COURSE DESCRIPTION:

COURSE NUMBER AND TITLE

BIOL 1151L - Anatomy and Physiology I Laboratory

CREDIT HOURS

1.0 semester credit hours

CATALOG DESCRIPTION

Laboratory accompanying BIOL 1151

CO-REQUISITES

Co-Requisite: BIOL 1151

NOTE: Withdrawal from BIOL 1151L requires withdrawal from BIOL 1151 and vice versa. Material learned in the laboratory supports learning in the lecture course. Students who have credit for BIOL 1151 from a prior term are accountable for the information previously learned in the course.

NOTEBOOK COMPUTER REQUIREMENT:

Each CSU student is required to have ready access throughout the semester to a notebook computer that meets faculty-approved hardware and software requirements for the student's academic program. Students will sign a statement attesting to such access. For further information on CSU's Official Notebook Computer Policy, please go to http://www.clayton.edu/hub/ITP-Choice/Notebook-Computer-Policy.
COMPUTER SKILL PREREQUISITES:

- Able to use the Windows™ operating system
- Able to use Microsoft Word™ or other word processing program
- Able to send and receive e-mail using Outlook™, Outlook Express™, or other e-mail program
- Able to attach and retrieve attached files via e-mail (Only use your CSU e-mail account to communicate academic information to your instructor)
- Able to use a Web browser
- Able to use Mastering A&P online course software (http://www.masteringaandp.com)
- Able to use D2L online course management software (Using D2L is a course requirement)

Students who do not have the required skills should go to the HUB and/or Student Software Support Services for training and help. Your instructor is not able to provide this training. Assignments will require use of your computer and an inability to complete an assignment due to a lack of the above (or other general computer issues) will not be an acceptable excuse.

IN-CLASS USE OF STUDENT NOTEBOOK COMPUTERS:

Student notebook computers may be used in the classroom in this course for class assignments. Computers will be required to access course materials, work on assignments outside of class, and to communicate with your instructor. Students may be permitted to use computers in class for general use at the instructor’s discretion.

Desire2Learn (Online Classroom):

On-line activity will take place in Desire2Learn, the virtual classroom for the course.

You can gain access to Desire2Learn by signing into the SWAN portal and selecting “D2L” on the top right side. If you experience any difficulties in Desire2Learn, please e-mail or call the HUB at TheHub@mail.clayton.edu or (678) 466-HELP. You will need to provide the date and time of your problem, your SWAN username, the name of the course that you are attempting to access, and your instructor's name.

LEARNING OUTCOMES:

COURSE LEARNING OUTCOMES:

- To provide opportunities for students to reinforce their knowledge of human anatomy and physiology.
- To provide opportunities for students to learn human anatomy and physiology from a laboratory perspective.

PROGRAM LEARNING OUTCOMES:

Biology Outcomes

- Students will identify and/or describe the biological core concepts: evolution; structure and function; information flow, exchange, and storage; pathways and transformations of energy and matter; and systems.
- Students will apply quantitative reasoning, modelling, and simulations, and laboratory skills to answer questions in the biological sciences.
- Students will effectively communicate scientific ideas to others inside and outside of the biology discipline.
- Students will formulate hypotheses and collect, evaluate, and interpret scientific data to solve problems in biological science and supporting fields.

Nursing Outcomes

- Students will utilize effective communication skills to promote therapeutic nurse-client interactions and good collegial relations. Communication skills will be demonstrated on class assignments and exams.
- Students will engage in critical thinking by using creative problem solving and making appropriate inferences, based on evidence derived from clinical practice. Students will use information from lecture and class readings to answer questions on assignments and exams.
- Students will demonstrate competence in utilizing information technology resources to advance professional practice. Students will use computer databases to find information relevant to course assignments and exams.
Students will utilize nursing therapeutics based on a synthesis of critical thinking strategies and a theoretical knowledge base in nursing to provide competent professional care and maximize healthy outcomes. This course will provide the knowledge base in anatomy & physiology.

