



College of Health Sciences | Master of Science, Athletic Training Department

ATR6007-1: Research Project Seminar

1 Unit

Summer 2026 | Quad 1

May 11 - July 5, 2026

Modality: Online Synchronous

Meeting Days: Wednesday

Meeting Times: 5:00 PM - 6:30 PM

Meeting Location: [Online via Zoom](#)

Office Hours: Friday 9am-11am

Instructor: Kevin Robell MA ATC

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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 provides attendees an introductory education around the concept of Data Analytics and its application to clinical athletic training. Rapidly growing complexity and enormity of clinical data sources present significant challenges to practitioners. Surviving this new normal requires constant growth and innovation to advance clinical practice metrics, optimize patient outcomes, and demonstrate practitioner value. Data Analytics is an established health IT framework designed to facilitate the conversion of clinical data to meaningful action. This course exposes attendees to essential understanding of this infrastructure and important steps involved when implementing a “culture of analytics” within an individual’s practice or organization.

Course Learning Outcomes

Upon completing this course, you should be able to:

1. Define the concept of Data Analytics and recognize its role in the area of health information technology.
2. Describe the types of analytics and their differentiation in the analysis of clinical data.
3. Identify the logistical steps involved when implementing any Data Analytics project.
4. Recognize attributes of industry leading Data Analytics technologies and classify their individualized role in the lifecycle of clinical data.

Distinguish common terminology used in data analytics to inform internal evaluations of current data management strategies within their organization.

Program Learning Outcomes

Upon completion of the Master of Science in Athletic Training (MS-AT), the successful student will be able to:

1. To prepare students to demonstrate competency in interpreting evidence-based research and improving clinical standards and practice through clinical question development and research methodology
2. To prepare students to develop expertise in the athletic training domains through an integrative experiential clinical model
3. To equip students with appropriate knowledge and educational foundation required for an entry-level Certified Athletic Trainer
4. To prepare students to establish and understand the importance of inter-professional relationships, while collaborating with other health care professionals to become effective communicators

To prepare students to demonstrate preparation, knowledge and skill in the delivery of comprehensive health care to a diverse set of patients with musculoskeletal injuries and conditions and illnesses in a distinctly moral and ethical manner, integrating Christian faith with clinical practice.

COMPETENCIES

Competencies Met In This Course

No Competency

PHP-8 Identify the necessary components to include in a preparticipation physical examination as recommended by contemporary guidelines (eg, American Heart Association, American Academy of Pediatrics Council on Sports Medicine & Fitness).

PHP-9 Explain the role of the preparticipation physical exam in identifying conditions that might predispose the athlete to injury or illness.

PHP-17i Lightning strike

PHP-18 Explain strategies for communicating with coaches, athletes, parents, administrators, and other relevant personnel regarding potentially dangerous conditions related to the environment, field, or playing surfaces.

CE-23 Describe current setting-specific (eg, high school, college) and activity-specific rules and guidelines for managing injuries and illnesses.

TI-19 Identify manufacturer, institutional, state, and/or federal standards that influence approval, operation, inspection, maintenance and safe application of therapeutic modalities and rehabilitation equipment.

TI-20 Inspect therapeutic equipment and the treatment environment for potential safety hazards.

HA-2 Describe the impact of organizational structure on the daily operations of a healthcare facility.

- HA-3** Describe the role of strategic planning as a means to assess and promote organizational improvement.
- HA-4** Describe the conceptual components of developing and implementing a basic business plan.
- HA-5** Describe basic healthcare facility design for a safe and efficient clinical practice setting.
- HA-6** Explain components of the budgeting process including: purchasing, requisition, bidding, request for proposal, inventory, profit and loss ratios, budget balancing, and return on investments.
- HA-7** Assess the value of the services provided by an athletic trainer (eg, return on investment).
- HA-8** Develop operational and capital budgets based on a supply inventory and needs assessment; including capital equipment, salaries and benefits, trending analysis facility cost, and common expenses.
- HA-9** Identify the components that comprise a comprehensive medical record.
- HA-10** Identify and explain the statutes that regulate the privacy and security of medical records.
- HA-11** Use contemporary documentation strategies to effectively communicate with patients, physicians, insurers, colleagues, administrators, and parents or family members.
- HA-12** Use a comprehensive patient-file management system for appropriate chart documentation, risk management, outcomes, and billing.
- HA-13** Define state and federal statutes that regulate employment practices.
- HA-14** Describe principles of recruiting, selecting, hiring, and evaluating employees.

