North Central State College

MASTER SYLLABUS	2022-2023

A. Academic Division: Health Sciences

B. Discipline: Science

C. Course Number and Title: BIOL2751 Human Anatomy & Physiology I

D. Assistant Dean: Leesa Cox, MBA, PTA

E. Credit Hours: 4
Lecture: 3 hours
Laboratory: 3 hours

F. Prerequisites: High school chemistry with minimum C minus (C-) grade or CHEM1010 with minimum C minus (C-) grade; AND ENGL0040, MATH0084 (Minimum grade of C- for all) or qualifying placement test score. If the student has completed BIO121 and BIO122 OR BIOL1730 with a minimum grade of C, then the student is not required to have high school Chemistry or CHEM 1010

G. Syllabus Effective Date: Fall, 2022

H. Textbook(s) Title:

Visual Anatomy and Physiology
- Author: Martini
- Copyright Year: 2018
- Edition: 3rd
- ISBN #: 9780134394695

I. Workbook(s) and/or Lab Manual:

Atlas of the Human Body (optional)
- Authors: Martini
- Copyright Year: 2015
- Edition: 10th
- ISBN #: 9780321940728

The Anatomy Coloring Book (optional)
- Authors: Kapit and Elson
- Copyright Year: 2002
- Edition: 3rd
- ISBN #: 9780133926989

Pocket Anatomy & Physiology (optional)
- Author: Jones
- Copyright Year: 2009
- Edition: N/A
- ISBN #: 9780803632813

J. Course Description: This course is an in-depth study of the principles of human anatomy and physiology. It includes the study of structure and function of the body as a whole and study of cell biology, histology, the integumentary, skeletal, muscular, endocrine, and nervous systems plus the special senses. Laboratory exercises are designed to supplement lecture topics and include microscopy, the study of models, cat and specimen dissection, cadaver study, and physiological experiments. (OTM approved course in Natural Sciences TMNS)

K. College-Wide Learning Outcomes

College-Wide Learning Outcomes	Assessments - - How it is met & When it is met
Communication – Written	
Communication – Speech	
Intercultural Knowledge and Competence	
Critical Thinking	Given a homeostatic imbalance, predict the physiological responses (all body systems throughout the semester).
Information Literacy	Accessing course quizzes, tutorials, audio presentations and grades in Blackboard and faculty websites (throughout the semester).
Quantitative Literacy	Determination of alteration of cell membrane potentials (completion of the muscular and nervous systems).

L. Course Outcomes and Assessment Methods:

Upon successful completion of this course, the student shall:

Outcomes	Assessments – How it is met & When it is met
1. Describe the body planes and organization and apply these to appropriate models, drawings, and specimens.	Exams, quizzes, practical lab tests throughout the semester
2. Explain the basic concept of homeostasis.	Exams, quizzes, practical lab tests throughout the semester
3. Identify selected cell structures and explain their respective functions.	Exams, quizzes, practical lab tests throughout the semester
4. Summarize the steps of cell division and protein synthesis.	Exams, quizzes, practical lab tests throughout the semester
5. Describe, locate, and identify the basic tissues of the body and explain their functions.	Exams, quizzes, practical lab tests throughout the semester
6. Identify the organs of the integumentary system and describe the functions of the system.	Exams, quizzes, practical lab tests throughout the semester
7. Identify and describe the major microscopic and macroscopic anatomical components of the skeletal system, osteogenesis, repair, and functional contributions to movement.	Exams, quizzes, practical lab tests throughout the semester
8. Identify and describe the major microscopic and macroscopic anatomical components of the muscular system and explain their functional roles in body movement.	Exams, quizzes, practical lab tests throughout the semester
9. Identify and describe the major microscopic and macroscopic anatomical components of the endocrine system and explain their functional roles in communication, cellular control and integration.	Exams, quizzes, practical lab tests throughout the semester

