

**BSC 2023L - HUMAN BIOLOGY LAB (MMC Campus)**

**Fall 2018**

**Syllabus**

**Course Description:** This lab is designed to be a practical complement for the lecture course. Students will understand the functioning of the human body and factors affecting human living, and will receive an introduction to biological concepts.

**Course Goals:** This course will present basic introductory concepts of biology, to reinforce the concepts learned in the Human Biology (BSC2023) lecture.

**Course Objectives:** Upon completion of this course, the student will:

- Understand and apply the basic components of the scientific method
- Know how to properly use two different types of microscopes to study organisms and their cells
- Understand the basic principles of genetics, including mitosis, meiosis, and inheritance
- Understand the foundational concept of human development
- Understand the function of the nervous and sensory systems
- Understand the parts and functions of the cardiovascular system
- Understand the parts and function of the digestive system
- Know what ideal weight principles are, and how to balance a diet
- Understand the parts of the musculoskeletal system
- Understand the importance and fundamental principles of homeostasis, including the organs involved
- Know and apply basic anatomical terms
- Understand the functions of different tissues
- Understand, classify, and identify STDs, their transmission, prevention strategies, and treat options
- Understand how some infectious diseases work, and how to treat them
- Be able to perform basic laboratory skills
- Be able to perform research using the library resources, to find scientific journal articles to write a research paper

**The contact information for the Lead Lab Instructor is listed below. The contact information for your specific section's lab instructor is listed on your respective Blackboard learning site. Blackboard may be accessed via FIU's main website, or via [ecampus.fiu.edu](http://ecampus.fiu.edu).**

Lead Lab Instructor: Alberto Cruz, MPH

E-mail: [alcruz@fiu.edu](mailto:alcruz@fiu.edu)

Office: OE296

Office Hours: By appointment only

\*All communication with the Lead Lab Instructor must be via e-mail, or in-person once an e-mail appointment has been confirmed.

**Human Biology Lab Links and Information:** All relevant laboratory information can be found on your respective Canvas LMS learn site.

**Required text(s):** This lab requires two main texts: a laboratory manual, and task sheets.

The laboratory manual is:

Laboratory Manual for Human Biology by Sylvia Mader (15<sup>th</sup> Edition), McGraw- Hill Publishing.

The task sheets can be found on your Canvas LMS site. You are required to print these on your own, and bring them with you to each lab to accompany your lab manual. These sheets will tell you which specific sections of the lab manual you need to read each week.

**Reading assignment:** You are required to read each lab assignment and task sheet before the lab period (task sheets are posted in the lab web site). You must bring the task sheets and lab manual to lab each week. This is essential for you to fully understand the procedures and to be able to complete the tasks and answer the questions for each assignment.

**Required Lab Supplies:** All of the following materials are **mandatory** for admission to the lab each week:

1. Lab coat (**Long sleeve shirts in-place of a lab coat are not acceptable**)
2. Close-toed shoes
3. Weekly task sheets
4. Brand new lab manual

**\* You will NOT be allowed in the lab (even to take the quiz) unless you are wearing your lab coat, close-toed shoes and have your task sheet and brand new lab manual \***

**Grading Breakdown:** All grades are based on a 100 point scale. There will be NO curve. No “incompletes” will be given.

**POINT SCALE:**

100 - 90 = **A**; 89 - 80 = **B**; 79 - 70 = **C**; 69 - 60 = **D**; 59 - 0 = **F** **Grade components:**

- 40% - Weekly Quizzes
- 35% - Practical Examinations
- 15% - Research Paper
- 5% - Group cooperation
- 5% - Lab Manual

**Extra Credit:** The only form of extra credit in this lab is a cooperative motivator. If each member within a given group receives at least 90% on each of their quizzes, all members of that group will receive 5 (five) extra points, on the quiz. This may apply to every week’s quiz. This is the only way to get extra credit!

