

Clinical Exercise Prescription (KIN 60056) (3 credit hours)

Online (remote), class meeting: Tuesdays 7:00pm – 8:30pm

Dates: 3/15/2021 – 5/7/2021

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's information:

Andrew Weiler M.Ed.

aweiler@pointloma.edu

Course Description

This course prepares students to utilize scientific rationale and a formal process to design, implement and supervise exercise programming for *apparently healthy populations* as well as those *Special Populations* (chronic diseases, muscular skeletal conditions, and requiring additional considerations/adaptations). An individualized health-risk assessment, exercise prescription and outcome-based exercise progression is the gold-standard for our profession.

Institutional Learning Outcomes (ILO)

1. **Learning, Informed by our Faith in Christ:** Students will acquire knowledge of human culture 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)

After completing this course students will be able to:

1. Interpret the findings of pre-exercise assessments, interviews, forms, and questionnaires to develop clinically appropriate exercise prescriptions to improve client health, fitness, and function.
2. Design safe and effective individualized exercise programs for *Apparently Healthy & Special Populations* including those with chronic diseases, conditions, and/or physical dysfunctions (e.g., cardiovascular, pulmonary, metabolic, musculoskeletal)
3. Implement exercise programs for clients in all stages of medical intervention following current industry guidelines, recommendations, best practices, and scientific principles.
4. Apply effective communication strategies and instructional techniques to optimize program outcomes and build client self-efficacy.

CREDIT HOUR INFORMATION

In the interest of providing sufficient time to accomplish the stated Course Learning Outcomes, KIN 6056 meets the PLNU credit hour policy for a 3-unit class delivered over 8-weeks. 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 course to be significant, and students should plan on spending about 18.5 hours per week engaged in the course content. The estimated time expectations for this course are shown below:

Assignments	Course Hours
Weekly Participation in Discussion Forums	28
Major Assignments	35
Reading	55
Other Learning Activities	20
Formative Assessments & Final Exam	12
Total Course Hours:	150

REQUIRED TEXT & RECOMMENDED RESOURCES:

Required

American College of Sports Medicine (2017). *ACSM's guidelines for exercise testing and prescription* (11th ed.). Philadelphia, PA: Wolters Kluwer/Lippincott Williams & Wilkins. ISBN-13: 9781975150198

Recommended

America Council on Exercise (2015). *ACE Medical Exercise Specialist Manual*. San Diego, CA: Author. ISBN-13: 9781890720520.

American College of Sports Medicine (2009). *ACSM's resources for clinical exercise physiology* (2 ed.). Philadelphia, PA: Wolters Kluwer/Lippincott Williams & Wilkins. ISBN-13: 9780781768702.

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. All supplemental materials posted on this course site (including articles, book excerpts, or other documents) are provided for your personal academic use. These materials may be protected by copyright law and should not be duplicated or distributed without permission of the copyright owner.

ASSESSMENT AND GRADING

The total number of points accumulated on exams, quizzes, assignments, and discussion board posts determines your final letter grade in this course and is outlined in the table below. Case studies should be a collaboration with your classmates and instructor.

<u>Assignment</u>	<u>#</u>	<u>Points per</u>	<u>Total Points</u>	<u>Percent of Total Points</u>
Quizzes	5	10	50	10%
Discussion Board Posts	5	20	100	20%
Case studies	5	40	200	40%
Mid-term	1	50	50	10%
Final Exam (cumulative)	1	100	100	20%
			500	100%

Standard Grade Scale Based on Percentage of Points Earned

Traditional letter grades (A, B, C, D, F (including plus and minus grades)) are used to indicate the level of scholarship for KIN 6056. Except for the correction of an error, all traditional letter grades are final at the conclusion of the academic term. Once the degree has been posted on the student's official transcript,

no change of grade action is allowed for courses leading to the degree. The grade of C is *the lowest grade acceptable for graduate credit*.