Outcomes	Assessments – How it is met & When it is met
10. Identify and describe the major microscopic and macroscopic anatomical components of the nervous system and explain their functional roles in communication control, and integration.	Exams, quizzes, practical lab tests throughout the semester
11. Identify and describe the major microscopic and macroscopic anatomical components of the eye and ear and explain their functional roles in vision and hearing.	Exams, quizzes, practical lab tests throughout the semester

M. Recommended Grading Scale:

NUMERIC	GRADE	POINTS	DEFINITION
93–100	A	4.00	Superior
90–92	A-	3.67	Superior
87–89	B+	3.33	Above Average
83–86	B	3.00	Above Average
80–82	B-	2.67	Above Average
77–79	C+	2.33	Average
73–76	C	2.00	Average
70-72	C-	1.67	Below Average
67–69	D+	1.33	Below Average
63-66	D	1.00	Below Average
60-62	D-	0.67	Poor
00-59	F	0.00	Failure

N. College Procedures/Policies:

North Central State College believes that every student is a valued and equal member of the community.* Every student brings different experiences to the College, and all are important in enriching academic life and developing greater understanding and appreciation of one another. Therefore, NC State College creates an inclusive culture in which students feel comfortable sharing their experiences. Discrimination and prejudice have no place on the campus, and the College takes any complaint in this regard seriously. Students encountering aspects of the instruction that result in barriers to their sense of being included and respected should contact the instructor, assistant dean, or dean without fear of reprisal.

* *Inclusive of race, color, religion, gender, gender identity or expression, national origin (ancestry), military status (past, present or future), disability, age (40 years or older), status as a parent during pregnancy and immediately after the birth of a child, status as a parent of a young child, status as a foster parent, genetic information, or sexual orientation*

Important information regarding College Procedures and Policies can be found on the syllabus supplement located at

http://catalog.ncstatecollege.edu/mime/download.pdf?catoid=5&ftype=2&foid=3

North Central State College

SYLLABUS ADDENDUM

Academic Division:	Health Sciences	**Discipline:**	Biology
Course Coordinator:	Justin Tickhill		
Course Number:	BIOL 2751	**Course Title:**	Human Anatomy & Physiology I
Semester / Session:	Fall 2026	**Start / End Date:**	08/17/2026 thru 12/11/2026

Instructor Information

Name:	Justin Tickhill	**Credentials:**	Master of Science in Biology
Phone Number:	4197554771	**E-Mail Address:**	jtickhill@ncstatecollege.edu
Office Location:	HS 334	**Office Hours:**	See Announcements in Canvas
Name:	Alison Yasick	**Credentials:**	Doctor of Philosophy in Regulatory Biology
Phone Number:	4197554895	**E-Mail Address:**	ayasick@ncstatecollege.edu
Office Location:	HS 328	**Office Hours:**	See Announcements in Canvas
Name:	Linda Worley	**Credentials:**	Masters of Science in Education, Bachelor's Degree in Biology
Phone Number:	See Announcements in Canvas	**E-Mail Address:**	lworley@ncstatecollege.edu
Office Location:	Online meetings only	**Office Hours:**	See Announcements in Canvas

I. Topical Timeline / Course Calendar (Subject to Change):

Week	Date	DAY	What is happening
Week 1	08/17/2026	Monday	Lecture: Introduction to the class and the body (anatomical terminology)
	08/19/2026	Wednesday	Lecture: Life and its maintenance, Chemistry of Life and the Big 4 Bio-molecules
Week 2	08/24/2026	Monday	Lecture: The Cell (Introduction and structures)
	08/26/2026	Wednesday	**ONLINE QUIZ 1 DUE (BEFORE CLASS)** Lecture: The Cell (membrane movement and Nucleic Acids)
Week 3	08/31/2026	Monday	Lecture: The Cell (protein synthesis and other metabolic processes)
	09/02/2026	Wednesday	**ONLINE QUIZ 2 DUE (BEFORE CLASS)** Lecture: The Cell (life cycle) and Tissues (the Big 4 Tissue types)
Week 4	09/07/2026	Monday	HOLIDAY
	09/09/2026	Wednesday	**EXAM 1** (Through Cellular Respiration)
Week 5	09/14/2026	Monday	Lecture: Epithelium in depth and the Integument
	09/16/2026	Wednesday	Lecture: Integument
Week 6	09/21/2026	Monday	**ONLINE QUIZ 3 DUE (BEFORE CLASS)** Lecture: Connective tissue in depth and The Skeletal System

