



**Dates:** 1/13 - 3/6

**Meeting Day/Time:** Wednesdays, 4:30 - 7:00 p.m.

**Location:** Rohr Science Room 112

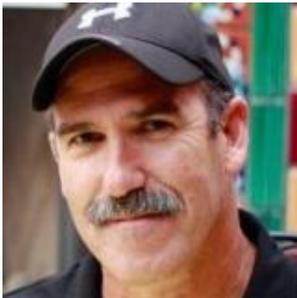
**Credit Hours:** 3

### **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 becomes an expression of faith. Being of Wesleyan heritage, we aspire to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life.

### **INSTRUCTOR INFORMATION**



**Instructor:** Professor Ken Nicodemus

**Phone:** 760.634.5169

**Email:** knicodem@pointloma.edu

**Office Hours:** By appointment only.  
Please contact via email.

### **COURSE DESCRIPTION**

This course covers a broad range of skills and information important in exercise testing and interpretation for both clinical and preventative health applications. The lecture and online content will provide practical information regarding clinical conditions and applications to health prevention and promotion encountered during exercise testing. The laboratory sessions are designed to develop specific and practical competencies in exercise testing skills. Skill development will include the use of electrocardiography (ECG), ventilatory, and metabolic assessment during both graded exercise and physical performance testing.

### **INSTITUTIONAL LEARNING OUTCOMES (ILO)**

- 1. Learning, Informed by our Faith in Christ**  
Students will acquire knowledge of human cultures and the physical and natural world while developing skills and habits of the mind that foster lifelong learning.
- 2. Growing, In a Christ-Centered Faith Community**  
Students will develop a deeper and more informed understanding of others as they negotiate complex professional, environmental and social contexts.
- 3. Serving, In a Context of Christian Faith**  
Students will serve locally and/or globally in vocational and social settings.

### **PROGRAM LEARNING OUTCOMES (PLO)**

The Point Loma Nazarene University MS-KIN graduate will be able to:

1. Appraise current research data in Kinesiology and integrate it into professional practice to solve relevant problems and make effective decisions .
2. Work independently and with a team to persuasively communicate essential information in their discipline.

3. Demonstrate appropriate breadth of knowledge of the background and principle research in their specialization in order to conduct an independent research project.
4. Serve various populations, integrating compassionate care and the Christian faith with their professional practice.
5. Pursue an active and growing involvement in their discipline by achieving advanced certification and/or membership in a related professional organization.

### **COURSE LEARNING OUTCOMES (CLO)**

The following learning outcomes will be achieved by students in this course:

1. Identify all risk factors that should be addressed by physician prior to allowing client/patient to participate exercise testing and/or prescriptions.
2. Clarify clinical conditions that may be encountered during exercise testing and any resultant contraindications for exercise testing and prescription.
3. Adjust or modify testing in response to the needs of special populations during exercise.
4. Identify the role(s) and benefits of specialized metabolic and ventilatory assessment for apparently healthy, at risk, and athletic populations.
5. Assess basis for selection of exercise and performance tests and be able to implement them.
6. Identify commonly prescribed medications and describe the effects they may have on heart rate, blood pressure and ECG responses during exercise.
7. Identify common abnormal ECG and Ventilatory responses to exercises and the underlying etiologies.
8. Demonstrate practical skills using various clinical and physiological measurement devices.

### **CREDIT HOUR INFORMATION**

It is anticipated that students will spend a minimum of 50 participation hours per credit hour on their course work. As a graduate course, students can expect the work in this class to be significant, and students should plan on spending up to 15-20 hours a week engaged in the course. The estimated time expectations for this course are shown below:

<b>Course Assignments</b>	<b>Pre-Course Hours</b>	<b>Course Hours</b>	<b>Post-Course Hours</b>
Face-to-Face Class Sessions	--	20	--
Online Participation in Discussion Forums	--	20	--
Reading	--	30	--
Written Assignments	--	20	--
Other Assignments & Learning Activities	--	25	--
Exams and Quizzes	--	10	--
<b>Total Course Hours</b>		125	

### **REQUIRED TEXT & RECOMMENDED RESOURCES**

#### **Required Text**

Ehrman, Gordon, Visich, & Keteyian, eds. **Clinical Exercise Physiology**, 4th ed. Champaign, IL: Human Kinetics, 2019.

Thompson, WR, ed. **ACSM's Guidelines for Exercise Testing and Prescription, 10th ed.** Philadelphia, PA: Wolters Kluwer/Lippincott Williams & Wilkins, 2017.

