

# COLLIN COLLEGE DISTRICT LABORATORY SECTION SYLLABUS

**COURSE NUMBER:** BIOL 2402

**COURSE TITLE:** Anatomy and Physiology II

## COURSE DESCRIPTION

Continued study of structure and function related to the human endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems. Additional topics include: composition and functions of blood; the immune response; fluid, electrolyte, and pH balance; and human development. Emphasis is placed on the interrelationships of these systems. Lab required. Prerequisite: BIOL 2401 with a grade of "C" or better within the last three years. 4 credit hours.

**CREDIT HOURS:** 4

Lecture Hours: 3

Lab Hours: 4

**PLACEMENT ASSESSMENT(S):** Placement in ENGL 1301; MATH 0310; College-Level Reading

**PRE-REQUISITE:** BIOL 2401 with a grade of "C" or better within the last three years.

**CO-REQUISITE:** BIOL 2402 Lecture

**REPEAT POLICY:** A student may repeat this course only once after receiving a grade, including "W".

**CAMPUS SECURITY:** In case of emergency, contact Campus Police at 972.578.5555

## COURSE RESOURCES

Required: Human Laboratory Manual for Anatomy and Physiology (cat version), current edition, by Elaine N. Marieb and Lori A. Smith

Recommended: Pearson My Lab and Mastering, publishing as Pearson Benjamin Cummings  
Get Ready for A&P, Garrett  
Medical dictionary (Taber's, Dorland's, Stedman's, etc.)

## SUPPLIES

Required: Safety goggles (required during lab); Dissecting kit; Surgical or exam gloves

Recommended: Surgical or dust mask; Lab coat or apron; Loose-leaf notebook to keep lab reports and handouts; Colored pencils or markers

## STUDENT LEARNING OUTCOMES

Upon completion of this course, students will:

1. Work within groups to identify and describe the major gross anatomy and microscopic components to make informed decisions on location, organization, structure, and function. (Teamwork)
2. Work individually or within groups to analyze and explain the functional and physiological roles of applicable body systems including endocrine system, circulatory system, lymphatic and immune systems, respiratory system, digestive system, urinary system, fluid/electrolyte and acid/base (pH) balances, reproductive system, development and inheritance. (Critical Thinking Skills)
3. Communicate knowledge of the above body systems through scientific papers, lab reports, discussions, and/or presentations. (Communication Skills)
4. Utilize scientific tools and laboratory equipment to collect and analyze data. (Empirical and Quantitative Skills)
5. Qualitatively and quantitatively investigate and describe homeostatic mechanisms of these body systems (Empirical and Quantitative Skills)
6. Analyze and describe the reasoning processes applied to scientific investigation and thinking integrating all body systems. (Critical Thinking Skills)

## METHOD OF EVALUATION

The laboratory will have three comprehensive practical examinations, in addition to lab quizzes and formal typed lab reports. All students are required to actively participate in laboratory experiments and dissections. Students who simply observe the work of others will not receive credit for that laboratory assignment.

Lab: 3 required practical exams - 20% each  
Quizzes (8 minimum required) - 20% of lab  
Lab reports (2 minimum, one required in a scientific format) - 20% of lab

The offering of bonus / extra points is optional. If given the maximum point values are:

Maximum 1 point per 10 point lab quiz  
Maximum 5 points per 100 point lab practical  
Maximum 0 points (no extra / bonus) per lab report

Bonus / extra points are neither acceptable nor available to add to the final course grade.

## ATTENDANCE

Laboratory attendance is mandatory. **Lab make-ups are only possible the week of the lab** and the student must have permission to attend another appropriate lab. If a student misses one of the practical exams, they must make-up the exam in accordance with the instructor's addendum. Instructors cannot count one practical exam grade twice. Contact your instructor immediately if you fail to take one of the practical exams. If you do not drop in accordance with the Collin College Academic Calendar, a course grade of "F" will be assigned. *See Collin student handbook for the academic drop date.*

## AMERICANS WITH DISABILITIES ACT

Collin College will adhere to all applicable federal, state and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal opportunity. It is the student's responsibility to contact the ACCESS office to arrange for appropriate accommodations. See the college directory for ACCESS contact information for each campus. See the current *Collin Student Handbook* for additional information.

**COLLIN COLLEGE ACADEMIC POLICIES:** See the current *Collin Student Handbook* and instructor addendum.

Every member of the Collin College community is expected to maintain the highest standards of academic integrity. All work submitted for credit is expected to be the student's own work. Collin College may initiate disciplinary proceedings against a student accused of scholastic dishonesty. Scholastic dishonesty includes, but is not limited to, statements, acts, or omissions related to applications for enrollment or the award of a degree, and/or the submission as one's own work material that is not one's own. Scholastic dishonesty may involve, but is not limited to, one or more of the following acts: cheating, plagiarism, collusion, use of annotated texts or teacher's editions, use of information about exams posted on the Internet or electronic medium, and/or falsifying academic records. While specific examples are listed below, this is not an exhaustive list and scholastic dishonesty may encompass other conduct, including any conduct through electronic or computerized means.

**General Scholastic Dishonesty** includes, but is not limited to, statements, acts, or omissions related to applications for enrollment, credit or class work, research, or the award of a degree; and/or falsifying academic records or documents. Students are expected to record honestly and accurately the results of all their research. Falsification of research results shall include misrepresentations, distortions, or omissions in data or reports on research.