	09/23/2026	Wednesday	**EXAM 2** (Through Integument) Lecture: Skeletal System part 2
Week 7	09/28/2026	Monday	Lecture: Skeletal System part 3
	09/30/2026	Wednesday	Lecture: Articular System
Week 8	10/05/2026	Monday	**ONLINE QUIZ 4 DUE (BEFORE CLASS)**
	10/07/2026	Wednesday	**EXAM 3** (Through Articular System)
BREAK	10/12/2026		**BREAK**
BREAK	10/14/2026		**BREAK**
Week 9	10/19/2026	Monday	Lecture: Muscle Tissue in depth
	10/21/2026	Wednesday	Lecture: Skeletal Muscle (Sliding Filament)
Week 10	10/26/2026	Monday	**ONLINE QUIZ 5 DUE (BEFORE CLASS)** Lecture: Skeletal Muscle (Sliding Filament)
	10/28/2026	Wednesday	Skeletal muscle names and groups, Other muscle types
Week 11	11/02/2026	Monday	**ONLINE QUIZ 6 DUE (BEFORE CLASS)**
	11/04/2026	Wednesday	**EXAM 4** (Through Other Muscle types)
Week 12	11/09/2026	Monday	Lecture: Endocrine System (which tissue)
	11/11/2026	Wednesday	HOLIDAY
Week 13	11/16/2026	Monday	**ONLINE QUIZ 7 DUE (BEFORE CLASS)** Lecture: Endocrine part 4
	11/18/2026	Wednesday	**EXAM 5** (Through Endocrine part 4)
Week 14	11/23/2026	Monday	Lecture: The Central Nervous System
	11/25/2026	Wednesday	**Thanksgiving**
Week 15	11/30/2026	Monday	**ONLINE QUIZ 8 DUE (BEFORE CLASS)** Lecture: The Central Nervous System
	12/02/2026	Wednesday	Lecture: The Peripheral Nervous System
Week 16	12/07/2026	Monday	**ONLINE QUIZ 9 DUE (BEFORE CLASS)** Lecture: Special Senses
	12/09/2026	Wednesday	**ONLINE QUIZ 10 DUE (BEFORE CLASS) (comprehensive)** **FINAL EXAM** (comprehensive) 16% of overall grade

II. Grading and Testing Guidelines:

100 points (5% of overall grade) Graded in LAB: The lab section will have points associated with a Pre-lab activity and a Post-lab activity

50 points (2.5% of overall grade) Graded in LAB: For being present and completing the lab attendance. More details will be made available in your lab section (Check there).

50 points (2.5% of overall grade) Graded in LECTURE: for being present and completing the LECTURE attendance. More details will be made available in your lecture section (Check there).
180 points (9% of overall grade) Graded in LECTURE: There will be ten (10) quizzes given throughout the semester. Each quiz will be worth 20 points and the lowest quiz will be dropped. Quizzes CANNOT be taken after the due date. If you miss a quiz, consider it your dropped quiz.

500 points (25% of overall grade) Graded in LAB: There will be five (5) lab exams during the semester, each will be worth 100 points. These will be fill in exams based on materials, images or scenarios presented in the lab section.

800 points (40% of overall grade) Graded in LECTURE: There will be five (5) module exams for modules 1-5. Each Module exam will be worth 160 points. This will total 800 points for the semester.

320 points (16% of overall grade) Graded in LECTURE: The FINAL EXAM will contain questions covering the entire semester. It will have a large section devoted to the module 6 materials as well. This exam is worth 320 points.

This means that there are 2000 points available for the semester.

III. Grading and Testing Guidelines:

Academic Dishonesty/Plagiarism

Cheating is not necessary, nor will it be tolerated. I care about your work and the integrity of this course. You owe it to your future patients to be knowledgeable and trust worthy. Cheating takes both of these from you and makes you **dangerous** in the Health Care field.
Cheating will result in failure of the assignment, and could possibly result in failure of the course and per college student conduct procedures, may result in dismissal from the college.

