

# BSC 2085L – Anatomy & Physiology I Hybrid Lab

Course Reference #: BSC 2093L - \_\_\_\_ - \_\_\_\_ - \_\_\_\_ - \_\_\_\_

## COURSE DESCRIPTION:

This is the lab component for BSC 2093. Lab topics include histology, the integument, and the skeletal, muscular, and nervous systems. It complements the lecture portion of this course, BSC2093.

## Prerequisites:

BSC 1020 and BSC 1020L or BSC 2010 and BSC 2010L and student must score into college-level mathematics and reading on placement test.

## Corequisites:

BSC2093 Lecture must be taken during the same semester as the laboratory.

## COURSE RATIONALE:

BSC 2093L focuses on the communicating major anatomical and physiological concepts and relate how these are connected within various areas of the biological sciences. Through several exercises, learners will demonstrate how they achieved objectives of the course. Mastering both the knowledge and skills presented in this course will help to prepare the learner with a sound approach and understanding of human anatomy and physiology applicable in the health field. Students will learn major biological concepts and relate how these are connected within various areas of the biological and physical sciences in a laboratory setting. Students will apply critical thinking skills to provide the foundation for lifelong learning and career development.

This course is divided into modules that cover concepts such as microscopy, cell structure, cell life cycle, body terminology, histology, and various human body systems.

- **Module 1** is an introduction to the lab which includes safety and lab policies. **Module 2** then discusses body terminology, movement terms and various concepts relating to Anatomy & Physiology. **Module 3** will cover microscopy, cell structure and function as well as the cell life cycle.
- **Module 4** will cover the first system of the semester which is the Integumentary System. This system will include being able to identify the tissue that makes up this system. Also, being able to identify and describe the structures and functions of the Integumentary System.
- **Module 5** will be centered around the next body system for the semester which is the Skeletal System. Students will be responsible for identifying the tissues that make up this system and identifying and describing the structures of the Skeletal System. There will also be a focus on articulations (joints) in **Module 5**.
- **Module 7** covers the Muscular System. While students will focus on muscles used for body movements, students will also be identifying the various muscle tissues found in the human body. Students will be identifying the muscles for body movements and will also need to discuss the various movements of these muscles.

- **Modules 8 & 9** are the final modules. **Module 8** covers the Nervous System while **Module 9** covers Special Sense organs (Eye and Ear). There are various organs involved in this system and students will be responsible for identifying various structures and functions of the different parts of these organs.

## COURSE LEARNING OBJECTIVES:

At the completion of this course, the student will be able to:

- Identify the structures of human cells and describe their function;
- Identify human tissues with respect to their structure, specific locations in the human body, and normal physiology;
- Identify and describe the structure and function of the components of the integumentary, muscular, skeletal and nervous systems;
- Describe the importance of the maintenance of homeostasis in the body;
- Contrast normal and abnormal functioning of these body systems, emphasizing particular pathological problems.

## REQUIRED TEXT/ MATERIALS:

As this is an online course, it is expected enrolled students will have a working computer and access to the internet.

- BSC2085L Anatomy & Physiology I Laboratory Physical Manual; ISBN 978-1-5339-4197-8
  - Contact the IRSC bookstore to purchase at: <https://www.bookstore.irsc.edu>
- VISIBLE BODY'S VIRTUAL ANATOMY PHYSICAL ACCESS CODE, 1<sup>st</sup> ed
  - Contact the IRSC bookstore to purchase at: <https://www.bookstore.irsc.edu>

## TENTATIVE SCHEDULE:

The course schedule with associated assignments will be located in the '**Schedule of Activities**' in the course control panel in Blackboard. Please see the '**Schedule of Activities**' for specific assignments and due dates. Below is a *tentative outline* of activities. Assignments and due dates may be changed with advanced notice via Blackboard announcements and Rivermail.

Week(s)	Lab Topic	Required* Lab Manual Readings
1	Introduction	Pgs. i-x
2	Medical Terminology/ Body Systems	Pgs. 13-36
3	Microscope; Cell Structure; Cell Cycle	Pgs. 1-12
4-5	Integument Histology; Integumentary System	Pgs. 37-66
6-7	Bone Histology; Skeletal System; Articulations	Pgs. 67-136

8	<b>Practical 1</b> - in lab class (covers Hybrid Modules 2-5) Lab Manual Pages 1-136 are due in lab class	
9-10	Muscle Histology, Muscular System	Pgs. 137-170
11-12	Nervous Histology, Nervous System	Pgs. 171-194
13-14	Special Senses-The Eye and Ear	Pgs. 195-212
15	<b>Thanksgiving Break-No Classes</b>	
16	<b>Practical 2</b> - in lab class (covers Hybrid Modules 6 and 7) Lab Manual Pages 137-212 are due in lab class	