HA-15 Identify principles of recruiting, selecting, employing, and contracting with physicians and other medical and healthcare personnel in the deployment of healthcare services.

HA-17 Identify key regulatory agencies that impact healthcare facilities, and describe their function in the regulation and overall delivery of healthcare.

HA-18 Describe the basic legal principles that apply to an athletic trainer's responsibilities.

HA-19 Identify components of a risk management plan to include security, fire, electrical and equipment safety, emergency preparedness, and hazardous chemicals.

HA-20 Create a risk management plan and develop associated policies and procedures to guide the operation of athletic training services within a healthcare facility to include issues related to security, fire, electrical and equipment safety, emergency preparedness, and hazardous chemicals.

HA-21 Develop comprehensive, venue-specific emergency action plans for the care of acutely injured or ill individuals.

HA-23 Identify and explain the recommended or required components of a pre-participation examination based on appropriate authorities? rules, guidelines, and/or recommendations.

HA-25 Describe common health insurance models, insurance contract negotiation, and the common benefits and exclusions identified within these models.

HA-26 Describe the criteria for selection, common features, specifications, and required documentation needed for secondary, excess accident, and catastrophic health insurance.

HA-27 Describe the concepts and procedures for revenue generation and reimbursement.

HA-28 Understand the role of and use diagnostic and procedural codes when documenting patient care.

HA-30 Describe the role and functions of various healthcare providers and protocols that govern the referral of patients to these professionals.

PD-1 Summarize the athletic training profession's history and development and how current athletic training practice has been influenced by its past.

PD-2 Describe the role and function of the National Athletic Trainers' Association and its influence on the profession.

PD-3 Describe the role and function of the Board of Certification, the Commission on Accreditation of Athletic Training Education, and state regulatory boards.

PD-4 Explain the role and function of state athletic training practice acts and registration, licensure, and certification agencies including (1) basic legislative processes for the implementation of practice acts, (2) rationale for state regulations that govern the practice of athletic training, and (3) consequences of violating federal and state regulatory acts.

PD-5 Access, analyze, and differentiate between the essential documents of the national governing, credentialing and regulatory bodies, including, but not limited to, the NATA Athletic Training Educational Competencies, the BOC Standards of Professional Practice, the NATA Code of Ethics, and the BOC Role Delineation Study/Practice Analysis.

PD-6 Explain the process of obtaining and maintaining necessary local, state, and national credentials for the practice of athletic training.

PD-8 Differentiate among the preparation, scopes of practice, and roles and responsibilities of healthcare providers and other professionals with whom athletic trainers interact.

PD-10 Develop healthcare educational programming specific to the target audience (eg, clients/patients, healthcare personnel, administrators, parents, general public).

- PD-11** Identify strategies to educate colleagues, students, patients, the public, and other healthcare professionals about the roles, responsibilities, academic preparation, and scope of practice of athletic trainers.
- PD-12** Identify mechanisms by which athletic trainers influence state and federal healthcare regulation.
- CIP-9** Utilize documentation strategies to effectively communicate with patients, physicians, insurers, colleagues, administrators, and parents or family members while using appropriate terminology and complying with statutes that regulate privacy of medical records. This includes using a comprehensive patient-file management system (including diagnostic and procedural codes) for appropriate chart documentation, risk management, outcomes, and billing.
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Institutional Learning Outcomes

- 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.
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Required Texts and Recommended Study Resources

There will be some ad-hoc readings that will be provided in relevant modules, but there is not a required textbook related to this course.