Dental Hygiene Outcomes

- Students will provide advanced professional and educational services using appropriate interpersonal, written, communication and critical thinking skills required for successful performance and progress in the profession. Communication skills will be demonstrated on class assignments and exams.
- Students will acquire knowledge in a technologically advanced manner in order to apply principles of sound research design to the critical evaluation of scientific literature related to general and oral health as a foundation for life-long learning. Students will use computer databases to find information relevant to course assignments and exams.
- Students will put into practice the principles of a sound research methodology in the planning, implementation and evaluation of scientific studies. Students will use this skill to analyze and interpret information necessary for class assignments and exams.
- Students will assess the need for treatment, then plan, provide, and evaluate treatment for the patient with advanced periodontal disease. This course will provide students with a background to allow them to determine the difference between healthy and disease conditions.

INSTRUCTOR INFORMATION:

**Dr. Nikki Sawyer**
Office: LDSC 135J  
Phone: (678) 466-4787  
E-mail: NikkiSawyer@mail.clayton.edu  
Homepage: [http://www.clayton.edu/faculty/nsawyer2](http://www.clayton.edu/faculty/nsawyer2)  
Office hours:  
- Mondays: 10:00am – 12:00 pm  
- Tuesdays: 1:00 – 2:30 pm  
- Wednesdays: 2:30 – 4:00 pm  
- Thursdays: 10:00 – 11:00 am  
And by appointment (e-mail Dr. Sawyer to arrange a time to meet outside of those times listed above)

**Dr. Jacqueline Jordan**
Office: LDSC 135F  
Phone: (678) 466-4781  
E-mail: JacquelineJordan@clayton.edu  
Homepage: [http://www.clayton.edu/faculty/jjordan](http://www.clayton.edu/faculty/jjordan)  
Office hours: TBA

**Dr. Stephen Burnett**
Office: LDSC 135D  
Phone: (678) 466-4774  
E-mail: StephenBurnett@clayton.edu  
Homepage: [http://www.clayton.edu/faculty/sburnett](http://www.clayton.edu/faculty/sburnett)  
Office hours: TBA

**Dr. Diane Day**
Office: LDSC 135M  
Phone: (678) 466-4794  
E-mail: DianeDay@clayton.edu  
Homepage: [http://www.clayton.edu/faculty/dday2](http://www.clayton.edu/faculty/dday2)  
Office hours: TBA

**Dr. Jewels Morgan**
Office: LDSC 135N  
Phone: (678) 466-4776  
E-mail: JulieMorgan@clayton.edu  
Homepage: [http://www.clayton.edu/faculty/jmorgan/](http://www.clayton.edu/faculty/jmorgan/)  
Office hours: TBA
LAB SECTIONS MEETING TIMES:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Section</th>
<th>Days</th>
<th>Time</th>
<th>Building</th>
<th>Room</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>20692</td>
<td>01</td>
<td>M</td>
<td>10:00 am - 11:50 am</td>
<td>MH</td>
<td>138</td>
<td>Burnett</td>
</tr>
<tr>
<td>20693</td>
<td>02</td>
<td>M</td>
<td>2:10 pm - 4:00 pm</td>
<td>MH</td>
<td>138</td>
<td>Burnett</td>
</tr>
<tr>
<td>20697</td>
<td>03</td>
<td>T</td>
<td>11:15 am - 1:05 pm</td>
<td>MH</td>
<td>138</td>
<td>Day</td>
</tr>
<tr>
<td>20776</td>
<td>04</td>
<td>R</td>
<td>3:35 pm - 5:25 pm</td>
<td>MH</td>
<td>138</td>
<td>Jordan</td>
</tr>
<tr>
<td>20824</td>
<td>05</td>
<td>W</td>
<td>9:00 am - 10:50 am</td>
<td>MH</td>
<td>138</td>
<td>Sawyer</td>
</tr>
<tr>
<td>20778</td>
<td>06</td>
<td>T</td>
<td>5:00 pm - 6:50 pm</td>
<td>MH</td>
<td>138</td>
<td>Jordan</td>
</tr>
<tr>
<td>21450</td>
<td>07</td>
<td>R</td>
<td>11:15 am - 1:05 pm</td>
<td>MH</td>
<td>138</td>
<td>Morgan</td>
</tr>
</tbody>
</table>