**Plagiarism** includes, but is not limited to, intentionally or unintentionally failing to quote and cite an author's words, information, and/or ideas in accordance with American Psychological Association (APA) Style, Modern Language Association (MLA) Style, The Chicago Manual of Style (Chicago Style), or another citation style approved by the professor. In cases where an incident report has been filed for an alleged violation of scholastic dishonesty, the faculty member shall delay posting a grade for the academic work in question

**Cheating** includes, but is not limited to, having access to unauthorized materials or electronic, digital media, telecommunication, and/or wearable devices (i.e., phones, smart watches, Fitbits, Bluetooth devices, tablets, etc.) during an examination; the giving or receiving of information in an unauthorized manner during an examination or to complete an assignment; using, buying, selling, soliciting, stealing, or otherwise obtaining course assignments and/or examination questions in advance; using someone else's work for an assignment as if it were one's own; submitting or resubmitting an assignment in whole or in part (i.e., recycling an assignment) for more than one (1) class or institution without permission from each of the professors; using annotated texts or teacher's editions; using information about exams posted on the Internet or in any electronic medium; leaving a test site without authority; failing to secure test materials; removing tests or answer sheets from a test site; and any other dishonest means of attempting to fulfill the requirements of a course.

**Collusion** includes, but is not limited to, intentionally or unintentionally aiding or attempting to aid another in an act of scholastic dishonesty; failing to secure academic work; providing a paper or project to another student; providing an inappropriate level of assistance; unauthorized collaboration or communicating answers to a classmate about an examination or course assignment; and allowing a classmate to copy answers.

In cases where an incident report has been filed for alleged violation of scholastic dishonesty, faculty are requested to delay posting a grade, for the academic work in question, until the Dean of Students Office renders an administrative decision of the case. Students found responsible for scholastic dishonesty offenses will receive an authorized disciplinary penalty from the Dean of Students Office. The student may also receive an academic penalty in the course where the scholastic dishonesty took place. The faculty member shall determine the appropriate academic penalty, which may range from a grade of zero (0) on the assignment to failing the course.

## STUDENT CONDUCT

Collin College expects students to conduct themselves in class in such a way as to not interfere with or disrupt the educational process. Students are to speak and act in a respectful manner toward their fellow students and the professor. Those who participate in inappropriate behavior such as, excessive talking, cell phone or pager use, verbal altercations, or blatantly disregarding instructor's directions will be asked to leave the class. Continuance of such behavior can result in permanent removal.

## LATERAL TRANSFERS

Lateral transfers will not be granted after the 4th week of class or after the first lecture exam, whichever comes first. Exceptions to this are for documented changes in work schedule and family emergencies. If a student does transfer to another section, all previous grades will accompany the student. However, the new instructor can require the student to retake any exam or quiz. For questions concerning this policy, contact the Associate Dean in the appropriate Academic Affairs Office.

**WITHDRAWAL POLICY:** See the current *Collin Registration Guide* for the last day to withdraw.

## LAB POLICIES AND PROCEDURES

No eating or drinking of any kind is allowed in the lab. Proper dress is required at all times. This includes no open toed shoes. An instructor has the right to ask a student that is improperly dressed to leave the lab or modify how they are dressed. See the current *Science Lab Procedures; Safety and Techniques* handout.

## IF YOU HAVE DIFFICULTIES

First see or call your instructor. If you are unable to resolve the problem, contact the appropriate Academic Affairs Office at that campus.

## INSTRUCTOR SYLLABUS / ADDENDUM

Please read and review regarding specific course information, schedule, and contact information.

<http://faculty.collin.edu/mweis>

Or use the provided links in Canvas for Concourse Syllabus

**BIOLOGY 2402 - ANATOMY & PHYSIOLOGY II  
PROPOSED DISTRICT LABORATORY SCHEDULE**

WEEK	LABORATORY TOPICS	LAB MANUAL EXERCISES
1	Orientation, Protocol, Safety, Review; and Endocrine System: Anatomy, Histology  Endocrine System: Anatomy, Histology, Dissection	Ex. 1– 6 (as needed), Ex. 33  Ex. 27
2	Endocrine System: Anatomy, Histology, Physiology, Dissection  Male Reproductive System: Anatomy, Physiology	Ex. 27, Dissection Ex. 3  Ex. 42, 43
3	Female Reproductive System: Anatomy, Physiology	Ex 42, 43
4	Reproductive System: Available Specimen Dissection Demo  Cat Dissection  Embryology and Development	Ex. 42,43 Dissection Ex. 9  Ex. 44, 45
5	Lab Practical Review  <b>Lab Practical I</b>	
6	Heart Anatomy, Pig Heart Dissection  Heart Physiology (ECG)	Ex. 30  Ex. 31, ADI ECG
7	Blood Vessel: Anatomy, Cat Dissection  Blood Vessel: Cat Dissection, Physiology	Ex. 32, Dissection Ex. 4  Ex. 32, 33, Dissection Ex. 4
8	Blood: Hematology Slides  Blood: Hematology Tests  <b>*** Last Day to Withdraw***</b>	Ex. 29  Ex. 29, Hematology Handout
9	Lymphatic System: Anatomy, Cat Dissection  Immune System	Ex. 35, Dissection Ex 5, Immunoassay handout  Ex. 35, “Immunoscenarios” Game
10	Lab Practical Review  <b>Lab Practical II</b>	
11	Respiratory System: Anatomy, Pig Pluck (demo)  Respiratory System: Cat Dissection, Physiology	Ex. 36  Ex. 37, Dissection Ex 6, ADI
12	Urinary System: Anatomy, Pig Kidney Dissection  Urinary System: Cat Dissection, Urinalysis	Ex. 40  Ex. 41, Dissection Ex. 8
13	Digestive System: Anatomy, Histology  Digestive System: Histology, Cat Dissection	Ex. 38  Ex. 38, Dissection Ex. 7
14	Digestive System: Physiology, Metabolism	Ex. 39, Enzyme Handout
15	Lab Practical Review  <b>Lab Practical III</b>	