### Recommended Resources

Kinnear, W, **A Practical Guide to the Interpretation of Cardiopulmonary Exercise Tests**, Oxford, UK: Oxford University Press, 2014

Dubin, Dale, Rapid Interpretation of EKG's, 6th ed., C.o.v.e.r., 2000

Journal Articles posted on Canvas

### ASSESSMENT AND GRADING

#### Grading Points

Course Assignments	Points
In-Class Labs (7 @ 20 pts each)	140
Online Discussions (6 @ 10 pts each)	60
Quizzes (3 @ 25 pts each)	65
Assignments (4 @ 50 pts each)	200
Group Project 1 (CVD patient/risk)	100
Group Project 2 (Video & quiz)	100
<b>Total Course Points</b>	<b>665</b>

#### Grade Scale (Percentage)

A	93-100	B-	80-82	D+	67-69
A-	90-92	C+	77-79	D	63-66
B+	87-89	C	73-76	D-	60-62
B	83-86	C-	70-72	F	0-59

Students must complete the required program hours in the major (program) from Point Loma Nazarene University with a minimum grade of "C" in each course and an overall 2.00 grade point average.

#### LATE ASSIGNMENTS

All assignments are to be submitted by the due dates posted. There will be a 20% reduction of possible points for each day an assignment is late. If missing assignments result in the your failure to meet learning outcomes, you may receive a letter grade reduction on the final grade in addition to the loss of points for missing work. No assignments will be accepted after midnight on Sunday night, the last day of class.

While there are due dates for weekly assignments, you are welcome to post your work earlier in the week. In our discussions, late work means that others may not have the opportunity to respond to your comments. It also means that you will not have the benefit of as much interaction with other students as you will have if your assignment is posted on time. If you know you will be away on the day your assignment is due, please post your work before you leave.

Assignments will be considered late if posted after midnight Pacific Standard Time on the day they are due.

#### 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 graduate students to encounter God and grow in their Christian faith. There are resources

for your Christian faith journey available at the [Graduate & Professional Student Spiritual Life web page](#).

For Mission Valley students there is a prayer chapel on the third floor which is open for use as a space set apart for quiet reflection and prayer.

## **COPYRIGHT POLICY**

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## **ACADEMIC HONESTY**

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 Academic Policies in the Graduate and Professional Studies Catalog for definitions of kinds of academic dishonesty and for further policy information.

## **ACADEMIC ACCOMMODATIONS**

If you have a diagnosed disability, please contact Jean Moncada in the Center for Student Success (CSS) within the first two weeks of class to demonstrate need and to register for accommodation by phone at (619) 563-2849 or by e-mail at [jmoncada@pointloma.edu](mailto:jmoncada@pointloma.edu). Ask your academic advisor or program director for any additional accommodation information.

## **ATTENDANCE POLICY**

Students taking online courses are expected to attend each week of the course. Attendance is defined as participating in an academic activity within the online classroom which includes posting in a graded activity in the course. (Note: Logging into the course does not qualify as participation and will not be counted as meeting the attendance requirement.)

Students who do not attend at least once in any 3 consecutive days will be issued an attendance warning. Students who do not attend at least once in any 7 consecutive days will be dropped from the course retroactive to the last date of recorded attendance.

Students who anticipate being absent for an entire week of a course should contact the instructor in advance for approval and make arrangements to complete the required coursework and/or alternative assignments assigned at the discretion of the instructor. Acceptance of late work is at the discretion of the instructor and does not waive attendance requirements.

## **ACADEMIC STANDING**

Graduate students at Point Loma must obtain a 3.0 GPA to remain in good standing in the MS Kinesiology program. Additionally, all graduate students need to earn a C or higher in all graduate courses according to the catalog grading policy found here: [GPS Academic Standing](#)

## **INFORMATION LITERACY**

The curriculum of the MS-KIN is designed so that you develop skills in scientific writing, performing statistical analysis of data, reading and critically appraising primary literature, and incorporating current best evidence into your professional practice. Not all information is equally sound or applicable to your practice. Various assignments within this course are designed to accomplish the goal of informational literacy—to evaluate the validity and importance of information obtained from any source and use the information appropriately to solve relevant problems. These assignments include: SPSS Output Reports, in-class article discussions, in-class discussion of experimental design, review of the literature related to your proposal, presentation of proposal. We will regularly direct you to the Ryan Library to accomplish these assignments.

## 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 **Technology and System Requirements** page. Problems with technology do not relieve you of the responsibility of participating, turning in your assignments, or completing your class work.

If you do need technical help, you may click on the HELP button (located on the top-right corner of Canvas) and choose from whom you want assistance, or you may contact the campus helpdesk (619-849-2222).

Point Loma Nazarene University encourages the use of technology for learning, communication, and collaboration. It is the responsibility of the student to confirm access to the essential applications needed for the class such as Excel as well as standard online research tools.

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