REQUIRED MATERIALS:

Required text and materials (Have these BEFORE the first lab meets):

- Mastering A and P 10.0 (for the Martini book)
- PHYSIOEX version 9.1 (You may purchase this separately, or it comes with Mastering A & P 10.0)
- Fundamentals of Anatomy & Physiology, 10th edition, 2015, Martini, Nath, and Bartholomew
- Dissection kit (mandatory)
- Safety Glasses or Safety Goggles (mandatory)

Recommended Texts and Materials (Optional):

- A medical dictionary such as Tabor's or the Medline Plus Medical Dictionary
- Martini's Atlas of the Human Body

EVALUATION:

<table>
<thead>
<tr>
<th>Item</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Lab Practicals @ 50 points each</td>
<td>150</td>
</tr>
<tr>
<td>Pre-Lab Quizzes/Assignments</td>
<td>50*</td>
</tr>
<tr>
<td>Post-Lab or In-Lab Quizzes/Assignments</td>
<td>50*</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>250</strong>*</td>
</tr>
</tbody>
</table>

* The total point value for the course will vary from instructor to instructor depending on the number and types of quizzes and assignments given during the term. See your instructor for details.
GRADING:

Your final grade will be determined as a percentage of total points earned as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage Range</th>
<th>Point Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90 - 100%</td>
<td>225-250 points</td>
</tr>
<tr>
<td>B</td>
<td>80 – 89.99%</td>
<td>200-224 points</td>
</tr>
<tr>
<td>C</td>
<td>70 – 79.99%</td>
<td>175-199 points</td>
</tr>
<tr>
<td>D</td>
<td>60 – 69.99%</td>
<td>150-174 points</td>
</tr>
<tr>
<td>F</td>
<td>below 60%</td>
<td>Less than 149 points</td>
</tr>
</tbody>
</table>

Your grade will be calculated by taking the total number of points you earned, dividing by the total number of points possible (based on the total possible value of all exams, quizzes, assignments, etc), and multiplying by 100 to obtain the percentage.

Points earned x 100 = final course grade
Points possible

MID-TERM PROGRESS REPORT:

A mid-term grade typically is not posted for the lab. The last day to withdraw from lab and lecture is Friday, March 3rd. Students may choose to withdraw from the course and receive a grade of "W." Students pursuing this option must withdraw from the course using the DUCK or fill out an official withdrawal form, available in the Office of the Registrar, by mid-term, which occurs March 3, 2017. Instructions for withdrawing can be found here. It is each student’s responsibility to keep up with their academic progress in this laboratory. If you have any questions as to whether or not you are making satisfactory progress, contact your instructor BEFORE March 3, 2017.

The last day to withdraw without academic accountability is Friday, March 3, 2017.

TENTATIVE COURSE SCHEDULE*:

Be sure to check the schedule often for changes in the due dates of assignments throughout the semester. Please note that the schedule is tentative and subject to change. Due dates for assignments may be changed at the instructor’s discretion. You are responsible for keeping track of due dates and turning in your work when it is required.

Course documents may be found on D2L. Students are required to review and COMPLETE this material BEFORE each week’s laboratory meeting. It is your responsibility to be prepared for each and every weekly lab meeting, so you should check with your instructor to verify what is required. Reviewing the material means that you should read about the topic in the textbook BEFORE coming to lab. You may receive quizzes or assignments on the topics before the instructor goes over the material in lab. Print out your ID sheets and any in-class assignments and bring them with you to lab. Pre-lab assignments must be typed and completed before lab and turned in at the beginning of lab. No hand-written assignments will be accepted.

