

BIOL 1322

Nutrition and Diet Therapy

Spring 2026

CREDIT

3 Semester Credit Hours (lecture)

MODE OF INSTRUCTION

Face to Face

PREREQUISITE/CO-REQUISITE:

None

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

Approved: Initials/date



INSTRUCTOR CONTACT INFORMATION

Instructor: Dr. Gradee Davis, Pharm.D.
Email: gldavis@libertyisd.net
Office Phone: 936-587-2119
Office Location: Liberty High School, Rm 111
Office Hours: 6:40 am to 7:10 am Monday-Thursday

REQUIRED TEXTBOOK AND MATERIALS

OpenStax Nutrition for Nurses

ATTENDANCE POLICY

- 1) Regular and Punctual attendance is expected for all students in all classes for which they are registered. If a student is tardy, they may enter if they do so quietly.
- 2) Roll will be taken every day at the beginning or end of class.
- 3) Attendance policies of Liberty Independent School District will be followed as outlined in the student handbook.

DROP POLICY

If you wish to drop a course, you are responsible for initiating and completing the drop process by the specified date as listed in the College Calendar on the [Student Success](#) web page. If you stop coming to class and fail to drop the course, you will earn an "F" in the course.

TENATIVE SCHEDULE

Week 1	Jan 21-24	Introduction to Nutrition
Week 2	Jan 27-31	Introduction to Nutrition
Week 3	Feb 3-7	Introduction to Nutrition
Week 4	Feb 10-14	Energy Nutrients- Macronutrients
Week 5-	Feb 17-21	Energy Nutrients- Micronutrients
Week 6	Feb 24-28	Digestive Process
Week 7	March 3-7	Digestive Process
Week 8	March 10-14	Spring Break
Week 9	March 17-21	Health and Wellness
Week 10	March 24-28	Neurological Nutrition
Week 11	March 31-April 4	Hematologic Nutrition
Week 12	April 7-11	Cardiovascular Nutrition
Week 13	April 14-18	Pulmonary Nutrition
Week 14	April 21-25	Renal Nutrition
Week 15	April 28- May 2	Gastrointestinal Health
Week 16	May 5- 9	Musculoskeletal and Integumentary Nutrition

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

- Daily grades 40%
- Major grades 60%

GRADE SCALE

- 90-100 A
- 80-89 B
- 70-79 C
- 60-69 D
- 0-59 F

TECHNICAL REQUIREMENTS

For the latest technical requirements, including hardware, compatible browsers, operating systems, etc., review the Minimum Computer and Equipment Requirements on the [LIT Online Experience](#) page. A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of online technology and resources.

DISABILITIES STATEMENT

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email specialpopulations@lit.edu. You may also visit the online resource at [Special Populations - Lamar Institute of Technology \(lit.edu\)](#).

STUDENT CODE OF CONDUCT STATEMENT

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.

ARTIFICIAL INTELLIGENCE STATEMENT

Lamar Institute of Technology (LIT) recognizes the recent advances in Artificial Intelligence (AI), such as ChatGPT, have changed the landscape of many career disciplines and will impact many students in and out of the classroom. To prepare students for their selected careers, LIT desires to guide students in the ethical use of these technologies and incorporate AI into classroom instruction and assignments appropriately. Appropriate use of these technologies is at the discretion of the instructor. Students are reminded that all submitted work must be their own original work unless otherwise specified. Students should contact their instructor with any questions as to the acceptable use of AI/ChatGPT in their courses.

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.