**Weekly Quizzes:** There will be **a quiz at the beginning of each class** on the material from the previous and current lab. The lowest quiz score will be dropped; however, if you miss a lab due to an unexcused absence, this will automatically count as the dropped quiz grade. You will also receive a grade of **ZERO** if you arrive in lab after the quiz has been completed. **No makeup quizzes will be given for unexcused absences.**

**Practical Examinations:** Two practical examinations will be given (midterm & final) on the dates provided in your syllabus. Each will comprise 17.5% of your grade. If you are late to a practical exam, you cannot make-up the questions you missed. You will continue taking the exam at the same pace as everyone else in class and you will finish at the same time as everyone else. No additional time will be given for you to make-up the questions that you missed because you were late. Plan to arrive an hour early so that you are not late. Just like a regular lab session, practical exam make-ups are only available within the same week the exam is administered.

**Research Paper:** There will be one research paper for this lab. The research paper will be based on one topic selected by your Lab Instructor from one of the 10 labs and it will be given to you no later than the second week of class. The research paper is to be completed individually! You need to gather information from the library as early as possible. The research paper will be 5 pages long (Times New Roman, 10pts, double-spaced, ~2000 words). It should include a half page introduction, 3 pages forming the body of the paper and a half page conclusion. Finally, the last page will consist of a reference page that will include a minimum of 6 journal articles, and 1 citation from a book (do not use your lab manual). The paper cannot include ANY quotations. Students must submit an annotated bibliography **by the start of class time the week of September 11th (Lab 3)**, and a rough draft of at least half of the paper **BY the start of class time the week of September 25th (Lab 5)**.

Students **MUST** submit the final version of the paper **only electronically to Turnitin.com by the end of the day of class the week of October 30th (Lab 9)**. **NOTE:** Spelling and grammatical errors are penalized. Plagiarizing is not acceptable! Your Lab Instructor will introduce you to it and how to avoid it in your papers this semester. Please take note of what your Lab Instructor tells you because failure to do so will result in getting an “F” for the paper with serious considerations to dismissal from the course and possibly the university (see Plagiarism Policy below). Each Lab Instructor is supplied with software that is sensitive to any level of Plagiarism and if you submit something that you have plagiarized the computer will find it. Do not copy anything directly from a web page. This is a serious offense and will be reported to the Dean. **You CANNOT RE-SUBMITT a paper, or portion of a paper, used for another lab or class.**

To avoid plagiarizing you must cite every idea or piece of information that is not your own or “common knowledge.” You must write all information in your own words. Please be sure to talk to your Lab Instructor if you are unsure whether you have plagiarized and how to cite references. For more information please check the Research Paper Guidelines in the lab website. All citations should be in APA format. You must include in-text citations in your papers.

**Group Cooperation:** This grade will be assigned based on:

- 1) Cooperative learning exhibited during class discussion
- 2) Being able to function as a cooperative learning group (using appropriate cooperative learning group roles)
- 3) Showing respect to your fellow lab mates and assigned TA
- 4) How well the individual student works within their groups

#### **Additional Information on Group Work:**

You will be working in groups of four. Each group will be assigned various **tasks** that must be completed during the lab period. You must work **together** to complete one task before moving onto the next one. Your Lab Instructor will evaluate the group after each task to determine that each group member understands the information. Each person will be evaluated and will receive a Group Grade based on their ability to work within the group. Did the group finish the tasks? Did all members of the group work together to make sure that everyone understood the material? Were there negative comments by group members? These are the kinds of questions that will shape your evaluation.

**All labs will run until ALL groups are finished.** Groups that finish early will work as helpers to those students that require help, or complete homework, and or work on completing assignments such as the Research Paper. **No one is permitted to leave the lab early. Doing so will result in a 0 for the day, including the quiz.**

**E-mail:** All students are required to obtain e-mail accounts. FIU provides free e-mail accounts to students. **All students must send an e-mail to their Lab Instructor** with their name, section, & e-mail address **before the second lab class. Otherwise, the first quiz will be a zero.**

Although e-mail is a great form of communication, if for some reason you cannot get a hold of your Lab Instructor via e-mail you must try other means of contacting him/her. You can visit them during their office hours, call their office (if they have one) or if you cannot get a hold of them, contact the Lead Lab Instructor. You should in NO way assume that an assignment is not due just because you have not heard back from your Lab Instructor. All due dates are posted on the schedule, so there are NO exceptions!