<u>Letter</u>	<u>Low%</u>	<u>High %</u>	<u>Points (low)</u>	<u>Points (high)</u>
A	93%	100%	465	500
A-	90%	93%	450	464.5
B+	87%	90%	435	449.5
B	83%	86.9%	415	434.5
B-	80%	82.9%	400	414.5
C+	77%	79.9%	385	399.5
C	70%	76.9%	350	384.5
D	55%	69.9%	275	349.5
F	55%		274.5	274.5

Participate in KIN 6056 as you will in our profession, representing Christ, your discipline, and yourself, demonstrating competence, respect, love, grace, diligence, and tenacity. It is your responsibility to access Canvas regularly and to participate in class discussions, as an important part of your interaction with the course content, the instructor, your classmate-colleagues, which is an integral part of the learning process and directly influences your level of success in the course.

DISCUSSION EXPECTATIONS

You will be expected to craft **one (1)** detailed post in response to the discussion board question(s) provided. Each original discussion board post should be written in formal tone, and should be concise and efficient using only as much text as required to present the information you feel necessary and pertinent to provide a complete answer. You should include a minimum of one citation (in APA format). Your response may be submitted any time after the question submission but no later than the following **Thursday at 11:59pm**.

Following your original post, craft at least **one (1)** post in response to the work of your classmate-colleagues to demonstrate your understanding and application of the concepts presented, as well as to further the class discussion in a meaningful way. Comply with the following guidelines for your posts in response to your classmates:

1. **Respond to a post that has not received a response.** If all posts have a response you may respond to any post you like. Please consider responding to more than one post. You can only improve your grade by responding to multiple posts.
2. **Do not critique your classmate-colleague's post under any circumstance.** For example, do not write about the quality, uniqueness, poignancy, or any other characteristic of the writing. Only address the subject matter in a formal tone, as concisely and efficiently as possible.
3. **Do not ask your classmates questions;** Only forward the conversation. You may agree or disagree with any assertions made in posts, but do not ask questions. You may address any information presented in the discussion thread including responses.
4. **Use a formal, academic tone in your posts.**
5. **Include a citation in your response (APA format).**

Response posts are due by Monday at 11:59pm. Please note that late submissions will not be considered for credit unless pre-arranged with your instructor.

Case Studies

Case studies are the primary mode of application of learning in KIN 6056 and represents 40% of the points possible. Develop a process by which you will *know* your client, *assess* your client and *develop* an individualized and comprehensive exercise prescription addressing all the components of health-related fitness (as a minimum). Include a plan for assessment and progression of the exercise prescription.

Each student will develop a structured process which incorporates, the Knowledge, Skills and Abilities taught in KIN 6056, professional resources (either self-made or available) to produce a client's record which may be used as documentation of practice, a schedule for exercise testing and progression, and a resource for education and supervision of exercise.

The case study assignment represents the beginning of the process which you will use throughout your professional practice as an exercise professional. Professionals use networks to establish standards of care and credible practice. In this spirit, please collaborate with your professor, other professionals in the field and your classmate-colleagues. In past classes, students corporately developed spreadsheets, formatted records and bibliographies which were used for case studies and exam preparation.

Class sessions

Tuesday nights from 7:00pm – 8:30pm KIN6054 will meet online. Class time will be spent covering material pertinent to the current week's work and for discussion about course logistics. Please know your instructor has seen consistent and significant correlation between class attendance, regular communication, quality of academic work and final grade earned in this course.

LATE ASSIGNMENTS

All assignments are to be submitted/turned in via Canvas by the end of day (11:59pm PT) on which they are due in order to be considered for credit. Your professor is committed to work as hard as you do to be successful in KIN 6056. Jesus said, in John 10:10 “...I have come that they may have life, and that they may have it more abundantly.” I know that life and practicing your faith brings blessings and challenges. Embrace KIN 6056, as you do the rest of your life. Through consistent and **preemptive** communication with your professor, integrate your work, servanthood, spiritual life, occupation and preoccupation with this course and everything will be fine. If you do miss a due date, a discussion will be held **at the end of KIN 6056** when your total body of work and your current standing in the class can inform our discussion about the most appropriate course of action to take.

