Directed Readings

Meeting Days:	Thursday	Instructor:	Jacob R. Goodin, Ph.D., CSCS
Meeting Times:	5:30 to 8:00p	Phone:	(619) 849-2254
Meeting Location(s):	Balboa Campus	Email:	jgoodin@pointloma.edu
Final Exam:	5/7/22	Office Hours:	By Appointment

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.

COURSE DESCRIPTION

This course provides advanced study and experience in applied sport science techniques. Advanced skills in training and performance quantification, athlete monitoring techniques, and data management and presentation will be acquired. This includes hands-on data collection opportunities and the creating of a fully functional athlete monitoring dashboard. Students will submit an athlete monitoring dashboard and take a final exam at the completion of the course. *Prerequisite: KIN 6005, KIN 6010, KIN 6065 or equivalent.*

COURSE AIM AND INTRODUCTION

This course is designed to layer atop the foundational knowledge of training theory gained in KIN 6065 (Sport and Tactical Strength and Conditioning) by introducing students to the sport science concepts of training load monitoring, performance assessment, and evidence-based training recommendations. These three inter-related concepts constitute the emerging role of the sport scientist within a high-performance sporting organization. Students will integrate multiple domains of knowledge—periodization and program design, research design and statistics, evidence-based practice, biomechanics, and exercise physiology—and leverage them for the purposes of improved sport performance. Ultimately, a sport scientist's job is to elevate individual and team performance while caring for athletes' overall wellbeing, and to provide decision-makers with relevant and up-to-date information. This course will provide in-depth practical experience in these regards.

Attendance at each session is mandatory and the student is expected to have completed any work prior to the start of class.

COURSE LEARNING OUTCOMES

After completing this course, you should be able to:

1. Select appropriate monitoring and testing measures based on sport demands and athlete characteristics.
2. Plan and execute a data collection session utilizing sport science technology using valid and reliable testing methodology.
3. Critically analyze sport training programs and make evidence-based training recommendations based on athlete monitoring and testing data.
4. Design a testing and monitoring dashboard that effectively communicates key metrics to key sport performance staff.

REQUIRED TEXTS AND MATERIALS

French, D., Torres Ronda, L., & NSCA -National Strength & Conditioning Association (Eds.). (2021). *NSCA's Essentials of Sport Science*. Human Kinetics

Purchase on Amazon: https://amzn.to/3Aiunsp

EDUCATIONAL OPPORTUNITIES

1. ***Attendance & Participation:*** Each class session will have both didactic and applied components. Attendance to each session is mandatory and there is an expectation that students come prepared to participate fully in classroom discussion, listen actively during lectures and tutorials, and work collaboratively with their peers during lab time.

2. ***Reading Quizzes:*** Students will be tested weekly on their readings through the use of short reading comprehension quizzes. These quizzes will cover the textbook assigned reading, but also any ancillary reading assigned for that week as well.

3. ***Methods and Reports:*** Throughout this course, students will collect various performance data during class. Following these sessions, students will formally write up the methods used to collect the data, and compose a mini data report that is intended to be both timely and actionable. The methods will be written up in bullet-point format in a Microsoft Word document, and the data report will consist of a Microsoft Excel file with one tab for the data, and a second tab for the data report. The data report will consist of figures, graphs, and numbers intended to give a coach or practitioner real-world value from the data collected.

4. ***Athlete Monitoring Dashboard:*** The final assignment for this class will be to create an athlete monitoring dashboard in Google Sheets or in Excel. These will be created in groups, and each dashboard will be unique to the specific data each group generates. (Many) More details can be found in Canvas.

5. ***Final Exam:*** The final exam will be cumulative and cover all of the reading and lecture material for the course.

COURSE GRADING AND ASSIGNMENTS

- Attendance: 8x10 pts
- Reading Quizzes: 8x10 pts
- Methods & Report Assignments: 8x10 pts
- Athlete Monitoring Dashboard: 80pts
- Final Exam: 80 pts

Total: 400 pts
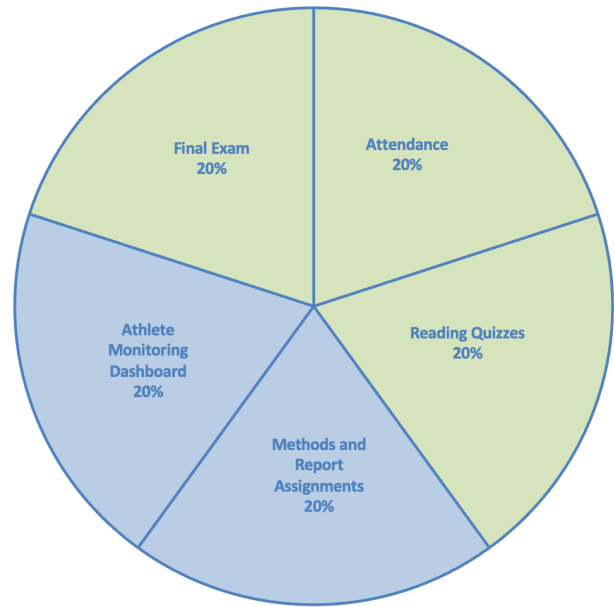
Student grades will be posted in the Canvas grade book no later than midnight on Tuesday of each week beginning in Week Two of this course. It is important to read the comments posted in the grade book as these comments are intended to help students improve their work. Final grades will be posted within one week of the end of the class. The final grade percentage will be rounded to the nearest percent with grades being recorded as follows:

Grade	Percent	Grade	Percent	Grade	Percent
A	93 - 100	B-	80 - 82.9	D+	67 - 69.9
A-	90 - 92.9	C+	77 - 79.9	D	63 - 66.9
B+	87 - 89.9	C	73 - 76.9	D-	60 - 62.9
B	83 - 86.9	C-	70 - 72.9	F	0 - 59.9

NOTE: It is your responsibility to maintain your class schedule. Should the need arise to drop this course (personal emergencies, poor performance, etc.), you have the responsibility to first contact the professors. Then if no accommodations can be made, you are responsible to follow through (provided the drop date meets the stated calendar deadline established by the university).

LATE ASSIGNMENTS

All assignments are to be submitted/turned in by their assigned dates (midnight). Incompletes will only be assigned under extremely unusual circumstances.
A 10% reduction in grade will be applied for each day an assignment is late.

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 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. Faculty should follow and students may appeal using the procedure in the university Catalog. See [Academic Policies](#) 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 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.

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](#) in the Graduate and Professional Studies Catalog for additional detail.

Attendance Policy for Hybrid/Blended Courses

Students taking hybrid/blended 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 and attending face-to-face class meetings. (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 in the online course will be issued an attendance warning. Students who do not attend at least once in any 7 consecutive days in the online course or face-to-face sessions will be dropped from the course retroactive to the last date of recorded attendance.

ACADEMIC STANDING

Graduate students at Point Loma must obtain a 3.0 GPA to remain in good standing in the MS Kinesiology program:
http://catalog.pointloma.edu/content.php?catoid=20&navoid=1403#Academic_Standing.
Additionally, all graduate students need to earn a C or higher in all graduate courses according to the catalog grading policy:

| 6025 Tentative Schedule | | | | | | | | = F2F meeting |

Module	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Module 1 (wk 1-2)	3/14	3/15	3/16	**3/17**	3/18	3/19	3/20	3/21	3/22	3/23	**3/24**	3/25	3/26	3/27
Sport Science & The Training Process	Topic: what is sport science?						Rest	quantifying the training process						Rest
	Lab: sport science tech familiarization							RPE & neuromuscular readiness						
	Due:	due before this class			due by next class				due before this class			due by next class		
		ch. 1 & quiz			sport sci tech familiarization				ch. 2 & 13 & quiz			NMR methods & report		
Module 2 (wk 3-4)	3/28	3/29	3/30	**3/31**	4/1	4/2	4/3	4/4	4/5	4/6	**4/7**	4/8	4/9	4/10
KPIs, Profiling, & Benchmarking	Topic: Needs Analysis: KPIs						Rest	Needs Analysis: Profiling & Benchmarking						Rest
	Lab: isometric testing							load- and power-velocity profiling						
	Due:	due before this class			due by next class				due before this class			due by next class		
		ch. 5 & quiz			isometric methods & report				ch. 6 & quiz			load-velocity methods & report		
Module 3 (wk 5-6)	4/11	4/12	4/13	4/14	4/15	4/16	4/17	4/18	4/19	4/20	**4/21**	4/22	4/23	4/24
Preparing for a Testing Battery	Topic: Easter Break (no class)						Rest	testing & monitoring preparations						Rest
	Lab: go to Easter Service or mass							testing day group rotations						
	Due:	due before this class			due by next class				due before this class			due by next class		
		ch. 7 & quiz			testing battery methods draft				ch. 8 & quiz			testing battery methods & report		
Module 4 (wk 7-8)	4/25	4/26	4/27	**4/28**	4/29	4/30	5/1	5/2	5/3	5/4	**5/5**	5/6	5/7	5/8
Athlete Monitoring Data and Dashboards	Topic: how to extract & clean data						Rest	athlete monitoring dashboards						Rest
	Lab: data extraction & cleaning (laptops)							AM dashboard workshop						
	Due:	due before this class			due by next class				due before this class			due by next class		
		ch. 21 & 22 & quiz			cleaned testing battery dataset				ch. 30 & 31 & quiz			dashboard report, presentation, & final		

	week 1							week 2						
KIN 6025 weekly microcycle -->	mon	tue	wed	thu	fri	sat	sun	mon	tue	wed	thu	fri	sat	sun
	readings, videos, quiz			class	assignments		rest	readings, videos, quiz			class	assignments		rest

Due Dates: Every Wed @11:59p