** For Dr. Sawyer’s lab section, a more detailed schedule will be posted on D2L.
<table>
<thead>
<tr>
<th>Week of</th>
<th>Laboratory Topic</th>
<th>Textbook Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 9</td>
<td>Introduction to Course; Safety Information</td>
<td>Chapters 1 &amp; 4</td>
</tr>
<tr>
<td></td>
<td>Lab 1 – Anatomical Terminology and Microscopes (Introduction to Tissues)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Attendance is <strong>mandatory</strong> (or you will be dropped from the course)</td>
<td></td>
</tr>
<tr>
<td>Jan 16</td>
<td>NO LAB THIS WEEK – MLK DAY HOLIDAY</td>
<td></td>
</tr>
<tr>
<td>Jan 23</td>
<td>Lab 2 – Organ Systems; Histology Part 1</td>
<td>Chapters 1 &amp; 4</td>
</tr>
<tr>
<td></td>
<td><strong>BRING YOUR DISSECTION KIT &amp; GOGGLES TO LAB</strong></td>
<td></td>
</tr>
<tr>
<td>Jan 30</td>
<td>Lab 3 – Histology Part II; Diffusion &amp; Osmosis</td>
<td>Chapters 3 &amp; 4</td>
</tr>
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<td></td>
<td><strong>PhysioEx Exercise 1</strong></td>
<td></td>
</tr>
<tr>
<td>Feb 6</td>
<td>Lab 4 – Histology Part III; Rat Dissection Review</td>
<td>Chapters 1 &amp; 4</td>
</tr>
<tr>
<td></td>
<td><strong>BRING YOUR DISSECTION KIT &amp; GOGGLES TO LAB</strong></td>
<td></td>
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<tr>
<td>Feb 13</td>
<td><strong>Lab Practical I (Labs 1-4)</strong></td>
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<tr>
<td>Feb 20</td>
<td>Lab 5 – Axial Skeleton</td>
<td>Chapter 7</td>
</tr>
<tr>
<td></td>
<td><strong>Bring your Atlas to Lab (if you have one)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Skeletal System Review Page</strong></td>
<td></td>
</tr>
<tr>
<td>Feb 27</td>
<td>Lab 6 – Appendicular Skeleton</td>
<td>Chapter 8</td>
</tr>
<tr>
<td></td>
<td><strong>Bring your Atlas to Lab (if you have one)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Skeletal System Review Page</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>LAST DAY TO DROP WITHOUT ACADEMIC PENALTY IS FRIDAY MARCH 3rd</strong></td>
<td></td>
</tr>
<tr>
<td>Mar 6</td>
<td>NO LAB THIS WEEK – SPRING BREAK</td>
<td></td>
</tr>
<tr>
<td>Mar 13</td>
<td>Lab 7 - Muscles</td>
<td>Chapters 10 &amp; 11</td>
</tr>
<tr>
<td></td>
<td><strong>PhysioEx Exercise 2</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>EMG BioPac Simulations</strong></td>
<td></td>
</tr>
<tr>
<td>Mar 20</td>
<td><strong>Lab Practical II (Labs 5-7)</strong></td>
<td></td>
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</tbody>
</table>
COURSE POLICIES:

**General Policy:**

Students must abide by policies in the [Clayton State University Student Resource Handbook](#) and the [Basic Undergraduate Student Responsibilities](#).

**University Attendance Policy:**

Students are expected to attend and participate in every class meeting. Instructors establish specific policies relating to absences in their courses and communicate these policies to the students through the course syllabi. Individual instructors, based upon the nature of the course, determine what effect excused and unexcused absences have in determining grades and upon students’ ability to remain enrolled in their courses. The university reserves the right to determine that excessive absences, whether justified or not, are sufficient cause for institutional withdrawal or failing grades.

