

## Foundations of Human Physiology Lab

### General Information

#### Professor Information

<b>Instructor:</b>	Maureen Walter, University Instructor 305.919.5898
<b>Phone:</b>	<b>(If I do not answer, do not leave a voicemail... message or email me instead)</b>
<b>Office:</b>	Academic 1, Rm. 380 (BBC)
<b>Office Hours:</b>	By Appointment <b>(Can be phone meeting)</b>
<b>E-mail:</b>	Please use Canvas course messages first, or <a href="mailto:walterm@fiu.edu">walterm@fiu.edu</a>

#### Course Description And Purpose

This course assumes very little or no prior scientific knowledge of biology, and thus serves for pre-Nursing, pre-Pharmacy majors and non-biology major students who wish to satisfy the lab portion of PCB 2099, completing the Life Science requirement within the FIU Core Curriculum Natural Science category. This course illustrates the processes, concepts, and principles discussed in PCB2099 Lecture through virtual investigative activities.

This course will expand the student's knowledge of how the physiological processes in the human body work over successive levels of organization to maintain the body's homeostasis. Lab assignments may include (but are not limited to) such work as virtual lab experiments, pre-lab and post-lab quizzes, activity questions, and lab reports.

#### Natural Sciences

Our technologically dependent world requires an understanding of the processes that led us here. Learning the basic concepts and ideas of scientific fields provides contact with not just those fields but with how science is done. In these courses students study the scientific method through examination of the foundational theories of modern scientific thought. Students apply scientific principles and theories to problem solving, evaluate scientific statements, and incorporate new information within the context of what is already known.

Emphasizing the essential connection between theory and experiment, the virtual laboratory experience provides the context for testing scientific theories.

Students will be able to describe the scientific method through examination of the foundational theories of modern scientific thought.

#### Course Objectives

Students will be able to:

- Identify Scientific Method
- Recognize some of the techniques and thought processes that a physiologist uses in gathering information (scientific method, observation, recording data and making drawings, using computers, etc.)
- Describe the complexity of living processes and how life, particularly human life, works on chemical, cellular, and organism levels.

## Teaching Methodology

Includes, but not limited to:

- Active participation in virtual experiments including recording & interpreting results and submitting Lab Report.
- Guided inquiry through illustrated text, animations, and virtual exercises assessed by quizzes and exams.

This is a fully online course in which all of the instructional materials and activities are delivered through Canvas, and/or other internet-based media.

## Policies

Please review the [FIU's Policies](#) webpage. The policies webpage contains essential information regarding guidelines relevant to all courses at FIU, as well as additional information about acceptable netiquette for online courses.

No material will be reopened except for an emergency that has impacted the FIU community. Any personal issues that impact your ability to complete work **MUST**:

- Prevent you from accessing the material (the last full 3 weeks of the ~6 weeks for quizzes and assignments and the last 5 days for exams). The Instructor **MUST** be contacted (at least 2 weeks for Quizzes and 4 days for Exams) before the closing of the material. These circumstances must be supported with original documentation such as the official hospital records showing day of admittance and release or police records showing day or arrest and release.
- If you choose to wait till the last few days (or hours) to do the work and something prevents you from completing the work (including an emergency), the material **WILL NOT** be reopened. By making the choice to wait, you are also accepting the possibility that (Murphy's Law) "If anything can go wrong, it will" and always at the worst possible time.

## Technical Requirements and Skills

One of the greatest barriers to taking an online course is a lack of basic computer literacy. By computer literacy we mean being able to manage and organize computer files efficiently, and learning to use your computer's operating system and software quickly and easily. Keep in mind that this is not a computer literacy course; but students enrolled in online courses are expected to have moderate proficiency using a computer. Please go to the "[What's Required](#)" webpage to find out more information on this subject.

This course utilizes the following tools:

1. PhysioEx Virtual Lab ([Privacy Policy](#))

Please visit our [Technical Requirements](#) webpage for additional information.

## **Accessibility And Accommodation**

Please visit our [ADA Compliance](#) webpage for information about accessibility involving the tools used in this course.

Please visit [Accessibility within Canvas](#) webpage for more information.

For additional assistance please contact FIU's [Disability Resource Center](#).

## **Course Prerequisites**

There are no prerequisites for this course, however for this course (PCB2099L) to fulfill the UCC requirement, students must also complete the Lecture (PCB2099) component worth 3 credits either before, during, or after completing this lab. These courses may be 100% online or in the traditional face-to-face format.