**Lab Manual:** You are responsible to have a folder with the syllabus, safety rules, and tasks for every lab. You will also complete assignments in your lab manual. Both the folder and the lab manual will be checked randomly during the semester. This grade will include all homework.

**Initial Assessment:** The first day in lab you will take an Initial assessment that will count as your first quiz grade. In order to earn a 100 on this, you must do three things:

1. **E-mail:** You must send the aforementioned initial e-mail to your Lab Instructor.
2. **Syllabus Survey:** You must electronically sign the syllabus via the Qualtrics Syllabus Survey link. This link is found on the lab website.
3. **Initial Meeting:** You must meet with your Lab Instructor for a brief 3-5 minute meeting at the beginning of the semester to review the initial assessment.

### **Policies:**

**Cheating:** Cheating on any quiz, practical exam or lab assignment will not be tolerated. Students caught cheating will receive a verbal warning and a grade of zero on the specific assignment. If the same student is caught cheating for the second time, charges will be filed against the student as stated in the Student Handbook. Consequences include (but are not limited to): suspension, expulsion, and disciplinary probation.

**Plagiarism:** The deliberate use and appropriation of another's work without any indication of the source and the passing off of such work as the student's own. Any student who fails to give credit for ideas, expressions, or materials taken from another, including web sources, is guilty of plagiarism.

### **Actions that might be seen as plagiarism:**

- Buying, stealing, or borrowing a paper;
- Using the source too closely when paraphrasing;
- Hiring someone to write your paper;
- Building on someone's ideas without citation;
- Copying from another source without citing (on purpose or by accident).

### **Some Consequences of plagiarism:**

- **Expulsion:** Permanent separation of the student from the University, preventing readmission to the institution. This sanction shall be recorded on the student's transcript.
- **Suspension:** Temporary separation of the student from the University for a specified period of time.
- **Disciplinary Probation:** Formal, written warning that the student's conduct is in violation of University policies. The continued enrollment of the student depends on the maintenance of satisfactory citizenship during the period of probation.
- **Reprimand:** A written statement placed in the student's disciplinary file or an oral statement of the student's violation of a university regulation.
- **Work Hours:** Obligation to complete community services under the supervision of FIU or an outside agency.
- **Failing Grade/Reduction of Grade:** Failing grade or reduction of grade for the examination, project, or course assignment involved, or for the course involved.

**Behavior:** Students should behave as educated, tolerant and willing-to-learn persons and follow conducts described in the Student Handbook. If a student fails to respect any one of these policies, especially the respect for self and others, that individual will be expelled from the lab thereby creating serious consequences for your grade and enrollment status. Students should follow the safety rules in a lab. Students should wear **lab coat and protective clothes all the time**. **Food, drinks, cell phones, laptops or music/video devices are NOT allowed in the lab**. Text messaging is not allowed in the lab, if you are caught doing it, you will be asked to leave the classroom, and will receive a 10 point penalty on that weeks quiz, with no further forewarning (aside from the syllabus) necessary.

**Attendance:** Attendance is mandatory and you have to be ON TIME. You must be registered for the section that you plan on attending and you must attend ALL labs. If this is going to be a problem for you, you need to drop this course now. Attendance is checked at the beginning and end of class. If you come in late or leave early your quiz grade will count as a ZERO. We will always have more than enough to do in the time provided. DO NOT schedule doctors/dentist appointments during class time, as these are not valid excuses for making up a lab.

