

# **Structural Kinesiology**

Meeting Days:	Tuesdays	Instructor:	Jacob R. Goodin, PhD, CSCS			
Meeting Times:	Section 1: 10:00 to 11:45	Phone:	Email to set up a phone meeting			
Meeting Location(s):	KIN 1	Email:	jgoodin@pointloma.edu			
Final Exam:	Section 1: 5/3 from 10:30a to 1:00p	Office Hours:	See Canvas for appt. details			

## **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**

In-depth study of the structure and function of neuro-musculo-skeletal components of the human body in motion. Promotes mastery of anatomical structure and function in order to make useful application to movement analysis, and serves as a framework for advanced study of human movement for sport, fitness, and recreation.

Prerequisite: BIO 130

## **COURSE LEARNING OUTCOMES**

In this course, successful students will learn to...

- Apply the language, concepts and procedures of Structural Kinesiology to the evaluation of human movement
- Identify diarrhrodial joints and demonstrate the physiological motions of those joints by anatomical planes and axes.
- Demonstrate mastery of the structure and function of skeletal muscles and their primary and synergistic effects on kinetic chain dynamics.
- Demonstrate typical and dysfunctional gait, sport, and rehabilitation skills.
- Design movement analysis techniques and report simple and complex motion in anatomically specific contexts and draw conclusions about the effectiveness, efficiency and safety of those motions.
- Contribute to and benefit from team-based learning which simulates the graduate and professional settings of your future.

## **COURSE GRADING AND ASSIGNMENTS**

Video Lecture Responses: 7x5 pts
In-class participation: 14x5 pts

In-class participation: 14x5 pts
 Individual Palpation Videos: 7x5 pts

• Team Video Analysis (TVA): 7x10 pts

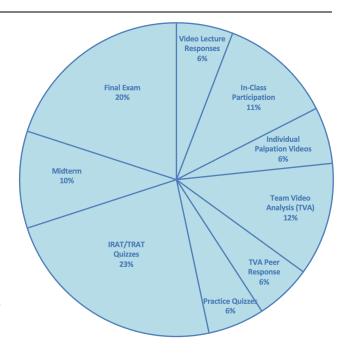
TVA Peer Response: 7x5 ptsPractice Quizzes: 7x5 pts

• IRAT/TRAT Quizzes: 7x20 pts

Midterm: 60 ptsFinal Exam: 120 pts

Total: 600 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
Α	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	С	73 - 76.9	D-	60 - 62.9
В	83 - 86.9	C-	70 - 72.9	F	0 - 59.9

## **EDUCATIONAL OPPORTUNITIES**

**Note**: All assignments are to be submitted electronically via Canvas by Saturday at 11:59pm unless otherwise noted. The only exception are the initial posts for discussions, which are due on Wednesdays at 11:59pm.

1. Lecture Responses: The lecture videos are created to give you an overview or sometimes a deeper look into concepts that you find in the textbook reading. Earn participation points by "Liking" the video and then leaving a comment to let me know you watched it (you have to be signed in to your YouTube, Google, or Gmail account for this to work). Your comment can be a 1-2 sentence executive summary, a thoughtful question, or funny comment relevant to the video or topic discussed. In addition to your comment, feel free to upvote other's comments that you related to, laughed at, or that you found yourself asking the same question. This should be done before class on Tuesday so that you already have knowledge of the region we will be palpating in class. Students may have participation

points docked for not arriving to class having watched the lectures as this will hold back their peers.

At the end-screen of the video, click on the link to be taken to the next video in the sequence without needing to leave YouTube.

Don't forget to subscribe to the channel so you're alerted when new videos are added.