Exam Procedure: ALL students will be expected to take **the exams** at the **same time** (unless one of the "Excussed Absence Policy (page 5)" is met). This is for a number of reasons but most importantly SO I CAN HELP YOU IF SOMETHING GOES WRONG. I will be ONLINE monitoring each EXAM as you take it, fixing any issues as they arise. I want to be there to help you and I cannot be there a 3:00AM. I want you to know that I care and I am there for you. We will set the exam time as the normal lecture course time. Exams will be taken via the learning management system, Canvas.

Quiz Procedure: Quizzes can be taken at any time **BEFORE** the **due date**. After the due date, I will be opening the answers for you to check your work. This will prevent me from being able to open a quiz after the due date. If something that would be covered in the "Excussed Absence Policy (page 5)" occurs, CONTACT ME (see Hello, Who am I? Who are you? (page 1) for contact information) and we will find a fair solution (fair to ALL students, not just you).

Late Policy: I do not accept late work. Please note time frames and plan accordingly. Please contact me if something occurs that is covered in the "Excussed Absence Policy (page 5)"

VI. Classroom Expectations:

Course Number: _____ **Course Title:** _____
Semester / Session: _____ **Start / End Date:** _____

All communications & conduct in this course is subject to the NC State Student Code of Conduct

General Professionalism Expectations

In general, as a future professional in your field, **you will be expected to conduct yourself as a professional in this course in ALL communications** - assignments, discussion forums, Canvas Inbox, emails etc.

This expectation includes *but is not limited to*:

- **Being respectful of classmates' opinions, work and comments**
  Good test = Is this something I would/should say to a co-worker in person?
- **Being respectful in communications with the instructor**
  Good test = Is this something I would/should say to my boss in the workplace?
- **Being respectful of others**
  Good test = Is this a comment/joke that is at some other groups, ethnicity, political etc. expense?
  Note: Offensive "jokes", slurs or hate speech will NOT be tolerated
  - **This will immediately escalate to a second level offense if it occurs.**
- **Using Non-Profane, Appropriate Language**
  Good test = Is this language you would use in the workplace or in front of your grandmother?
- **Using proper. NON-"Text speak" Language to make Yourself Easily Understood**
  Good test = Could my older boss understand what I have written?

Consequences for Failure to Meet These Expectations

Failure to meet these standards will result in the following consequences in this course:

1st Level=
Written warning from the instructor documenting issue
(No points deductions)

2nd Level=
Mandatory meeting with the instructor and or Department Chair or Division Dean
(Related assignment/Participation subject to Point Deductions)

3rd Level=
College Disciplinary procedures filed with the NC State Judicial Committee as a violation of the NCSC Student Code of Conduct (Links to an external site.).
(Course Grade subject to F)

NOTE: For an extreme single incident of disruptive unprofessional behavior I reserve the right to go directly to initiating college disciplinary procedures
NCSC Disciplinary hearings can result in a variety of consequences, including and up to suspension or being expelled from the college.

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SYLLABUS ADDENDUM

Academic Division:	Health Sciences	**Discipline:**	Biology
Course Coordinator:	Justin Tickhill		
Course Number:	BIOL 2751L	**Course Title:**	Human Anatomy & Physiology I Lab
Semester / Session:	Fall 2026	**Start / End Date:**	08/17/2026 thru 12/11/2026

Instructor Information

Name:	Amy Elderbrock (lab Instructor)	**Credentials:**	Master of Arts in Biology
Phone Number:	NA	**E-Mail Address:**	aelderbrock@ncstatecollege.edu
Office Location:	Adjunct Workroom	**Office Hours:**	See Announcements in Canvas

Name:	Alison Yasick (Lecture/lab instructor)	**Credentials:**	Doctor of Philosophy in Regulatory Biology
Phone Number:	4197554895	**E-Mail Address:**	ayasick@ncstatecollege.edu
Office Location:	HS 328	**Office Hours:**	See Announcements in Canvas