Note: Students are responsible for having the required textbooks prior to the first day of class. Students are also encouraged to begin reading the books in preparation for the class as soon as possible.

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.

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 8 weeks. It is anticipated that students will spend a minimum of 37.5 participation hours per credit hour on their coursework.

Assessment and Grading

It is important to read the feedback provided in the gradebook as these comments are intended to help you improve your work. Final grades will be posted within ten days of the end of the class. Multiple measures of evaluation are used in the course, allowing students opportunities to demonstrate their learning in more than one way, and giving consideration to individual learning styles. Course components that will be evaluated include:

Assignment Weighting Towards Final Grade

Assignment Category	Percentage of Final Grade
Discussions	25%
In Class Activities	25%
Attendance & Participation	30%
Assignments	20%

Discussions

We will utilize the Discussion Board feature of canvas to expand upon topics raised during class and from your reading of the textbook and outside journals. You will have the opportunity, via the discussion Boards, to interact with your fellow students and with me and to discuss topics of interest to you. You are invited to become engaged with others in this class as you debate issues raised in the questions, examine and analyze case studies related to the content, and respond to the comments of your classmates.

For each Discussion Board topic, you will be required to post one response of your own and to post two replies to classmates. Thus, you must respond at least **three times** to each Discussion Board topic on Canvas. Your response to a classmate's post may include one or more of the following:

- Ask a probing question
- Share an insight from having read your classmate's post
- Offer and provide evidence to support an opinion
- Validate a classmate's idea with reference to your own experiences
- Make a suggestion for improvement

- Expand on your classmate's post.

To receive full credit for your participation, your initial post must be completed by 11:59 PM PST on Wednesday and response to your classmates' posts (minimum of two) must be completed by 11:59 PM PST on Saturday.

Lessons

Each week you will read through a guided lesson on Canvas. In addition to text and video content, these lessons will include quiz questions and free-response sections to allow you to check your comprehension of the material and ask any questions for the professor to answer in class.

Activities

These assignments are the main focus of the class, and they will typically be due the day before class or at 11:59 PM PST on Sunday. These activities will allow you to apply the concepts learned in the class to real-world scenarios that an allied health care management professional will encounter. As such, many of these activities will make excellent portfolio pieces for you as an Athletic Training student.

Attendance & Participation

You must attend each asynchronous class session and participate actively in our in-class discussions and activities.

Grading Scale

The following grading scale will be used for all exams and final course grades:

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	

Course-Specific Information

ACTIVE LEARNING

Your active participation in this class will be required. You will be responsible for your own learning by reviewing class material before and after class. I will guide you in this process; however, in the end, the onus of learning will be your responsibility. **Become intrinsically motivated to improve yourself and your understanding of management theories, policy and procedures, and application of;** if you do this you will succeed every time.

Here are some KEYS to success:

- EFFORT (Work hard)
- APPROACH (Work smart)
- ATTITUDE (Think positively)

Evidence-based medicine (EBM) is the integration of clinically relevant research, clinical skills and experience, and patient preferences and values (Sackett et al 2000). The increased awareness **and focus on the practice of Evidence-Based Medicine comes from our daily need for valid information about diagnosis, prognosis, therapy, and prevention.** We want to ask local questions about the effectiveness of therapeutic modalities and design ways to find answers. The EBM portion of this course is **designed so students can explore therapeutic modalities commonly used in the athletic training setting** and determine what evidence is available to support their current uses.

COURSE RULES/GUIDELINES

Acceptable behavior

- Make sure cell phones are turned off and put away (no texting or making/receiving calls during class).
- Even if you don't always agree, you will have respect for each other's opinions as to what is being discussed in class.
- Everyone learns at a different rate; at no time should you make other's feel inadequate

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 assigned in extremely unusual circumstances.