E-MAIL ETIQUETTE

Communication is part of your academic work and therefore should be written concisely and efficiently as possible. When sending an email to the professor, students are expected to write in a formal, academic tone, and all the necessary information to fully understand and respond to the e-mail should be provided. The **student's name and course number should be in the subject line**. In addition, the body of the email should include an appropriate greeting, salutation and complete contact information. The professor and students will respond to all e-mail **within 48 hours of receipt**.

FINAL EXAMINATION POLICY

Successful completion of this class requires taking an online final examination during the **scheduled timeframe** during the last week of the course (Wednesday, May 3rd – due Friday, May 5th at 11:59pm). All requests for early examinations or alternative days will be approved in advance.

SPIRITUAL CARE

PLNU strives to be a place where you grow as a whole person. To this end, resources for our graduate students to encounter God and grow in their Christian faith are available at the **Graduate & Professional Student Spiritual Life web page**. (<https://www.pointloma.edu/opportunities/graduate-professional-student-spiritual-life>)

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.

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.

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's Graduate and Professional Studies Catalog. See *Academic Policies* in the Graduate and Professional Studies Catalog for definitions of types of academic dishonesty and for further information.

ACADEMIC ACCOMMODATIONS

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 (a) 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

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 will also be asked to attend and participate in **at least one** of the live webinars held.

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.

INSTRUCTOR FEEDBACK

Weekly assignments will be graded in timely fashion and graded work will be posted in Canvas weekly. Regular communication and attendance in Tuesday's online session is encouraged.

USE OF TECHNOLOGY

In order to be successful in the online environment, students need to meet the minimum technology and system requirements; please refer to the [Technology and System Requirements](#) page. Be sure to have redundancy plans as it pertains to technology and access to KIN 6056 materials. **Problems with technology do not relieve students of the responsibility of participating, turning in assignments, or completing coursework.**

Students who need [technical help](#), 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.

ACADEMIC STANDING

Graduate students at Point Loma must obtain a 3.0 GPA to remain in good standing in the MS Kinesiology program: 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.

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 using the below link to view which states allow online (distance education) outside of California.

Course Summary:

Mon Mar 15, 2021 (week 1)

Tuesday Night Class: Building a profession: Credible practice in an unregulated profession.

- Introduction
- Syllabus review

Discussion board: Credible practice in an unregulated profession.

- Original post due Friday, March 20th, before 11:59pm
- Responses due Monday, March 22nd, before 11:59pm

Quiz one: Wednesday, March 17th – due Friday before 11:59pm

- Standard of care
- Scope of Practice
- Licensure and certification
- Negligence by omission and commission
- Informed consent
- Knowledge, Skills and Abilities in practice
- The *Benefits v. Risk Ratio!!!*
 - Bend the curve!!! Tip the ratio in favor of your client.

📄 Academic Honesty Verification Statement (<https://canvas.pointloma.edu/courses/49309/assignments/458883>) due by 11:59pm

📄 State Authorization VerificationForm (<https://canvas.pointloma.edu/courses/49309/assignments/464028>) due by 11:59pm

Monday, March 22nd, 2021 (week 2)

Tuesday Night Class: To test or not to test?

- How your practice reduces liability and increases credibility
- Serve everyone a “piece of the liability pie” to improve the safety of exercise participation for your client.
- Risk stratification? Do we need to risk stratify our clients?

Case study 1: Miley Serious

- Begin Monday March 22nd, 2021
- Submit Friday, March 26th, 2021 before 11:59pm

Discussion board: The purpose of risk stratification and baseline exercise testing

- Original post due Friday, March 26th, before 11:59pm
- Responses due Monday, March 29th, before 11:59pm

Quiz Two: Wednesday, March 24th – due Friday before 11:59pm

- History of risk stratification and today's standards
- Algorithm for risk stratification, physician's clearance, and appropriate settings
- Baseline testing
- Risk management

Mon Mar 29th, 2020 (week 3) Good Friday & Resurrection Sunday

Tuesday Night Class: Testing, retesting and quantification.

