UNDERGRADUATE SYLLABUS TEMPLATE



Kinesiology Department

KIN 3040 L (Physiology of Exercise Lab)

1 Unit

Fall 2020

Meeting days: Mondays	Instructor title and name: Dr. Heidi Lynch, PhD, RDN
Meeting times: 1:30-3:20 pm	Phone: 619-806-3306
Meeting location: online	Email: hlynch@pointloma.edu
Final Exam: due on Canvas 12/4 by 11:59 pm	Office location and hours: by appointment

PLNU Mission

To Teach ~ To Shape ~ To Send

Point Loma Nazarene University exists to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service is an expression of faith. Being of Wesleyan heritage, we strive to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life.

COURSE DESCRIPTION

This course will provide practical experiences in assessing human physiological responses to exercise and training.

Specifically, this course will provide students the opportunity to learn how to use equipment in the laboratory, such as the metabolic cart; to collect, analyze, and interpret data from submaximal and maximal exercise tests; and to become proficient using Excel to analyze and visually display data.

COURSE LEARNING OUTCOMES

- 1. Demonstrate an understanding of muscle physiology by testing the basic principles (and analyzing the results) including active and passive length-tension relationships and types of contractions (eccentric, concentric, isometric).
- 2. Measure and interpret the results of the following tests: resting energy expenditure, submaximal exercise test, and maximal exercise test.
- 3. Measure and interpret the results of both anaerobic power and capacity testing.
- 4. Measure and interpret the results of an anaerobic/lactate threshold test.

- 5. Apply the results of maximal oxygen uptake and anaerobic threshold testing to the prescription of continuous vigorous exercise as well as high-intensity interval training.
- 6. Be able to convert between various units of measure commonly used in exercise physiology.
- 7. Demonstrate mastery of graphing data in Microsoft Excel.

REQUIRED TEXTS AND RECOMMENDED STUDY RESOURCES

Materials posted on Canvas

COURSE CREDIT HOUR INFORMATION

In the interest of providing sufficient time to accomplish the stated Course Learning Outcomes, this class meets the PLNU credit hour policy for a 1-unit class delivered over 16 weeks. It is anticipated that students will spend a minimum of 37.5 participation hours per credit hour on their coursework. For this course, students will spend an estimated 37.5 total hours meeting the course learning outcomes. The time estimations are provided in the Canvas modules.

COURSE SCHEDULE AND ASSIGNMENTS

This semester we will spend two weeks on each lab. You are expected to watch the video of the lab on Monday since you have that time allotted in your schedule, and then you will have the rest of the week to work on your lab report. However, this is not "synchronous" (you may watch the lab on your own time). Dates noted as "LIVE CLASS" are for me to go over lab problems with you and to answer questions about your lab reports. *Please have your lab report as complete as possible PRIOR to these sessions*. I will not just tell you what to do; you need to show me that you've worked on your report first. Lab reports will be due the following day to allow you time to apply what you learned from our live sessions to your lab reports. To access the Zoom sessions, please click on the Zoom link in your lefthand vertical navigation menu. The calendar with all Zoom links for the semester is there.

Week	Date (Mondays)	Activity	Assignment due dates (Lab reports are due Sunday nights by 11:59 pm)
1	8/17	Watch Lab 1 video (calculations, graphing)	
2	8/24	LIVE CLASS Zoom to review lab 1 Qs	Syllabus quiz due on Sunday, 8/23 by 11:59 pm Lab 1 due on 8/30 by 11:59 pm
3	8/31	Watch Lab 2 video (muscle length-tension relationship)	

4	9/7	LIVE CLASS Zoom to review lab 2 Qs	Lab 2 due on 9/13 by 11:59 pm
5	9/14	Watch Lab 3 video (anaerobic power & capacity: Wingate test)	
6	9/21	LIVE CLASS Zoom to review lab 3 Qs	Lab 3 due on 10/4 by 11:59 pm
7	9/28	Watch Lab 4 video (exercise energy expenditure and EPOC)	
8	10/5	LIVE CLASS Zoom to review lab 4 Qs	Lab 4 due on 10/18 by 11:59 pm
9	10/12	Watch Lab 5 video (VO2max)	
10	10/19	LIVE CLASS Zoom to review lab 5 Qs	Lab 5 due on 11/1 by 11:59 pm
11	10/26	Watch Lab 6 video (lactate & ventilatory thresholds)	
12	11/2	LIVE CLASS Zoom to review lab 6 Qs	Lab 6 due on 11/15 by 11:59 pm
13	11/9	Watch Lab 7 video (Critical Power)	
14	11/16	LIVE CLASS Zoom to review lab 7 Qs	Lab 7 due on 11/29 by 11:59 pm
15	11/23	Watch Lab 8 video (exercise prescription)	
16	11/30 (Finals Week)	LIVE CLASS Zoom to review lab 8 Qs	Lab 8 due by FRIDAY, 12/4 BY 11:59 pm