PLNU Spiritual Care

Balboa Campus

PLNU strives to be a place where you grow as a whole person. To this end, we provide resources for our graduate students to encounter God and grow in their Christian faith. At the Balboa campus, we have an

onsite chaplain, Rev. Kevin Portillo, who is available during class break times across the week. If you have questions or a desire to meet or share any prayer requests with Rev. Portillo, you may contact him directly at KevinPortillo@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 map on [State Authorization](#) to view which states allow distance education outside of California.

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 Recording Notification

In order to enhance the learning experience, please be advised that this course may be recorded by the professor for educational purposes, and access to these recordings will be limited to enrolled students and authorized personnel.

Note that all recordings are subject to copyright protection. Any unauthorized distribution or publication of these recordings without written approval from the University (refer to the Dean) is strictly prohibited.

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.

For all student appeals, faculty and students should follow the procedures outlined in the University Catalog. See [Graduate Academic and General Policies](#) for definitions of kinds of academic dishonesty and for further policy information.

During the first week of class, you will be asked to submit an Academic Honesty Verification Statement. Submitting the statement is a requirement of this course. By submitting the Academic Honesty Verification Statement, you will be verifying all assignments completed in this course were completed by you. Carefully review the Academic Honesty Statement below.

Statement: "In submitting this form, I am verifying all the assignments in this course will be completed by me and will be my own work."

Artificial Intelligence (AI) Policy

You are allowed to use Artificial Intelligence (AI) tools (e.g., ChatGPT, Gemini Pro 1.5, GrammarlyGo, Perplexity, etc.) in this course. Any work that utilizes AI-based tools must be clearly identified as such, including the specific tool(s) used. Please use the following sources to guide your citations when using AI.

- [MLA Style Center: Citing Generative AI](#)
 - [APA Style: How to Cite ChatGPT](#)
 - [Chicago Manual of Style: Citing Content Developed or Generated by AI](#)
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PLNU Academic Accommodations Policy

PLNU is committed to providing equal opportunity for participation in all its programs, services, and activities in accordance with the Americans with Disabilities Act (ADA). 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 619-849-2533). Once a student's eligibility for an accommodation has been determined, the EAC will work with the student to create an Accommodation Plan (AP) that outlines allowed accommodations. Professors are able to view a student's approved accommodations through Accommodate.

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. Accommodations are not retroactive so clarifying with the professor at the outset is one of the best ways to promote positive academic outcomes.

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. Students cannot assume that because they had accommodations in the past, their eligibility at PLNU is automatic. All determinations at PLNU must go through the EAC process. This is to protect the privacy of students with disabilities who may not want to disclose this information and are not asking for any accommodations.

Language and Belonging

Point Loma Nazarene University faculty are committed to helping create a safe and hospitable learning environment for all students. As Christian scholars we are keenly aware of the power of language and believe in treating others with dignity. As such, it is important that our language be equitable, inclusive, and prejudice free. Inclusive/Bias-free language is the standard outlined by all major academic style guides, including MLA, APA, and Chicago, and it is the expected norm in university-level work. Good writing and speaking do not use unsubstantiated or irrelevant generalizations about personal qualities such as age, disability, economic class, ethnicity, marital status, parentage, political or religious beliefs, race, gender, sex, or sexual orientation. Inclusive language also avoids using stereotypes or terminology that demeans persons or groups based on age, disability, class, ethnicity, gender, race, language, or national origin. Respectful use of language is particularly important when referring to those outside of the religious and lifestyle commitments of those in the PLNU community. By working toward precision and clarity of language, we mark ourselves as serious and respectful scholars, and we model the Christ-like quality of hospitality.

If you (or someone you know) have experienced other forms of discrimination, you can find more information on reporting and resources at [PLNU's Nondiscrimination webpage](#).

Sexual Misconduct and Discrimination

Point Loma Nazarene University faculty are committed to helping create a safe learning environment for all students. If you (or someone you know) have experienced any form of sexual discrimination or misconduct, including sexual assault, dating or domestic violence, or stalking, know that help and support are available through the [Title IX Office](#). Please be aware that under Title IX of the Education Amendments of 1972, it is required to disclose information about such misconduct to the Title IX Office.

