



Course Title: Human Anatomy & Physiology
Course #: BIOL-1310C-1

Credit Hours: 4
Semester: Spring 2022
Cap:

Instructor: Franklin Mvo Maloba

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Office:

Office Phone:

Office Hours: Monday & Wednesday: 12:00 - 3:30 pm.

Class Location: Lab/ Face-to-Face/Online (Hybrid).

Class/Lab Meeting Times: MW: 3:30 pm – 4:50 pm Lab: T 3.30 pm – 4:50 pm

Required Materials:

Textbook: Patton, K.T. and Thibodeau, G.A. Anatomy & Physiology. 10th Edition, Mosby- Elsevier, MO. (2013). ISBN: 978-0-323-34139-4.

Laboratory Manual: Patton, K.T., and Thibodeau, G.A. Anatomy & physiology. 10th Edition, Mosby –Elsevier, MO. (2013). ISBN: 978-0-323-52892-4.

Tools: Color pencils.

Lab Fee: \$125.00

Tools: Every student is required to have a laptop.

The Human & Physiology I (BIO1310C-1) course will be offered as a hybrid class. Moodle platform will be used. Lectures will hold on Mondays and Wednesdays, and labs on Tuesday. Monday Lectures will be in Person and Wednesday Lectures will be in person and/or by Moodle/zoom. All labs, Quizzes and Finals. shall be in Person.

Mission, Vision, and Philosophy

Mission: Navajo Technical University honors Diné culture and language while educating for the future.

Vision: Navajo Technical University provides an excellent educational experience in a supportive, culturally diverse environment, enabling all community members to grow intellectually, culturally, and economically.

Philosophy: Through the teachings of Nitsáhákees (thinking), Nahátá (planning), Íina (implementing), and Siihasin (reflection), students acquire quality education in diverse fields, while preserving cultural values and gaining economic opportunities.

Course Description: This course is designed to examine the structure and function of the human body. The approach is to place individual structures or functions into an integrated framework or “big picture”. Topics include cells and cellular processes, tissues, integumentary, skeletal, muscle, central, peripheral, and autonomic nervous system, sense organs, and endocrine system. There would be three hours of lecture and two hours of laboratory work per week.

Course Objectives

After successfully completing this course, students should be able to:

1. Explain how the human body is put together, and how all parts work,

2. Explain the underlying scientific principles of human structure and function.
3. Gain insight into how the parts work together and allow various activities.
4. Explain how chemical reactions and functions are coordinated via the regulation of body organs by hormones, nerves, and other mechanisms.
5. Name the various body parts, describe their detailed structure, and explain the mechanisms that produce their functions.
6. Recognize that disease processes are disruptions of homeostasis, a breakdown of the normal integration of form and function.

COURSE OUTCOMES	COURSE MEASUREMENTS
Identify important structures of the human body learned in the lectures	Identification of body structures will be measured by class tests and quizzes, and by labeling and coloring exercises, dissection of anatomical models, fresh and preserved specimens.
Use correct terminology to communicate anatomical features and physiological processes	Knowledge of anatomical and physiological terminologies will be evaluated by quizzes, essays, oral presentations, homework, and exams.
Apply physiological concepts to explain a variety of functional processes of the human body	Understanding of physiological concepts underlying functions will be analyzed by essays, oral presentation, observations of students' performance at tasks, quizzes, homework, and exams.
Apply concepts and knowledge gained in microscopic and gross anatomy to identify, explain and solve clinical problems.	Examination, quizzes, poster and/or oral presentations, interpretation of case studies, homework assignments, lab write-ups, research papers, portfolios, and small group exercises would be used to measure outcomes.

Week	Date	Chapters	Assignment	Quiz
1	01/18-01/21	1-2: Organization of the body/Homeostasis <i>Labs 1-2</i>	Read Pp. 1-35	
2	01/24-01/28	3-4: The chemical basis of life/Biomolecules <i>Labs 3-4</i>	Read Pp. 38-74	
	01/31	Quizz/Assignment on Chapters 1-4	Quiz	Chpt. 1 -4
3	01/31-02/04	5-6: Anatomy and Physiology of cells <i>Labs 5-6</i>	Read pp.75-113	
4	02/07-02/11	7: Cell growth and development <i>Labs 7</i>	Read pp. 120-137	
5	02/14-02/18	8: Tissues <i>Labs 8</i>	Read pp. 137-154	
	02/21	Holiday-President's Day		
	02/23	Quizz/Assignment on Chapters 5-8	Quiz	Chpt. 5-8
6	02/22-02/25	9: Tissue types <i>Labs 9</i>	Read pp. 155-180	
7	02/28-03/04	10: Skin and appendages <i>Labs 10</i>	Read pp. 181-207	