**Course Attendance Policy:**

- Students are **required** to attend weekly meetings of the laboratory and attendance will be checked at the **beginning** of each lab period.
- Students are **NOT** permitted to attend any section of the laboratory other than the one that they are registered for unless they have received permission from both instructors. Failure to attend the weekly meeting of the laboratory for the entire 1 hour and 50 minutes may result in loss of assignment/quiz points for that day.
- If you miss lab, you are still responsible for the lab material on the lab practical.
- If you are unable to attend a weekly laboratory meeting, written documentation of an unavoidable personal or immediate family **emergency** from a doctor or other competent authority **MUST** be presented to your instructor on the **first day** that you return to laboratory. This policy applies to both weekly laboratory meetings and lab practicals. Routine scheduled appointments are not valid excuses for missing lab, so students should not schedule such appointments during laboratory times.
- **Each student must attend all labs for 1 hr & 50 min.**
- **If you miss three or more laboratory classes, you will receive an Institutional Withdrawal.**

**Missed or Late Work:**

Failure to complete assignments by the due date and time result in a grade of zero (0). Assignments cannot be made up. Assignments are available in D2L for many days, so there is no excuse for missing one unless you have a valid written excuse from a competent authority (doctor, judge, etc.) for the **entire period** for which the assignment was available. Waiting until the last day possible to do your assignment and then having an
emergency on that day is not an excusable reason for missing an assignment. Complete assignments early to avoid unnecessary stress from issues on the day it is due.

There are NO makeups for lab practical exams. If you have an excused absence for a date when a lab practical was given, those points will not be considered in calculating your grade (however, this means that the other graded work will be responsible for a greater weight in determining your final grade). You are only allowed ONE excused absence from a lab practical. If you miss more than one practical with an excused absence, you will be expected to ask for a hardship withdrawal since the lab practicals count for a majority of the class points.

Exam/Quiz/Lab Practical Policies:

- All electronic devices including cell phones, palm pilots, pagers, calculators, MP3 players, etc. are not allowed during exams, quizzes, or lab practicals, unless specifically permitted by the instructor. During such activities, these devices are not permitted to be in your possession at all (which means they cannot be clipped to your belt, in your pocket, etc.). Possession and/or use of these items during an exam, quiz, or lab practical will result in an automatic zero on the graded activity, and may result in a charge for academic misconduct.
- If a cell phone or other electronic device makes noise (by ringing, buzzing, etc.) and disrupts the testing environment, even if it is not on your person, the instructor will penalize the responsible student(s) by taking points from their score.

Academic Dishonesty:

Any type of activity that is considered dishonest by reasonable standards may constitute academic misconduct. The most common forms of academic misconduct are cheating and plagiarism. All instances of academic dishonesty will result in a grade of zero for the work involved. All instances of academic dishonesty will be reported to the Office of Community Standards. Judicial procedures are described in the Student Resource Handbook (Procedures for Adjudicating Alleged Academic Conduct Infractions, beginning on page 19).

Disruption of the Learning Environment:

Behavior which disrupts the teaching-learning process during class activities will not be tolerated. While a variety of behaviors can be disruptive in a classroom setting, more serious examples include belligerent, abusive, profane, and/or threatening behavior. A student who fails to respond to reasonable faculty direction regarding classroom behavior and/or behavior while participating in classroom activities may be dismissed from class. A student who is dismissed is entitled to due process and will be afforded such rights as soon as possible following dismissal. If found in violation, a student may be administratively withdrawn and may receive a grade of WF.

A more detailed description of examples of disruptive behavior and appeal procedures is provided at this link (starting on page 8).

Some common examples of disruptive behaviors which should be avoided are:
- Refusal to comply with faculty direction
- Monopolizing classroom discussions
- Talking when the instructor or others are speaking
- Failing to respect the rights of other students to express their viewpoints
- Constant questions or interruptions that interfere with the instructor’s presentation
- Creating excessive noise
- Use of electronic devices (pagers, iPods, MP3 players, or cell phones) in the classroom without the instructor’s approval
- Overt inattentiveness (e.g., sleeping or reading the paper in class)
- Inordinate or inappropriate demands for time or attention
- Routinely entering the lab late or leaving early without instructor permission.
- Leaving and re-entering the class during lab

Conditions attributed to physical or psychological disabilities are not considered a legitimate excuse for disruptive behavior.