- Screening for testing vs. exercise training
- Symptom-limited maximum testing vs. submaximal testing
- Conveying test results

Case study 2: Randy Jackson

- Begin Monday March 29th, 2021
- Submit Thursday, April 3rd before 11:59pm (Friday, April 4th is Good Friday)

Discussion board: Exercise testing and results-based counseling and prescription

- Original post due Thursday, April 1st, before 11:59pm
- Responses due Tuesday, April 6th, before 11:59pm

Quiz three: Wednesday, March 31st – due Thursday, April 3rd, 2021 before 11:59pm

- Standard of care
- Scope of Practice
- Licensure and certification
- Negligence by omission and commission
- Knowledge, Skills and Abilities in practice

Monday April 5th, 2021 (week 4)

Tuesday Night Class: Are you ready for the midterm - review.

- Review what you knew – are you ready for your mid-term exam?

No discussion board: Feel free to use the general discussion board to review together – I might even join you



Midterm exam: Wednesday, April 7th – due Friday before 11:59pm

Monday, April 12th, 2021 (week 5)

Tuesday Night Class: Exercise prescription

- Can you PRESCRIBE exercise?
- How will you prescribe exercise? You better get a system.
 - Exercise is medicine, how much medicine and what type are you prescribing?
- What are the benefits of YOUR exercise prescription?
 - Proving your prescription
- Conveying prescription – How do you and your client know your exercise prescription is working?

Case study 3: Burton Barr

- Begin Monday April 12th, 2021
- Submit Friday, April 16th, before 11:59pm

Discussion board: Exercise testing and results-based counseling and prescription

- Original post due Friday, April 16th, before 11:59pm
- Responses due Monday, April 19th, before 11:59pm

Quiz four: Wednesday, April 14th – due Friday before 11:59pm

- Who can prescribe?
- Nutrition information? Oh no you didn't!
- Quality and quantity of exercise

Monday, April 19th, 2021 (week 6)

Tuesday Night Class: Who is *Apparently Healthy*?

- I'm special – are you special? (*Special populations*)
- How will you prescribe exercise – honing your system.
 - Exercise is medicine, how much medicine and what type are you prescribing?
- What are the benefits of YOUR exercise prescription?
- Conveying prescription – How do you and your client know your exercise prescription is working?

Case study 4: Frank Rogain

- Begin Monday April 19th, 2021
- Submit Friday, April 23rd, 2021 before 11:59pm

Discussion board: Do the benefits of exercise outweigh the risks for your client?

- Original post due Friday, April 16th, before 11:59pm
- Responses due Monday, April 22nd, before 11:59pm

Quiz five: Wednesday, April 14th – due Friday before 11:59pm

- Can you work with this client?
- Proving your exercise prescription
- Quality and quantity of exercise

Monday, April 26th, 2021 (week 7)

Tuesday Night Class: I can help you lose weight!

- Obesity: What do we know? Can you help a client lose weight?

Case study 5: Jillian “*Big Mac*” McMichaels

- Begin Monday April 26th, 2021
- Submit Friday, April 30th, before 11:59pm

Discussion board: Who’s the *Biggest Loser*?

- Original post due Friday, April 30th, before 11:59pm
- Responses due Monday, May 3rd, before 11:59pm

Quiz six: Wednesday, April 14th – due Friday before 11:59pm

- What is the health risk of obesity?
- Proving your exercise prescription – special considerations for the obese client
- Quality and quantity of exercise

Monday, May 3rd, 2021 (week 8)

Tuesday Night Class: Are you ready? This is final!

- Cumulative final – you will be fine.
- How will you prescribe exercise – use your system.
 - Exercise is medicine, how much medicine and what type are you prescribing?
- What are the benefits of YOUR exercise prescription?
- Conveying prescription – How do you and your client know your exercise prescription is working?

Final exam: Wednesday, May 3rd – due Friday before 11:59pm

- Recap the entire semester.
- Your client from soup to nuts.