## **Academic Misconduct Statement**

Florida International University is a community dedicated to generating and imparting knowledge through excellent teaching and research, the rigorous and respectful exchange of ideas and community service. All students should respect the right of others to have an equitable opportunity to learn and honestly to demonstrate the quality of their learning. Therefore, all students are expected to adhere to a standard of academic conduct, which demonstrates respect for themselves, their fellow students, and the educational mission of the University. All students are deemed by the University to understand that if they are found responsible for academic misconduct, they will be subject to the Academic Misconduct procedures and sanctions, as outlined in the Student Handbook.

Academic Misconduct includes: **Cheating** – The unauthorized use of books, notes, aids, electronic sources; or assistance from another person with respect to examinations, course assignments, field service reports, class recitations; or the unauthorized possession of examination papers or course materials, whether originally authorized or not. **Plagiarism** – The use and appropriation of another's work without any indication of the source and the representation of such work as the student's own. Any student who fails to give credit for ideas, expressions or materials taken from another source, including internet sources, is responsible for plagiarism.

Learn more about the [academic integrity policies and procedures](#) as well as [student resources](#) that can help you prepare for a successful semester.

## Textbook

### **PhysioEx 9.1: Laboratory Simulations in Physiology with 9.1 Update**

Peter Zao, Timothy N. Stabler, Lori A. Smith, Andrew Lokuta, Edwin Griff

Pearson; 1st Edition; 2013

ISBN-10: 0321929640

ISBN-13: 9780321929648

You may purchase your textbook online at the [FIU Bookstore](#).

Or, you can buy it online at this site: <http://www.physioex.com/login.html>

## Expectations Of This Course

Expectations for performance in an online course are the same for a traditional course. In fact, online courses require a degree of self-motivation, self-discipline, and technology skills which can make these courses more demanding for some students.

### Students are expected to:

- **Review the how to get started information** located in the course content. Be sure to acquire PhysioEx program.
- **(Optional; not required) Introduce yourself to the class** during the first week by posting a self-introduction in the appropriate discussion forum
- **Take the practice quiz** to ensure that your computer is compatible with Canvas
- **Take Student/Instructor Quiz as many times as necessary to earn a perfect score.** This Quiz acts to certify your knowledge of the course rules and deadlines and your acceptance of said rules.

- **Interact** online with instructor/s and peers and keep up with all material.
- **Review** and follow the course calendar
- **Submit correct assignments** by the corresponding deadline. If you submit an incorrect assignment, you will receive a zero and feedback explaining your mistake. At that time, you may resubmit the correct work and will receive the highest earned score from multiple submissions. The Instructor will NOT try to figure out where you submitted the necessary work. The correct assignment must be submitted in the correct lab.

### **The Instructor will:**

- Log in to the course at least 3 times per week
- Respond to emails/messages within 3 days.
- Grade assignments in a timely manner so that students can see their earned score and decide, upon reading the Instructor's feedback, if they wish to correct any issues and resubmit. Assignments submitted during the Late Submission 3 day period may not be scored in time for students to be able to resubmit the corrected material so plan accordingly.

## **Course Detail**

### **Course Communication**

Communication in this course will take place via messages and announcements. **You may also email me at my regular FIU email, walterm@fiu.edu.** But be sure to put your name and course number in the subject line indicating you are an online student.

The course message feature is a private, internal Canvas only communication system. Users must log on to the Canvas system to send/receive/read messages. There are no notifications in Canvas to inform users when a new message has been received; therefore, it is recommended that students check their messages routinely to ensure up-to-date communication.

The announcements are messages sent to your registered email account. This is typically your FIU account email. They are also posted on your My Courses page. Be sure to pay attention to these announcements. I will be sending out an announcement the first day of class. If you do not receive it, contact Technology Support (through link on left-hand menu) and ask them to confirm your email.

The announcement messages are very helpful because I may use this tool to inform the whole class about course issues such as material closing or any technology problems students have encountered

Many messages are received throughout the semester. For some, I respond individually, but to others the response is a message to the whole class because it is an issue that everyone needs to know about. And for some messages, I do not respond at all. These are the messages that request for material that has closed to be reopened. Since the course guidelines are very clear on this matter, and since all students will have taken the Student-Instructor quiz covering these

guidelines, there is no reason for a message telling the student what they already know: the material will not be reopened.

I typically log on to the Course site multiple times a week, so you can expect to receive an answer to your message within ~72 hours. If it is an emergency, you can contact me through my regular FIU email.