- 1. Palpation Labs: The first Tuesday of each module will be dedicated to learning to professionally locate and palpate the various structures and muscles of the body segment we are studying. Each student should watch the lecture videos *before* arriving to class so that they are prepared to learn and engage with classmates. I will take a few minutes to introduce or reinforce topics before passing out guided palpation labs. Each group will work through the written palpation exercises. Once completed, I will administer a palpation skill check for each group, which must be passed with 100% before leaving class for the day. Below are some guidelines:
  - Dress in clothing that is convenient for palpations.
  - Be prepared to put in serious mental and physical work to learn the skills of the day. It is rewarding to work hard and improve.
  - Proper mask use must be maintained at all times.
  - Proper sanitization protocols will be explained and followed. Gloves will be worn while palpating.
  - All palpation work will be done with the utmost respect and professionalism. At any point a student who feels uncomfortable for any reason can request to skip a palpation.
- 2. Palpation Videos: To be completed during the first week of each module after attending the palpation lab. These videos will be created individually, and should show you palpating all of the appropriate structures on another individual such as a roommate, friend, significant other, or member of your group. The purpose of these videos is to begin to develop a base of clinical or practical skills you can take with you into your profession. Practice these palpation demonstrations ahead of time to ensure that your hand/finger placement and description of muscle actions is precise.
  - Due to the current COVID-19 pandemic, it is advised that you perform these individuals (family, roommates) who are well and free of symptoms
  - Keep each video to under 3 minutes.
  - Upload to YouTube and submit the link to Canvas.
  - Keep a professional demeanor at all times while thoroughly palpating the full length each muscle, bone, or joint structure. Explain how you are locating a structure, it's significance, nearby landmarks, or its actions (if it's a muscle)
- 3. **Practice Quizzes**: These guizzes can be taken at any point during 1<sup>st</sup> week of each module.

- The quizzes will be timed (20 minutes), but each person can take 3 attempts and your highest score is kept. Questions are cycled so make sure you've studied and have done the reading first!
- For the practice assessments only, you may communicate with team members via Zoom (or some other app). I recommend waiting until each person is logged into the Zoom meeting before starting the quiz.
- 4. **Individual Readiness Assessment Test (IRAT)**: The second week of each module, an IRAT will be administered at the beginning of class. These assessments are designed to provide you, your team, and your professor with feedback on your readiness for the data collection and lab topic of the day.
  - The assessment is timed to be available for the first 15 minutes of class.
  - No provision is made for make-up or late arrival assessments.
  - Unlike the TRAT, students do not get immediate feedback on the IRAT
  - We will vote on whether the IRAT constitutes 40%, 50%, or 60% of your total IRAT/TRAT score (20 pts total).
  - Bring your laptop to take the quiz through Canvas. Phones, tablets, and other devices will not work for the assessment.
- 5. **Team Readiness Assessment Test (TRAT)**: Taken after the IRAT is completed. Enhances mastery through team-based learning and discussion to determine correct answers.
  - Work together with your team to reach a consensus on each answer.
  - Your team's answer to each question is scratched off the answer sheet.
  - The correct answer will reveal a star shape under the scratcher, an incorrect answer will be blank.
  - We will vote on whether the TRAT constitutes 40%, 50%, or 60% of your total IRAT/TRAT score (20 pts total).
  - The score for each item is based upon the number of attempts the team takes to get the correct answer
    - o 1<sup>st</sup> attempt = 4 pts
    - o 2<sup>nd</sup> attempt = 2 pts
    - o 3<sup>rd</sup> attempt = 1 pts
    - o 4<sup>th</sup> attempt = 0 pts
    - o Divide total by 4, and multiply by the percent voted on above
- 6. **Team Video Analysis (TVA)**: To be completed during the second week of each module. A team-based assignment that harnesses team-based, collaborative learning, giving students a chance to identify and discover anatomical structures, actions, and movement concepts. Each week your Canvas prompt will set the context, explain the task(s), and give instructions for video assignment creation.
  - Read and understand the prompt.