I. Topical Timeline / Course Calendar (Subject to Change):

	Date	Lab	Topic
1	08/18/2026	Lab 1	**Lab 1: General Science and Anatomical Terminology**
	08/20/2026	Lab 2	**Lab 2: Locational terms and Microscope Use**
2	08/25/2026	Lab 3	**Lab 3: Cell structure and observation**
	08/27/2026	Lab 4	**Lab 4: Filtration and Osmolarity Part 1**
3	09/01/2026	Lab 5	**Lab 5: Filtration and Osmolarity part 2**
	09/03/2026	Lab 6	**Lab 6: Mitosis and Tissues**
4	09/08/2026	**Study Lab**	**Study lab due to Holiday**
	09/10/2026	**Exam 1**	**Includes Labs 1-5 (Practical exam)**
5	09/15/2026	Lab 7	**Lab 7: Epithelium and Muscle tissue**
	09/17/2026	Lab 8	**Lab 8: Connective and Nervous tissue**
6	09/22/2026	Lab 9	**Lab 9: Skin**
	09/24/2026	Lab 10	**Lab 10: Appendicular Skeleton, Pectoral girdle and upper limb**
7	09/29/2026	**Exam 2**	**Includes Labs 6-9 (Practical exam)**
	10/01/2026	Lab 11	**Lab 11: Appendicular skeleton, bones of the pelvic girdle and lower limb**
8	10/06/2026	Lab 12	**Lab 12: Bones and processes of the skull**
	10/08/2026	Lab 13	**Lab 13: Foramen of the skull and bones of the axial skeleton**
	10/13/2026	**BREAK**	**BREAK**
	10/15/2026	**BREAK**	**BREAK**
9	10/20/2026	Lab 14	**Lab 14: Articulations and muscles of the head**
	10/22/2026	**Exam 3**	**Includes Labs 10-13 (Practical exam)**
10	10/27/2026	Lab 15	**Lab 15: Muscles of the upper limb and torso**
	10/29/2026	Lab 16	**Lab 16: Cat dissection part 1 (upper body)**
11	11/03/2026	Lab 17	**Lab 17: Muscles that move the lower limb**

	11/05/2026	Lab 18	**Lab 18: Cat dissection part 2 (the lower limb)**
12	11/10/2026	**Exam 4**	**Includes Labs 14-18 (Practical exam)**
	11/12/2026	**Study Lab**	**Study lab due to Holiday**
13	11/17/2026	Lab 19	**Lab 19: Endocrine system**
	11/19/2026	Lab 20	**Lab 20: Neurons, nerves and peripheral nerves**
14	11/24/2026	Lab 21 & Lab 22	**Lab 21: Spinal cord, reflex arc and Brain anatomy 1** **Lab 22: Brain Anatomy 2**
	11/26/2026	**NO LAB**	**Holiday**
15	12/01/2026	Lab 23	**Lab 23: Cranial nerves and Special senses 1**
	12/03/2026	Lab 24	**Lab 24: Special Senses 2**
16	12/08/2026	**Exam 5**	**Includes Labs 19-24 (Practical exam)**
	12/10/2026	NO LAB	FINALS

II. Course Assignments (this is taken from the Lecture Syllabus):

Lab points are bolded:

100 points) The lab section will have points associated with a Pre-lab activity and a Post-lab activity

50 points) for being present (attendance) for the entire class time and completing the lab. More details will be made available in your lab section (Check Canvas).

50 points) for being present and completing the LECTURE attendance. More details will be made available in your lecture section (Check Canvas).

180 points) There will be ten (10) quizzes given throughout the semester. Each quiz will be worth 20 points and the lowest quiz will be dropped. Quizzes CANNOT be taken after the due date. If you miss a quiz, consider it your dropped quiz.

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320 points) The FINAL EXAM will contain questions covering the entire semester. It will have a large section devoted to the module 6 materials as well. This exam is worth 320 points.

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III. Examination Policy:

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1.