> Beyond the Nutrients	<input type="checkbox"/> Chapter 12: Protecting Our Food Supply Notes & Activities <input type="checkbox"/> <b>DUE:</b> Work on Group Project: FAD Diets Due 04.12.24 <input type="checkbox"/> Group Project: In-Class Presentation	04.12.24
<b>Week 14</b> <b>April 15<sup>th</sup> – 19<sup>st</sup></b> <u>Module 3</u> Beyond the Nutrients	<input type="checkbox"/> Chapter 13: Global Nutrition Notes & Activities <input type="checkbox"/> <b>Quiz 3: Module 3</b> Opens 04.19.24 and due 04.20.24	04.20.24
<b>Week 15</b> <b>April 22<sup>nd</sup> – 26<sup>th</sup></b> <u>Module 4</u> A Focus on Life Stages	<input type="checkbox"/> Chapter 14: Nutrition for Pregnancy and Breastfeeding Notes & Activities <input type="checkbox"/> Chapter 15: Nutrition – Infancy through Adolescence Notes & Activities	
<b>Week 16</b> <b>April 29<sup>th</sup> – May 3<sup>rd</sup></b> <u>Module 4</u> A Focus on Life Stages	<input type="checkbox"/> Chapter 16: Nutrition in Adulthood <input type="checkbox"/> Discussion 7: Nutrition through the Life Cycle <input type="checkbox"/> <b>Quiz 4: Module 4</b> Opens 05.01.24 and closes 05.02.24	05.01.24 05.02.24
<b>Week 17</b> <b>May 6<sup>th</sup> – May 8<sup>th</sup></b> <b>Final Exam</b>	<input type="checkbox"/> <b>FINAL EXAM</b> (Modules 3 & 4) Opens 05.03.24 and Closes 05.04.24 <input type="checkbox"/> Congratulations!! You made it!! Celebrate ☺	<b>05.04.24</b>