## CONTACT INFORMATION:

When questions arise during this course, please remember to check these four sources for an answer:

1. Course Syllabus
2. Schedule of Activities (SOA)
3. Announcements in Blackboard

If you have questions of a personal nature such as relating a personal emergency, questioning a grade on an assignment, or something else that needs to be communicated privately, please contact the instructor via email and/or Course Messages. Please allow 24/48 hours for the instructor to respond. You can find your instructors email and contact information on Blackboard and the Biology Weebly site:

**Biology Faculty:** <http://biology-irsc.weebly.com/full-time-faculty---websites-and-office-information.html>

**Adjunct Faculty:** <http://biology-irsc.weebly.com/find-adjunct-faculty-and-tlss.html>

**Technical Lab Specialist (TLS):** <http://biology-irsc.weebly.com/find-adjunct-faculty-and-tlss.html>

<b>Instructor of Record, IOR:</b>
<b>Email:</b>

On Day 1 of your lab class, your Instructor will introduce themselves as the **Instructor of Record (IOR)** for this course. **Please write their name and contact information above** (both can also be found with the links provided). The IOR is responsible for the selection of experiments and exams developed and approved by Biology Department Faculty, approves all assignments, and assigns the student's grade for the course. In addition to the IOR, a **Technical Lab Specialist (TLS)** may also be assigned to this course. The role of the **TLS** is to facilitate the performance of the assigned experiments within the laboratory setting. The **TLS** also assists with the grading of assessments

under the direction of the course instructor and other biology faculty. If you have any questions or concerns, please first try to work with the course **TLS/IOR**. If the issue cannot be resolved, Lab Coordinator Sarah Rodgers (772-462-7149, srodgers@irsc.edu) is also available to assist. **Any correspondence must include the student's name and course reference number.** The IOR/TLS/Coordinator will generally respond to the student within 2 business days (*note: failure to include **name and reference number** in initial correspondence, may result in delayed to no response*). The IOR reports the grade the student earns over the course of the semester and will issue any incompletes (I) or withdrawals (W) that are needed.

## GRADES:

Pre- and post-lab quizzes, homework assignments and two practical exams will be used to determine your final course grade. These assignments will be found using a link in Blackboard that will take you to the Pearson website. Remember, you earn your grade; your Instructor does give it to you. The work for the course has been broken down per category. Blackboard automatically calculates your grade based on the average score you earned per category (see below) and your overall grade is a running score and updated continuously throughout the semester.

The final course grades are based on the following categories:

- Visible Body Assignments: 212 pts
- Completing Lab Manual pages: 200 pts
- Two Practical Exams (100 pts Each): 200 pts

Total Points: 612 points possible

Course grades are assigned on the following:

**A:** 90% - 100%

**B:** 80% - 89%

**C:** 70% - 79%

**D:** 60% - 69%

**F:** below 60%

Students must continually complete assignments/exams over the semester. It is the student's responsibility to be aware of all due dates. All online assessments are due at the time posted. It is your responsibility to complete the work on time and submit it. Remember all electronic communication is time stamped. Please review the make-up and late policy posted below.

Grades will be posted on Blackboard, but technical and human errors may not reflect the true grade in Blackboard. Instructors reserve the right to manually calculate grades to verify the blackboard grades. It is the student's responsibility to monitor their grade and to approach the instructor if any grade discrepancy is noted within Blackboard. **Instructor contact must be administered promptly**, as last-minute concerns cannot always be addressed or remedied.

W = The student withdrawal deadline is **Oct 25<sup>th</sup>, 2021**. Please contact the instructor before withdrawing.

I = An incomplete for passing students is only given in EXTREME cases. Students must be passing the course, the incomplete **must be approved by the IOR**, and are only given on a case by case basis.

If a student withdraws from the course, the student must email both the TLS and IOR. A “W” is submitted through students and their advisors. The IOR will respond with a confirmatory email that the student has been withdrawn once the workday process is complete. Requests for Instructor Withdrawal (WI) after the student has taken the final exam are prohibited. If you are concerned about your grade and the Student Withdrawal date has passed, then you need to discuss “WI” with your Instructor before taking the final exam.

## ASSESSMENT POLICIES:

Students are responsible for knowing their exact dates and times of their assessments as listed in the **Schedule of Activities!!** To access the Pearson labs, please use the links posted on Blackboard. Assignments and due dates may be changed with advance notice via Blackboard announcements and Rivermail. Please review the following policies for each type of assessment.