If you wish to speak to a confidential employee who does not have this reporting responsibility, you can contact Counseling Services at counselingservices@pointloma.edu or find a list of campus pastors via our [Sexual Harassment and Discrimination Policy](#).

If you (or someone you know) have experienced other forms of discrimination or bias, you can find more information on reporting and resources via our [Nondiscrimination and Anti-harassment Policy](#).

PLNU Attendance and Participation Policy

Regular and punctual attendance at all class sessions is considered essential to optimum academic achievement. Therefore, regular attendance and participation in each course are minimal requirements.

If the student is absent for more than 10 percent of class sessions, 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 withdrawal date or, after that date, receive an "F" grade.

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.

Refer to [Academic Policies](#) for additional details.

Synchronous Attendance/Participation Definition

For synchronous courses that have specific scheduled meeting times (including in-person, hybrid, and synchronous online courses), absences are counted from the first official meeting of the class regardless of the date of the student's enrollment. For courses with specific attendance requirements, those requirements are outlined in the course syllabus.

Note: For synchronous courses with an online asynchronous week, refer to the Online Asynchronous Class Attendance policy listed below.

Online Asynchronous Attendance/Participation Definition

Students taking online courses with no specific scheduled meeting times are expected to actively engage throughout each week of the course. Attendance is defined as participating in an academic activity within the online classroom which includes, but is not limited to:

- Engaging in an online discussion
- Submitting an assignment
- Taking an exam
- Participating in online labs
- Initiating contact with faculty member within the learning management system to discuss course content

Note: Logging into the course does not qualify as participation and will not be counted as meeting the attendance requirement.

Course Modality Definitions

1. Online Courses: These are courses with class meetings where all instruction and interaction are fully online.
 1. Synchronous Courses: At least one class meeting takes place at a designated time.
 2. Asynchronous Courses: All class meetings are asynchronous.
2. Hybrid Courses: These are courses with class meetings that take place both in the classroom and online synchronously and/or asynchronously.
3. In-Person Courses: These are courses that meet in person with the instructor and students in a physical classroom setting. With approval by the area dean, this may include up to 25% of qualified class interactions through a Learning Management System (such as Canvas).

Use of Technology

In order to be successful in the online or hybrid environment, you'll need to meet the minimum technology and system requirements; please refer to the [Technology and System Requirements](#) information. Additionally, students are required to have headphone speakers, microphone, or webcams compatible with their computer available to use. Please note that any course with online proctored exams requires a computer with a camera (tablets are not compatible nor allowable) to complete exams online.

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

GPS Academic Resources

PLNU offers the following free academic resources virtually for Graduate Professional Studies (GPS) Students. Visit myPLNU through the links below for more information.

- [The GPS Writing Center](#) offers:
 - **Zoom Writers Workshops** offered each quad on a variety of helpful topics
 - **One-to-one appointments** with the Writing Coach
 - **Microlearning YouTube Video Library** for helpful tips anytime
 - [Research Help Guide](#) to help you start your research
 - The physical office is located on the third floor of the [Mission Valley Regional Center](#) off the student lounge
 - [Academic Writing Resources Course](#): Found on your Canvas Dashboard, this course is non-credit with 24/7 access, no time limits, and self-paced content. [Watch a quick video run-through](#) and take time now to explore!
 - [Grammarly](#): Students have unlimited FREE access to Grammarly for Education, a trusted tool designed to help enhance writing skills by providing real-time feedback, identifying areas for improvement, and providing suggestions. Grammarly's Generative AI is NOT available with our student accounts.
 - [Tutoring](#): Students have access to 24/7 live or scheduled subject tutoring through Tutor.com, including a Paper Drop-Off Service with feedback within 12 hours.
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Assignments-at-a-Glance

The course summary below lists our assignments and their due dates. Click on any assignment to review it.