Visit our [Writing Resources](#) webpage for more information on professional writing and technical communication skills.

## **Discussion Forums**

Keep in mind that your discussion forum postings will likely be seen by other members of the course. Care should be taken when determining what to post.

## **Assessments**

In order to mitigate any issues with your computer and online assessments, it is very important that you take the “Practice Quiz” from each computer you will be using to take your graded quizzes and exams. It is your responsibility to make sure your computer meets the minimum **hardware requirements**.

Assessments in this course are not compatible with mobile devices and should not be taken through a mobile phone or tablet. If you need further assistance please contact **FIU Online Support Services**.

### **Quiz and Exam Expectations:**

- **Student/Instructor Quiz** – Contract Quiz to confirm the students’ understanding of the Course rules and agreement to follow those same rules. While the score is **not** part of the grade, a perfect score must be achieved. Students may take this quiz as many times as necessary to earn a perfect score.
- 10 Canvas Quizzes and 2 Canvas Exams
- Quiz duration: 30 minutes; Exam duration: 1 hour
- Students will see Quiz and Exam scores and feedback immediately after submission.
- Students may take each Quiz and Exam up to 2 times. If taken 2 times, the student will receive the **average** of the two scores.

## **Assignments**

### **Assignment Expectations:**

- Lab Assignments are found within the PhysioEx 9.1 program.
- Lab Assignments have a regular submission period and a late submission period. Refer to syllabus and course content for opening and closing dates and times. Submissions during the late period may have up to 30% deducted due to the late submission.

- Pay attention in the Syllabus and Course Content information to which PhysioEx Exercise is attached to each Lab. For example, Lab 1 is PhysioEx Exercise 1, but Lab 2 is PhysioEx Exercise 4.
- Each Lab Assignments may be submitted multiple times, after receiving feedback, to try to improve your overall score.
- All work is done individually. No group submissions.
- Within the Schedule table, students will see which PhysioEx Exercise is assigned to each Lab and how many Activities are found with that Lab's Exercise. Quizzes found within the PhysioEx work are to be completed and are **NOT** the separate Canvas Quizzes whose links are found through the Assessments link.
- Assignments must be generated as pdfs by the PhysioEx program and include all Activities with respective PhysioEx quizzes. Hand written work using the paper Lab book and submitted as a scanned pdf will NOT be accepted.
- Submitted Lab Assignments will be scored in a timely manner, with a target of returning them within 72 hours of submission. Any Assignments with a late submission may not be returned in time for students to resubmit corrected work.
- Please be aware that correctly following directions is part of successfully completing the work and earning points. The faculty member scoring the write-up will not be responsible for trying to figure out work that has been incorrectly submitted. You will be assigned a zero and will receive feedback indicating how you may correct the error and resubmit.

## Grading

Course Requirements	Number of Items	Points for Each	Total Points Available	Weight
Quizzes	10	100	1000	25%
Exams	2	100	200	40%
Assignments	10	10	100	35%
<b>Total</b>	<b>22</b>			<b>100%</b>

Letter	Range (%)	Letter	Range (%)	Letter	Range (%)
A	93 and above	B-	80 - 82	D	60 - 69
A-	90 - 92	C+	77 - 79	F	< 60
B+	87 - 89	C	70 - 76		
B	83 - 86				

## Course Calendar

### Weekly Schedule

This course is designed in a format that divides the 10 Labs in half, with Labs 1-5 open during the first half of the semester and then Labs 6-10 open during the second half of the semester. This results in a work load of at least one Lab per week.

Each Lab will include specifically assigned activities from the PhysioEx 9.1 program and a post-lab Canvas quiz.

Exam 1 is comparable to a Midterm Exam covering the material in Labs 1-5 and Exam 2 will cover the material in Labs 6-10.

**If you have a smart-phone, I suggest you now place in your Calendar app the closing days and time for the quizzes, lab assignments, and Exams and also include some alerts to remind you of these closings.**

Please note that while there is a "late submission" period for the Lab assignments (with a potential deduction of up to 30% of points for a late submission), there is NO corresponding late submission option for the quizzes or Exams. They MUST be submitted by the designated days and times seen below (while the days may change, **the time for submission closing is ALWAYS 9AM**).