ASSESSMENT AND GRADING

Grades will be based on the following:

A	В	C	D	F
A 93-100	B+ 87-89	C+ 77-79	D+ 67-69	F Less than 59
A- 90-92	В 83-86	C 73-76	D 63-66	
	B- 80-82	C- 70-72	D- 60-62	

STATE AUTHORIZATION

State authorization is a formal determination by a state that Point Loma Nazarene University is approved to conduct activities regulated by that state. In certain states outside California, Point Loma Nazarene University is not authorized to enroll online (distance education) students. If a student moves to another state after admission to the program and/or enrollment in an online course, continuation within the program and/or course will depend on whether Point Loma Nazarene University is authorized to offer distance education courses in that state. It is the student's responsibility to notify the institution of any change in his or her physical location. Refer to the map on State Authorization to view which states allow online (distance education) outside of California.

INCOMPLETES AND LATE ASSIGNMENTS

All assignments are to be submitted/turned in by the beginning of the class session when they are due—including assignments posted in Canvas. Incompletes will only be accepted in extremely unusual circumstances. Late assignments incur a 50% deduction in earned grade on that assignment.

Corrected work: You will have **one chance** to correct your lab reports to still receive full credit. Corrected reports are due the week after they were returned. Assignments turned in late will *not* be eligible for this correction opportunity.

PLNU COPYRIGHT POLICY

Point Loma Nazarene University, as a non-profit educational institution, is entitled by law to use materials protected by the US Copyright Act for classroom education. Any use of those materials outside the class may violate the law.

PLNU ACADEMIC HONESTY POLICY

Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. Academic dishonesty is the act of presenting information, ideas, and/or concepts as one's own when in reality they are the results of another person's creativity and effort. A faculty member who believes a situation involving academic dishonesty has been detected may assign a failing grade for that assignment or examination, or, depending on the seriousness of the offense, for the course. Faculty should follow and students may appeal using the procedure in the university Catalog. See <u>Academic Policies</u> for definitions of kinds of academic dishonesty and for further policy information.

PLNU ACADEMIC ACCOMMODATIONS POLICY

While all students are expected to meet the minimum standards for completion of this course as established by the instructor, students with disabilities may require academic adjustments, modifications or auxiliary aids/services. At Point Loma Nazarene University (PLNU), these students are requested to register with the Disability Resource Center (DRC), located in the Bond Academic Center (DRC@pointloma.edu or 619-849-2486). The DRC's policies and procedures for assisting such students in the development of an appropriate academic adjustment plan (AP) allows PLNU to comply with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. Section 504 prohibits discrimination against students with special needs and guarantees all qualified students equal access to and benefits of PLNU programs and activities. After the student files the required documentation, the DRC, in conjunction with the student, will develop an AP to meet that student's specific learning needs. The DRC will thereafter email the student's AP to all faculty who teach courses in which the student is enrolled each semester. The AP must be implemented in all such courses.

If students do not wish to avail themselves of some or all of the elements of their AP in a particular course, it is the responsibility of those students to notify their professor in that course. PLNU highly recommends that DRC students speak with their professors during the first two weeks of each semester about the applicability of their AP in that particular course and/or if they do not desire to take advantage of some or all of the elements of their AP in that course.

PLNU ATTENDANCE AND PARTICIPATION POLICY

Regular and punctual attendance at all **synchronous** class sessions is considered essential to optimum academic achievement. If the student is absent for more than 10 percent of class sessions (virtual or face-to-face), the faculty member will issue a written warning of deenrollment. If the absences exceed 20 percent, the student may be de-enrolled without notice until the university drop date or, after that date, receive the appropriate grade for their work and participation. In some courses, a portion of the credit hour content will be delivered **asynchronously** and attendance will be determined by submitting the assignments by the posted due dates. See <u>Academic Policies</u> in the Undergraduate Academic Catalog. If absences exceed these limits but are due to university excused health issues, an exception will be granted.

Asynchronous Attendance/Participation Definition

A day of attendance in asynchronous content is determined as contributing a substantive note, assignment, discussion, or submission by the posted due date. Failure to meet these standards will result in an absence for that day. Instructors will determine how many asynchronous attendance days are required each week.

SPIRITUAL CARE

Please be aware PLNU strives to be a place where you grow as whole persons. To this end, we provide resources for our students to encounter God and grow in their Christian faith.

If students have questions, a desire to meet with the chaplain or have prayer requests you can contact the <u>Office of Spiritual Development</u>

USE OF TECHNOLOGY

In order to be successful in the online environment, you'll need to meet the minimum technology and system requirements; please refer to the <u>Technology and System Requirements</u> information.

Additionally, students are required to have headphone speakers compatible with their computer available to use. If a student is in need of technological resources please contact student-tech-request@pointloma.edu.

Problems with technology do not relieve you of the responsibility of participating, turning in your assignments, or completing your class work.