



Dates: January 10 - March 6, 2022

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

Location: Rohr Science Room 195

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:

Estimated Time Expectations

| Course Assignments | Pre-Course Hours | Course Hours | Post-Course Hours |
|---|------------------|--------------|-------------------|
| 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 | -- |
| Total Course Hours | 125 | | |

REQUIRED TEXT & RECOMMENDED RESOURCES

Required Text

Ehrman, Gordon, Visich, & Keteyian, eds. [Clinical Exercise Physiology, 4th ed. \(Links to an external site.\)](#) Champaign, IL: Human Kinetics, 2019.

Thompson, WR, ed. [ACSM's Guidelines for Exercise Testing and Prescription, 11th ed. \(Links to an external site.\)](#), Philadelphia, PA: Wolters Kluwer/Lippincott Williams & Wilkins, 2020.

Recommended Resources

Kinnear, W. [A Practical Guide to the Interpretation of Cardiopulmonary Exercise Tests, 2nd ed \(Links to an external site.\)](#), Oxford, UK: Oxford University Press, 2021

Dubin, Dale, [Rapid Interpretation of EKG's \(Links to an external site.\)](#), 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 (8 @ 10 pts each) | 80 |
| Quizzes (2 @ 20 pts each, 1 @ 25 pts) | 65 |
| Assignments (4 @ 50 pts each) | 200 |
| Lab Quizzes (2 @ 50 pts each) | 100 |
| Lab Practical Exam | 50 |
| Project Sign-up (2 @ 5 points) | 10 |
| Group Project 1 (CVD patient/risk) | 100 |
| Group Project 2 (Video & quiz) | 100 |
| Total Course Points | 845 |

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

PLNU strives to be a place where you grow as a whole person. To this end we provide resources for our Graduate and Adult Degree Completion students to encounter God and grow in their Christian faith. At the Mission Valley (MV) campus we have an onsite chaplain, Rev. Gordon Wong, who is available during class break times across the week. If you have questions for, desire to meet or share a prayer request with Rev. Wong you can contact him directly at mvchaplain@pointloma.edu or gordonwong@pointloma.edu. Rev. Wong's cell number is 808-429-1129 if you need a more immediate response.

In addition, on the MV campus 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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[Links to an external site.](#)

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 the [Academic Honesty PolicyLinks to an external site.](#) in the Graduate and Professional Studies Catalog for definitions of kinds of academic dishonesty and for further policy information.

ACADEMIC ACCOMMODATIONS

PLNU is committed to providing equal opportunity for participation in all its programs, services, and activities. Students with disabilities may request course-related accommodations by contacting the Educational Access Center (EAC), located in the Bond Academic Center (EAC@pointloma.edu or 619-849-2486). Once a student's eligibility for an accommodation has been determined, the EAC will issue an academic accommodation plan ("AP") to all faculty who teach courses in which the student is enrolled each semester.

PLNU highly recommends that students speak with their professors during the first two weeks of each semester/term about the implementation of their AP in that particular course and/or if they do not wish to utilize some or all of the elements of their AP in that course.

Students who need accommodations for a disability should contact the EAC as early as possible (i.e., ideally before the beginning of the semester) to assure appropriate

accommodations can be provided. It is the student's responsibility to make the first contact with the EAC.

ATTENDANCE 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 de-enrollment. 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 [Academic Policies](#)Links to an external site. in the Graduate and Professional Studies 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.

Note: Face-to-face courses. Regular and punctual attendance at all classes is considered essential to optimum academic achievement. If the student is absent from more than 10 percent of class meetings, the faculty member can file a written report which may result in de-enrollment. 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. See [Academic Policies](#)Links to an external site. in the Graduate and Professional Studies Catalog for additional detail.

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](#)Links to an external site.

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 Links to an external site.](#) information. Additionally, students are required to have headphone speakers compatible with their computer available to use. Problems with technology do not relieve you of the responsibility of participating, turning in your assignments, or completing your class work.

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