	03/7 – 03/11	Midterm Exam Covering Chapters 7-11	Midterm	Chpt. 6 -8
		Spring Break 03/14-03/18		
8	03/14-03/18	11-13: Skeletal system <i>Labs 11-13</i>	Read pp. 209-282	
9	03/21-03/25	14: Articulations <i>Labs 14</i>	Read pp. 283-312	
10	03/28-04/01	15: Anatomy of the axial muscles <i>Labs 15</i>	Read pp. 312-336	
	04/11	Quiz on Chapters 11-14	Quiz	Chpt. 11-14
11	04/04-04/08	16: Anatomy of the appendicular muscles <i>Labs 16</i>	Read pp. 337-360	
12	04/11-04/15	17: Physiology of the muscular system <i>Labs 17</i>	Read pp. 361-391	
	04/22	Quiz on Chapters 15 -17	Quiz	Chpt. 15-17
13	04/18-04/22	18: Nervous system cells <i>Labs 18</i>	Read pp. 392-435	
14	04/25-04/29	19-22: Nervous signaling Central, peripheral, and autonomic nervous systems <i>Labs 19-22</i>	Read pp. 408-511	
		Quiz on Chapters -18-22	Quiz	Chpt. 18-22
15	05/02-05/06	REVISION	REVISION	REVISION
16	05/09-05/12	FINAL EXAMINATION	FINALS	

Grading Plan:

A = 100-90%
 B = 89-80%
 C = 79-70%
 D = 69-60%
 F = 59% or less

Allocation of Grades

Exams (Midterm & Finals)	40%
Homework/Presentations	10%
Tests/Quizzes	20%
Class participation	5%
Lab work	25%

Grading Policy

Students must do their own work. Cheating and plagiarism are strictly forbidden. Cheating includes (but is not limited to) plagiarism, submission of work that is not one's own, submission or use of falsified data, unauthorized access to exams or assignments, use of unauthorized material during an exam, or supplying or communicating unauthorized information for assignments or exams.

Participation

Students are expected to attend and participate in all class activities. Points will be given to students who actively participate in class activities including guest speakers, field trips, laboratories, and all other classroom events.

Cell phone and headphone use

Please turn cell phone off **before** coming to class. Cell phone courtesy is essential to quality classroom learning. Headphones must be removed before coming to class.

Attendance Policy

Students are expected to attend all class sessions. A percentage of the student's grade will be based on class attendance and participation. Absence from class, regardless of the reason, does not relieve the student of the responsibility to complete all course work by required deadlines. Furthermore, it is the student's responsibility to obtain notes, handouts, and any other information covered when absent from class and to arrange to make up any in-class assignments or tests if permitted by the instructor. Incomplete or missing assignments will necessarily affect the student's grades. Instructors will report excessive and/or unexplained absences to the Counseling

Department for investigation and potential intervention. **Instructors may drop students from the class after three (3) absences unless prior arrangements are made with the instructor to make up work and the instructor deems any excuse acceptable.**

Study Time Outside of Class for Face-to-Face Courses

For every credit hour in class, a student is expected to spend two hours outside of class studying course materials.

Study Time for Hybrid or Blended Courses

For a hybrid or blended course of one credit hour, a student is expected to spend three hours per week studying course materials.

Study Time for Online Courses

For an online course of one credit hour, a student is expected to spend four hours per week studying course materials.

Academic Integrity

Integrity (honesty) is expected of every student in all academic work. The guiding principle of academic integrity is that a student's submitted work must be the student's own. Students who engage in academic dishonesty diminish their education and bring discredit to the University community. Avoid situations likely to compromise academic integrity such as cheating, facilitating academic dishonesty, and plagiarism; modify academic work to obtain additional credit in the same class unless approved in advance by the instructor, failure to observe rules of academic integrity established by the instructor. **The use of another person's ideas or work claimed as your own without acknowledging the original source is known as plagiarism and is prohibited.**

Diné Philosophy of Education

The Diné Philosophy of Education (DPE) is incorporated into every class for students to become aware of and to understand the significance of the four Diné philosophical elements, including its affiliation with the four directions, four sacred mountains, the four set of thought processes, and so forth: Nitsáhákees, Nahát'á, Íina and Siih Hasin which are essential and relevant to self-identity, respect, and wisdom to achieve career goals successfully.

At NTU's Zuni Campus, the A:shwi Philosophy of Education offers essential elements for helping students develop Indigenous and Western understandings. Yam de bena: dap haydoshna: akkya hon detsemak a:wannikwa da: hon de:tsemak a:ts'umme. *Our language and ceremonies allow our people to maintain strength and knowledge.* A:shwi core values of hon i:yyułashik'yanna:wa (respect), hon delank'oha:willa:wa (kindness and empathy), hon i:yyayumola:wa (honesty and trustworthiness), and hon kohoł lewuna:wedyahnan, wan hon kela i:tsemanna (think critically) are central to attaining strength and knowledge. They help learners develop positive self-identity, respect, kindness, and critical thinking skills to achieve life goals successfully.

Students with Disabilities

Navajo Technical University is committed to serving all students in a non-discriminatory and accommodating manner. Any student who feels that she or he may need special accommodations should contact the Accommodations Office (<http://www.navajotech.edu/student-services#accomodations-services>) in accordance with the university's Disability Accommodations Policy (see http://www.navajotech.edu/images/about/policiesDocs/Disability_Exhibit-A_6-26-2018.pdf).

Email Address

Students are required to use NTU's email address for all communications with faculty and staff.

Final Exam Date: May 9 - 12, 2022