**Visible Body Assignments:** Students are responsible for knowing their exact dates and times of their assignments and quizzes as listed in the **Schedule of Activities**. **The schedule will be located in the Schedule of Activities link in the course control panel.**

**Lab book completion:** The student will need to attend in-person lab sessions and also use their associated Lecture text to complete lab book assignments. See the assignment posted on Blackboard and the SOA for details. No late work accepted.

**Practical Exams:** Students are responsible for knowing the exact dates and times of the Practical Exams listed in the Schedule of Activities. The Lab Practical Exams are set to be given at a specific time, thus any late arrivals will NOT be allowed, *regardless if it is 10 seconds past Due Date/Time*, **so plan accordingly**. This is to ensure all students have fair and equal testing experience. Students will view projected images of slides, diagrams or models they have reviewed in the “labs” prior and will be expected to answer questions about those items. Students will not be able to return to a question and the questions are timed. Just like a Face-to-Face Lab Practical Exams, you will need to know the material by memory to be able to complete the exam during the time allotted.

## LATE SUBMISSION POLICY:

Late work is not permitted. This course is organized so you have plenty of time to complete each weekly unit. It is YOUR RESPONSIBILITY to manage your time so that work is submitted on time. It is strongly advised that most work is completed before the day it is due IN CASE you experience loss of computer or internet and/or experience software issues that prohibit you from finishing the work on time. *Schedule your work, activities, and personal needs around the Schedule of Activities Dates as there is no flexibility to “catch-up” as labs are changed (or locked) weekly and cannot be “set-up” again.*

## MAKE-UP POLICY:

All assessments are open for multiple days. Therefore, there are no make-ups allowed. Work not completed will receive less than 100% (grade determined by amount completed). Any work not started will receive a zero grade.

If awarded an Incomplete "I", the student and the faculty must arrange a time frame to complete all missing work during the next sequential semester. A document with due dates for missed work will be generated by the instructor and agreed upon by the student. If any of these due dates are missed, a zero will be assigned as the grade for the assessment.

## ATTENDANCE:

**Beginning of the Term Attendance Verification.** IRSC requires instructors to mark student attendance at the beginning of the term for financial aid purposes. To be marked as attending the course, students must attend the first in-person class, and also log into to the Pearson system by the date posted in the Blackboard Announcements. Failure to come to class or make an account with the Pearson system by this date will cause the student to be marked as non-attending and they will be automatically dropped.

**Weekly Attendance.** Attendance via logging into Blackboard at least once per week is mandatory. Students who do not frequently log into Blackboard and access material typically will miss due dates and perform worse in the course. Successful students will access material 3-5 times a week.

**Blackboard Collaborate.** Collaborate review sessions are at the instructor's discretion and the date and time will be announced based on student request. To effectively utilize any collaborate discussion or review session, preparation is required on the part of the student. The student should keep up with reading the assigned laboratory exercises **before these sessions** to become familiar with details.

## EXTRA CREDIT:

No extra credit is given.

## CHEATING/PLAIGURISM:

Cheating of ANY kind **WILL NOT** be tolerated by this Department or the College. Anyone caught cheating will automatically receive a minimum of a zero for that assignment/test. Any further episodes will result in an F in the class. Anyone who witnesses this inexcusable behavior and does not report it is also considered to be guilty of improper conduct. Examples of cheating include, but are not limited to, taking photos and screenshots of assessments and exams and sharing images with others and the internet, taking the exam next to a classmate and discussing and sharing questions and answers, and copying your assignment answers word for word from a peer, past student, textbook, or the internet. Post-lab quizzes and practical exams must be taken individually. Group efforts will be considered cheating.

Additionally, all electronic communication devices are prohibited during Practical Exams. The only electronic device in hands reach should be the device you are taking the exam with. Your practicals will be virtually proctored (or proctored in the assessment center when open). Additional information on virtual proctoring can be found on Blackboard. During exams, any student who uses a cell phone



to make or answer a call, or send and/or read text messages or emails during one of these sessions may be asked to leave, and if testing will be considered cheating (see details below). Cell phones must be set on *silent* or *off* during any Collaborate live discussion session (unless using it for the session).

Please review IRSC's policy on Plagiarism: <https://irsc.libguides.com/copyright/plagiarism>. This course follows the same policy. Plagiarism on an assignment is subject to a zero grade.

## TECHINICAL REQUIREMENTS:

### 1. IRSC RiverMail:

Students must be able to log into IRSC's email system, RiverMail, every 48 hours (or two days) to see if there are updates regarding your course. You can forward your RiverMail to any other mail system, but YOU are responsible for this system to be reliable. Failure to check your email may result in missed information essential to your course success.

### 2. IRSC Computer Requirements (for online classes only):

Students must have a reliable computer and an Internet connection throughout the course, **with a microphone and camera for exam testing**.