- Practice each step of the prompt as many times as necessary to develop proficiency before recording.
- Record and narrate the video task, and save your video files to a Google Drive folder so that one team member can compile them.
- Compile the video, keeping it to 5 minutes or less. One group member should upload the video to YouTube and then submit the link to Canvas. Set the video to "unlisted" but don't set it to "private", as that will prevent me from grading it and your peers from viewing it. One video submission per team.
- Be sure to distribute the work evenly, and all verbal information should be delivered live (limit post-filming voice-overs).
- 7. **TVA Peer Response**: During the second week of each module, individuals will have the chance to view and evaluate TVA assignments from other teams. Please leave a substantive comment on at least two videos from other groups. Comments should address specific elements that were well-executed, creative, or humorous, or they should provide constructive feedback for the group.
- 8. **Midterm & Final Exam**: The midterm & final exam will each be a Canvas quiz monitored by HonorLock, covering material from each previous module. The midterm will contain questions from modules 1-3 (first 8 weeks of class), and the final exam will contain questions from modules 1-7 (entire semester). Questions will be presented in multiple choice format similar to the module quizzes.
- 9. **Textbook Reading**: Regular reading chapters will be assigned from the textbook in order to be prepared to engage virtually with your peers and to understand the material.

# REQUIRED TEXTS AND MATERIALS

Floyd, R. T. Manual of Structural Kinesiology, 21st edition. McGraw-Hill Education (2021)

• Note: any of the editions listed below are all acceptable. Be aware that the chapter order may vary.

19th edition
 20th edition
 21st edition
 direct link: <a href="https://amzn.to/3mlcqV1">https://amzn.to/3mlcqV1</a>
 direct link: <a href="https://amzn.to/3j4LqHt">https://amzn.to/3j4LqHt</a>
 direct link: <a href="https://amzn.to/3sBGA7v">https://amzn.to/3sBGA7v</a>

In addition to the textbook, for this online course you will need access to the following:

- Zoom: <a href="https://zoom.us/">https://zoom.us/</a>
  - Sign up for a free account using your PLNU email address. Download the app to your laptop, phone, and/or tablet.
- Google Drive: https://www.google.com/drive/
  - You already have a free account associated with your PLNU email address. In this class we will use the browser-based document functionality.
- Google Chrome: <a href="https://www.google.com/chrome/">https://www.google.com/chrome/</a>

- Google Chrome is the required browser for HonorLock, and must be downloaded and used on a laptop or desktop for the module quizzes, midterm, and final exam.
- Laptop or desktop computer equipped with a microphone and webcam
- Ability to record yourself using a phone, camera, or webcam

## **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 2-unit class delivered over 15 weeks. For this course, students will spend an estimated 50 total hours meeting the course learning outcomes (based on 37.5 hours of student engagement per credit hour). Specific details about how the class meets the credit hour requirement can be provided upon request.

## LATE AND INCOMPLETE ASSIGNMENTS

All assignments are to be submitted/turned in according to the specified time in Canvas. Late assignments/quizzes will be docked 20% per day with assignments/quizzes submitted over 5 days late receiving a 0. Completes will only be assigned in extremely unusual circumstances.

## FINAL EXAMINATION POLICY

Successful completion of this class requires completing the final examination online using Honorlock by the date specified in Canvas.

#### 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 <a href="Academic Policies">Academic Policies</a> for definitions of kinds of academic dishonesty and for further policy information.

# 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 <a href="State Authorization">State Authorization</a> to view which states allow online (distance education) outside of California.

## 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 deenrollment. 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.

#### TUTORING

The PLNU Tutorial Center is available free of charge for all current, undergraduate PLNU students. It offers tutoring for most subjects, as well as for general help with paper editing, study skills, etc. The Tutorial Center is located on the south end of Bond Academic Center, next to the Study Abroad offices. Tutoring is available over the phone at (619) 849 2593, or via email at TutorialServices@pointloma.edu.

## SPIRITUAL CARE

Please be aware PLNU strives to be a place where you grow as whole persons. To this end, we provide resources for our students to encounter God and grow in their Christian faith.

If students have questions, a desire to meet with the chaplain or have prayer requests you can contact the <u>Office of Spiritual Development</u>.

## **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 <u>Technology and System Requirements</u> 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 require a computer with a camera (tablets are not compatible) 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.

#### **OFFICE HOURS**

It is important to me that I get to know each of you on an individual level, therefore I will be posting virtual office hours via the Zoom virtual conferencing app. I will send out more details on this soon. I have an open-door policy for questions, nerdy training theory discussions, or if you just need someone to listen and pray for you. I often won't have all the answers, but I'm positive we can figure it out together!

