

# **ATR 6011 Advanced Functional Movement Interventions**

**Spring 2022**

**Dates: 3/14 - 5/8**

**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:** Ben Harwood

**Email:** bharwood@pointloma.edu

## **COURSE DESCRIPTION**

This course will provide graduate level athletic trainers with an in-depth experience in movement interventions used to improve function, eliminate pain and enhance performance. Emphasis will be placed on utilizing movement screening and assessment to identify dysfunction, and then designing and effectively implementing corrective exercise programs (i.e., functional interventions) for a wide spectrum of patients and clients.

## **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. Understand key concepts for Applied Functional Science (AFS)\*
  1. Principles/Strategies/Techniques (PST\*)
  2. Chain Reaction Biomechanics (CRB\*)
  3. Real v Relative motion
  4. Functional Manual Reaction (FMR\*)
2. Understand and implement functional nomenclature of AFS.
  1. SFT Syntax\*
  2. 10 observation essentials\*
  3. Transformational Zones\* (TZs)
3. Describe normal bone motion in gait kinematics and apply screen to determine abnormal movement patterns. Communicate findings appropriately.
4. Utilize appropriate functional screening tools and exercises to improve functional movement, performance and reduce pain.

### **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 3-unit class delivered over 8 weeks. Specific details about how the class meets the credit hour requirement can be provided upon request.

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

- There are no required books for this course.\*

\*There will be study resources posted to canvas to further your understanding of AFS. The material utilized is from the Gray Institute and Rehab United.

1. The foundation of the Rehab United educational curriculum model is largely credited to the Gray Institute and therefore, you will learn from a blend of resources from the Gray Institute, Rehab United's Education program and real evaluation and treatment application experience.
2. The material prepared for this class are exclusive to this class and are not to be redistributed beyond this class.

### COURSE SCHEDULE AND ASSIGNMENTS

DATE PRESENTED	CLASS CONTENT OR ASSIGNMENT	ASSIGNMENT DUE DATE
March 14	AFS introduction, functional nomenclature	March 16
March 21	MAPS/positioning/posture assessment	March 23
March 28	Gait: Transformational Zones 1 and 2	March 30
April 4	Ankle/Knee (assessment, FMR, exercise)	April 6
April 11	Hip/Pelvis (assessment, FMR, exercise)	April 13
April 18	Shoulder (assessment, FMR, exercise)	April 20
April 25	Spine (assessment, FMR, exercise)	April 27
May 2	Final Case project	TBD

### Grade Scale (Percentage)

Standard Grade Scale Based on Percentage of Points Earned

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

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.

### GRADING WEIGHT

- Pre-Class worksheet (6 @ 25 points) 150 points
- Post-Class worksheet/Activity (6 @ 50 points) 300 points

- Class Participation (8 @ 25 points) 200 points
- Discussion Board participation (4 @ 25 points) 100 points
- Final Case project (100 points)

### **LATE ASSIGNMENTS**

- All assignments are to be submitted by the due date and time listed.
- Missed exams or quizzes may **ONLY** be made up with a legal, written excuse.
- Late work will **NOT** be accepted or graded. Assignments will be considered late if posted **after midnight Pacific Standard Time on the day they are due.**

### **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.

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

### **PLNU ACADEMIC ACCOMMODATIONS POLICY**

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](mailto: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.

### **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 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 PoliciesLinks 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.

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.

### **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 StandingLinks to an external site.](#)

### **GRADING SYSTEM**

Traditional letter grades (A, B, C, D, F) including plus and minus grades are used to indicate the level of scholarship earned for each course. 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.

### **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.

### **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](mailto:mvchaplain@pointloma.edu) or [gordonwong@pointloma.edu](mailto:gordonwong@pointloma.edu).

### **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 [mapLinks to an external site.](#) to view which states allow online (distance education) outside of California.

### **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 RequirementLinks 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 classwork.