For Exam testing, students will be instructed to [download Honorlock](#), an online proctoring service and have a valid photo id. Information on Honorlock can be found at <https://www.irsc.edu/admissions/honorlock.html> and details will be provided in the course.

### 3. Blackboard Learning Management System (LMS):

The entire course is constructed within the students Blackboard course shell, thus students should expect to spend a significant amount of time each week within this system.

*Blackboard LOG IN:*

*USERNAME: Student ID number (no dashes)*

*PASSWORD: IRSC web registration/pay pin*

Blackboard preferred browsers are Google Chrome and Mozilla Firefox.

If you need assistance with Blackboard, please review the [Blackboard Help Videos](#) by clicking on the link provided on the course menu.

Technical Support: If you can't find your answer within the Blackboard Help Videos section, visit the [Blackboard Help Center](#) or call 772-462-7480 or email the help desk at [helpdesk@irsc.edu](mailto:helpdesk@irsc.edu)

## ADDITIONAL STUDENT RESOURCES:

**Biology website:** <http://biology-irsc.weebly.com> is a resource that list Biology faculty, instructor, and staff contacts, provides information on all offered courses, lists information on both the AA and BS guided pathways as well as other information.

**Library:** The Miley Library serves as IRSC's main library. A library is an information place providing professional assistance, library books and media, and access to the library's electronic resources.

Each branch campus also has a library. Additionally, there is an extensive online database system also available through IRSC's website as well as useful libguides on plagiarism, citations, and more. <https://irsc.libguides.com/c.php?q=824505> and [www.irsc.edu](http://www.irsc.edu)

**Tutoring:** If the student is not earning the grade, they desire then it is the student's responsibility to contact the instructor for academic support/suggestions. In addition to receiving instructor help, please utilize the following services. Tutoring is provided by the IRSC ASCs. It's free! The ASC has also made virtual tutoring. <https://irsc-asc.weebly.com/> Additionally, you can receive tutoring through the "SmartThinking" link on Blackboard. Use it!

## STUDENT ACCESSABILITY SERVICES:

Indian River State College provides reasonable accommodations to students with documented disabilities through the Student Accessibility Services (SAS) Office. The rights of students with disabilities which pertain to post-secondary education are provided under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) of 1990. Students who wish to request an accommodation for a documented disability may contact Student Accessibility Services at 772-462-7808, 772-462-7782 or e-mail [accessibilityservices@irsc.edu](mailto:accessibilityservices@irsc.edu). The **Student is responsible to inform the instructor at the beginning of the semester** so lab managers, staff, and the instructor have ample time to prepare any testing accommodations that will be needed.

## NON-DISCRIMINATION AND HARRASSMENT POLICY:

Indian River State College and its faculty are committed to supporting our students and seeking an environment that is free of bias, discrimination, and harassment. IRSC does not discriminate on the basis of race, color, national origin, ethnicity, sex (pregnancy), religion, age, disability, sexual orientation, marital status, veteran status, or genetic information in its programs and activities. If you have encountered any form of discrimination or harassment, including sexual misconduct (e.g. sexual assault, sexual harassment, stalking, and domestic or dating violence), we encourage you to report this to the Title IX Coordinator. If you report such an incident of misconduct to a faculty member, that faculty member is required by law to notify the IRSC Title IX Coordinator. The following person has been designated to handle inquiries regarding non-discrimination and non-harassment policies: Adriene B. Jefferson, Equity Officer, and Title IX Coordinator, 3209 Virginia Avenue, Fort Pierce, FL 34987; IRSC Main Campus, W Building, Room 207; (772)462-7156; [ajeffer@irsc.edu](mailto:ajeffer@irsc.edu).

## STATEMENT TO STUDENTS:

If you are having trouble in your course, **your first obligation is to work directly with your instructor to resolve the issue**. If you are unable to settle your concerns with the assistance of your instructor, you should contact your Instructor of Record (IOR). If issues are not addressed, you may contact the Department Chair (Dr. Robin Willoughby, 462-7498), or the Assistant Dean (Dr. Anthony Dribben, 462-7503) who will assist you or advise you and if necessary help you contact the Vice President (Dr. Heather Belmont, Vice President of Academic Affairs, 462-7215).

## SYLLABUS DISCLAIMER:

**Syllabus Disclaimer:** The instructor views the course syllabus as an educational contract between the instructor and students. Every effort will be made to avoid changing the course schedule, but



the possibility exists that unforeseen events will make syllabus changes necessary. The instructor reserves the right to make changes to the syllabus as deemed necessary. Students will be notified promptly of any syllabus changes in the course Announcements or course e-mail.