# **Tentative Semester Schedule & Module Setup**

							Due Date: Saturdays @11:59							
Module	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Module 1 (wk 1-2)	1/17	1/18	1/19	1/20	1/21	1/22	1/23	1/24	1/25	1/26	1/27	1/28	1/29	1/30
The Trunk & Spinal Column	Video Lecture Responses (before class)						IRAT/TRAT Quiz (in class)				Rest			
The Trank & Spinar Column	Palpation Lab (in class)				Rest	TBL Assignment (in class)								
ch. 11	Practio	ce Quiz	& Palpat	tion Vide	eo (aftei	rclass)		TVA Assignment (after of class)						
Module 2 (wk 3-4)	1/31	2/1	2/2	2/3	2/4	2/5	2/6	2/7	2/8	2/9	2/10	2/11	2/12	2/13
The Shoulder Girdle &	Vid	eo Lectu	ire Resp	onses (k	pefore cl	ass)	٠	IRAT/TRAT Quiz (in class)						
Shoulder Joint		Pal	pation L	ab (in cl	ass)		Rest	TBL Assignment (in class)						Rest
ch. 4-5	Practio	Practice Quiz & Palpation Video (after class)						TVA Assignment (after of class)						
Module 3 (wk 5-6)	2/14	2/15	2/16	2/17	2/18	2/19	2/20	2/21	2/22	2/23	2/24	2/25	2/26	2/27
The Elbow & Radioulnar	Vid	eo Lectu	ire Resp	onses (b	oefore cl	ass)		IRAT/TRAT Quiz (in class)						
Joints	Palpation Lab (in class)					Rest	TBL Assignment (in class)					Rest		
ch. 6	Practice Quiz & Palpation Video (after class)							TVA Assignment & Midterm (after of class)						
Module 4 (wk 7-8)	2/28	3/1	3/2	3/3	3/4	3/5	按	3/14	3/15	3/16	3/17	3/18	3/19	3/20
The Wrist & Hand Joints	Video Lecture Responses (before class)			spring break	IRAT/TRAT Quiz (in class)				Rest					
The Whist & Hand Johns	Palpation Lab (in class)				TBL Assignment (in class)									
ch. 7	Practice Quiz & Palpation Video (after class)					Ŋ	TVA Assignment (after of class)							
Module 5 (wk 9-10)	3/21	3/22	3/23	3/24	3/25	3/26	3/27	3/28	3/29	3/30	3/31	4/1	4/2	4/3
The Hip Joint & Pelvic Girdle	Video Lecture Responses (before class)				IRAT/TRAT Quiz (in class)				Rest					
The hip some a relivie dirace	Palpation Lab (in class)				Rest	TBL Assignment (in class)								
ch. 8	Practice Quiz & Palpation Video (after class)						TVA Assignment (after of class)							
Module 6 (wk 11-12)	4/4	4/5	4/6	4/7	4/8	4/9	4/10	4/11	4/12	4/13	4/14	4/15	4/16	4/17
The Knee Joint	Video Lecture Responses (before class)					Rest	IRAT/TRAT Quiz (in class)							
	Palpation Lab (in class)						TBL Assignment (in class)				Rest			
ch. 9	Practio	ce Quiz	& Palpat	tion Vide	eo (aftei	rclass)			TVA As:	signmen	t (after	of class)		
Module 7 (wk 13-14)	4/18	4/19	4/20	4/21	4/22	4/23	4/24	4/25	4/26	4/27	4/28	4/29	4/30	5/1
The Ankle & Foot Joints	Video Lecture Responses (before class)					IRAT/TRAT Quiz (in class)								
THE ATIME & FOOL JOINES	Palpation Lab (in class)			Rest	TBL Assignment (in class)				Rest					
ch. 10	Practice Quiz & Palpation Video (after class)							TVA As:	signmen	t (after	of class)			
Module 8 (wk 15)	5/2	5/3	5/4	5/5	5/6	5/7	5/8			·				
Final Exam	Final	Exam			Rest									
	(on	line)			ž									

= Palpation Day! = Quiz/TBL Day!