Laboratory Policies:
Participation in laboratory activities involves an inherent risk of injury. In the event of injury, the student should immediately inform the instructor or laboratory technician who will file an accident report. The injured party will be given first aid and referred to appropriate medical facilities for follow-up.

Visitors, including children, are not allowed in the laboratory.

**DRESS CODE:** Proper attire and footwear must be worn in the laboratory at all times. Inappropriate items include, but are not limited to: shorts or skirts above the knee and shoes that do not cover the feet (e.g. sandals, flip-flops). Students should not wear hanging jewelry, and long hair should be tied back during the lab. Students should not wear sleeveless tops or tops with long, flowing sleeves. Students who come to lab without appropriate clothing or footwear **will not** be permitted to take part in lab and will forfeit any points for that day. **Safety goggles or safety glasses must be worn during dissections.**

No smoking or other use of tobacco, eating, or drinking is permitted at any time in the laboratory.

**E-Mail Policy:**

Each student **must** activate his/her e-mail account at Clayton State University. The class list serve will be the only method for communicating with the class by email. **Important announcements will be sent to the class on the class list serve.** You should also check D2L regularly for new postings. Handouts given in class and other important items will be posted on the course page for this class.

Communication from **personal email accounts** (e.g. Yahoo, gmail, etc.) is no longer acceptable due to privacy issues (FERPA). **E-mails sent from a personal email account will not receive a response.**

**Other Policies:**

- Students must read and **abide by all course policies** as stated in this syllabus and on the first day of class.
- Changes or additions to this syllabus, including readings, exam dates, grading, and course policies can be made at the discretion of the instructor at any time. If such changes are made, they will be posted on the announcements section of the instructor's web page, D2L, and/or announced in class.
- General data from this course may be used by the instructor for research on improved methods of teaching, leading to presentation or publication. Data that would be used for this purpose would consist of anonymous data, with no identifying information from particular students (e.g., the overall average for the course, NOT grades from particular students). If you do not wish for your instructor to include your data in such studies, fill out the **withdrawal of consent form** and bring it to your instructor.
- Issues associated with grades on assignments (disputes over points for a question, questions about grading keys, etc.) must be brought to the instructor's attention in a timely manner. This means that such concerns must be brought to your instructor within **one week** of the assignment being returned to the class. Items that are not brought to the instructor in this time period will **NOT** be addressed.
- **Lab exercises:** You are expected to prepare for the current week's exercise prior to lab so that you will already be familiar with the topic at hand. This includes reading the information in your textbook, lab manual, and/or any handouts provided by the instructor. This will enable you to work through the lab on your own, asking the instructor when you have questions.
- **Electronic devices:** All electronic devices including cell phones, palm pilots, pagers, calculators, etc. are not allowed to be used in the laboratory at any time. Possession and/or use of these items during laboratory time will result in a zero on the graded activity (if any on that day) or deduction of 10 points on next lab practical.

**OPERATION STUDY:**

At Clayton State University, we expect and support high motivation and academic achievement. Look for Operation Study activities and programs this semester that are designed to enhance your academic success such as study sessions, study breaks, workshops, and opportunities to earn Study Bucks (for use in the University Bookstore) and other items. [Use this link to find out more details.](#)

**CENTER FOR ACADEMIC SUCCESS:**
The Center for Academic Success (CAS) provides personalized one-on-one peer and professional staff tutoring in over 100 core subjects. The Center is located in Edgewater Hall, Suite 276. The CAS also offers moderated study groups, informal study sessions, a comfortable study environment, a student study lounge, and it's all free! Use the CAS if you need help; become a tutor if you don't. For more information, you can e-mail the center at thecas@clayton.edu.

Changes or additions to this syllabus, including reading, exam schedule, grading, and course policies can be made at the discretion of the instructor at any time.

REMINDER: The last day to withdraw without academic accountability is Friday, March 3\textsuperscript{rd}, 2017.

*Last Updated: 1/4/2017*