- **Make-up Policy:** Excused absences are either a death in your immediate family (written proof required) or if you are in the hospital (proof required, e.g. doctor's note) or if you get involved in an accident (police report required). **Proof of excused absences must be provided to the Lead Lab Instructor immediately; otherwise the absence will be considered unexcused and will automatically count as the quiz grade to be dropped (if this is your first absence). If approved, you will be able to make up a lab WITHIN the week that you missed. Once the lab week passes, there is no possible way to make up a lab. Only one make-up will be granted in the semester, with PROPER DOCUMENTATION. You must make an appointment via e-mail with the Lead Lab Instructor in order to gain the possibility to make-up the lab. Keep in mind that the *last lab of the week* is Thursday 3:00pm-5:50pm. Once that lab time passes, there is no way to make up a lab.**
- **Religious Holidays:** A student must notify their Lab Instructor and the Lead Lab Instructor at the beginning of the semester that he/she wishes to observe a religious holiday but will be held responsible for scheduling the make-up, and submitting documents in a timely manner.
- **Student Athletes:** Student athletes obligated to miss a lab because of a sporting event MUST contact the Lead Lab Instructor at least one week prior to the laboratory class; preferably this . If the student contacts the TA in the same week or after the missed lab, he/she will not be allowed to make up the lab/assignments/exams, and they will be penalized for the lab.

**Disability Services:** Students with disabilities, who may need accommodations for this class, are required to notify the lead lab instructor, Jose Alberte, and contact the Disability Resource Center (DRC), early in the semester so that reasonable accommodations may be implemented. We cannot make accommodations without the direct instruction of the DRC. The Disability Resource Center offers a wide variety of legally mandated services to students with documented disabilities. After reviewing your documentation, a Disability Specialist will determine appropriate academic services and accommodations, depending on your functional limitations in the academic setting. You will then be responsible for requesting accommodations, in a timely manner, following DRC policies and procedures for accessing accommodations. The same rules apply for absences and tardiness, being a DRC student does not exempt you from bringing appropriate documentation. For example, if you were at the doctor's office, you must bring in documentation confirming this was the case. All disability related arrangements must be made under the direct supervision/approval of the Lead Lab Instructor.

**Lab cleanliness:** Your laboratory workbench must be clean and sterilized, and all instruments must be put away in their proper place at the end of class. Failure to do so will cost you 2 percentage points off your final grade every time you fail to follow these instructions.

**Dissections:** The best way to comprehend the organization and makeup of an organism's body is through the dissection of that organism, or another related organism. In the human biology laboratory, dissection is an essential part of the learning process and is therefore required. If you are unable to dissect an animal, you may **not** be excused from that lab that day, and you should consider registering for a different course.

**Topic Schedule:** The topic schedule for the labs is located on a separate document. Please refer to the Human Biology Lab Schedule for the most updated schedule for the semester.

**Canvas:** This lab will use Canvas to upload all task sheets, send announcements, and put up quiz and exam grades. The grades are not weighted, and will only show the percentage received on each assessment. You must calculate your own overall grade using the weights of each assignment, or by meeting with your lab instructor. Do **NOT** take into account the "average" grade provided by Canvas. Canvas messages will not be checked or used by the lab instructor, nor the Lead lab instructor.

**Drop & Add Policy:**

If you need to add or drop this laboratory section for any reason, make sure you do so on Panthersoft. Keep in mind that you cannot drop the lab without the lecture, and vice-versa. Dropping either the lab or the lecture, will require you to drop both. *Please note that the last day to drop this laboratory section with a DR grade is **Monday, June 25th**.*

\*To determine if you should drop the lab or not, you should be fully aware of all of your grades in the lab, know which grades and assignments are to come, understand the grading policy, and meet with your assigned academic advisor.

**Important dates:**

Midterm Exam: Week of October 2.

Final Exam: Week of November 13.

Research Paper due: Week of October 30.

**"Professors don't give grades; students earn them."**

**\*\*\*Syllabus is subject to change!!!\*\*\***

**\*\*\*Syllabus is subject to change!!!\*\*\***