Date	Tasks
	Welcome to Foundations of Human Physiology Lab - Familiarize yourself with the Canvas Learn structure. Read Syllabus and take Instructor/Student Contract Quiz (link on top of Course Material page). You may take the Instructor/Student Quiz as many times as necessary to earn a perfect score.
August 20	Be aware that the Lab number <b>does not always correspond</b> to the PhysioEx Exercise number. <b>For example, Lab 1 is Exercise 1 but Lab 2 is Exercise 4.</b> Be sure to submit the correct Exercises with each Lab assignment and include <u>all</u> included activities.  Acquire the PhysioEx 9.1 Lab program. <b>Lab 1 - Exercise 1:</b> Cell Transport Mechanisms and Permeability includes: - 5 Activities with accompanying Review Sheet questions.
1st Period	- A Lab Report will be submitted as saved pdf through menu link to Assignment Dropbox. on-time submission: October 5, 9AM; late submission by 9AM, October 8
August 24- October 12; open and close 09:00 (9AM)	- A Canvas quiz which will cover material. Closes 9AM October 5  <b>Lab 2 - Exercise 4:</b> Endocrine System Physiology includes: - 4 Activities with accompanying Review Sheet questions. - A Lab Report will be submitted as saved pdf through menu link to

Assignment Dropbox. on-time submission: October 5, 9AM; late submission by 9AM, October 8

- A Canvas quiz which will cover material. Closes 9AM October 5

**Lab 3 - Exercise 3:** Neurophysiology of Nerve Impulses

includes:

- 9 Activities with accompanying Review Sheet questions.
- A Lab Report will be submitted as saved pdf through menu link to Assignment Dropbox. on-time submission: October 5, 9AM; late submission by 9AM, October 8
- A Canvas quiz which will cover material. Closes 9AM October 5

**Lab 4 - Exercise 2:** Skeletal Muscle Physiology

includes:

- A Lab Report will be submitted as saved pdf through menu link to Assignment Dropbox. on-time submission: October 5, 9AM; late submission by 9AM, October 8
- A Canvas quiz which will cover material. Closes 9AM October 5

**Lab 5 - Exercise 7:** Respiratory System Mechanics

includes:

- 3 Activities with accompanying Review Sheet.
- A Lab Report will be submitted as saved pdf through menu link to Assignment Dropbox. on-time submission: October 5, 9AM; late submission by 9AM, October 8
- A Canvas quiz which will cover material. Closes 9AM October 5

EXAM 1:

EXAM 1 Opens 0900 (9AM) October 5; Closes 0900 (9AM), October 12

October 5-12

**Lab 6 - Exercise 5:** Cardiovascular Dynamics

includes:

- 7 Activities with accompanying Review Sheet questions.
- A Lab Report will be submitted as saved pdf through menu link to Assignment Dropbox. on-time submission: 9AM, November 23; late submission by 9AM, November 26.
- A Canvas quiz covering material provided in this Lab. closes 9AM November 23

2nd Period:

October 12 -

November 30;  
opens and closes  
at 09:00 (9AM)

**Lab 7 - Exercise 6:** Cardiovascular Physiology includes:

- 5 Activities with accompanying Review Sheet questions.
- A Lab Report will be submitted as saved pdf through menu link to Assignment Dropbox. on-time submission: 9AM, November 23; late submission by 9AM, November 26.
- A Canvas quiz covering material provided in this Lab. closes 9AM November 23

**Lab 8 - Exercise 9: Renal System Physiology includes:**

- A Lab Report will be submitted as saved pdf through menu link to Assignment Dropbox. on-time submission: 9AM, November 23; late submission by 9AM, November 26.
- A Canvas quiz covering material provided in this Lab. closes 9AM November 23

**Lab 9 - Exercise 10: Acid-Base Balance includes:**

- 4 Activities with accompanying Review Sheet questions.
- A Lab Report will be submitted as saved pdf through menu link to Assignment Dropbox. on-time submission: 9AM, November 23; late submission by 9AM, November 26.
- A Canvas quiz covering material provided in this Lab. closes 9AM November 23

**Lab 10 - Exercise 8: Chemical and Physical Processes of Digestion includes:**

- 4 Activities with accompanying Review Sheet questions.
- A Lab Report will be submitted as saved pdf through menu link to Assignment Dropbox. on-time submission: 9AM, November 23; late submission by 9AM, November 26.
- A Canvas quiz covering material provided in this Lab. closes 9AM November 23

EXAM 2:

EXAM 2 opens 0900 (9AM) November 23; closes 0900 (9AM) November 30  
November 23 - 30