PLNU forward

Kinesiology

EXS 370

3 Units

Praxis of Strength Training, Conditioning and Kinesiatrics

Fall 2017

Meeting days: **M,W**	**Instructor:** **Brent A. Alvar, Ph.D., CSCS*D, RSCC*D, FNSCA, FACSM**
Meeting times: **1:25pm - 2:40pm**	**Phone: 619-849-3007**
Meeting location: KIN_2	**E-mail: balvar@pointloma.edu**
Final Exam: **Dec. 11; 1:30pm-4pm**	**Office location and hours: KIN #12; M & W;** **9:00am – 11:00am or 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

Application of concepts of exercise science in the development and practice of strength training and conditioning programs. Kinesiatrics, movement to enhance athleticism, physical efficiency, and organismic wellness, is practiced. May be used to prepare for national certification in strength and conditioning or fitness and wellness.

COURSE LEARNING OUTCOMES

- Demonstrate and analyze proper lifting, plyometric, and stretching technique.
- Explain how energy systems work in our body during exercise and sport.
- Assess and evaluate clients for various components of fitness.
- Design and implement safe and effective strength training, conditioning and personal training programs by applying exercise prescription principles for training variation, injury prevention, and reconditioning. (PLO.5)
- Learn how to provide guidance regarding nutrition and performance-enhancing substances.

COURSE SCHEDULE AND ASSIGNMENTS

I. Course Grading

- Quizzes (24 @ 5pts each): 120pts
- Midterm: 100pts
- Final: 150pts
- Group Project: 100pts
- Individual Project: 100pts
- Weightlifting/Powerlifting Videos: 50pts
- Labs (8 @ 10pts each): 80pts
- Attendance and Participation: 50pts

Total: 750

II. Educational Opportunities

1. **Individual Project:** Student will develop a Sport-specific strength and conditioning program for a sport of their choice.
    - **a.** The program is to include:
        - **i.** Schedules for Off-Season, Pre-Season, In-Season, & Post-Season training
        - **ii.** Movement Drills: specific to their sport for warm-up and skill development
        - **iii.** Weight Training Exercise Program
            1. Frequency
            2. Intensity
            3. Sets
            4. Reps
            5. Rest
        - **iv.** Energy Systems Training a.k.a Conditioning (Phosphagen, Glycolytic, Oxidative)
            1. Include brief explanations of why certain exercises/movement drills were used to train a specific energy system
        - **v.** A minimum of three (3) reliable sources are to be referenced.
            1. This is not a group project and, each student is responsible for their own project. However, group sharing of common methods is encouraged.

2. **Weightlifting/Powerlifting Video Recording and Analysis:** Each student will record themselves performing a set of Parallel Back Squats, Power Cleans, and Power Snatches from both front and side angles. After the recordings are acquired, each student will use Imovie (or similar technology) to produce a video clip for each lift using the two recording angles and end up with a side-by –side video of themselves to analyze for each of the three lifts.

3. **Chapter quizzes:** Regular chapter quizzes will be given to test knowledge of the readings in textbook. Quizzes must be completed prior to class for full credit.

4. **Midterm exam:** The midterm exam will be designed to test the students' comprehension of material in the previous sections and new material presented via lectures and independent studying of the

textbook. Questions will include: multiple choice, fill in the blank, matching, true/false, and short answer format.

5. **Final exam:** The final exam will resemble an NSCA Practice Exam which is a comprehensive multiple choice test including questions requiring video clips.

6. **Participation in class and physical activities:** Most class sessions will be held in places other than a classroom for the purpose of actually performing certain physical activities. These activities are designed to broaden the students' knowledge base and enhance learning and retention. Some concepts are better learned by doing them rather than just reading about them or watching a video about them. Student will be told in advance of upcoming class periods being activity days, and that proper attire should be worn. (Examples of activity days are; lifting in the weight room, performing a plyometric workout, being exposed to different kinds of stretching techniques, completing a conditioning workout).

7. **Textbook Reading:** Regular reading assignments will be assigned from the textbook in order to come prepared for the upcoming classes and be able to participate in the discussions and perform well on quizzes.

8. **Labs:** There will be a short lab report due 1 week after each laboratory experience in the class. Most labs will consist of a specific topic we are discussing in class that week.

9. **Group Project**s: Students will be put in groups of 3 to 4 members. Each group will choose 2 methods of exercising (TRX, Crossfit, Kettlebells, Tabata, Battling Ropes, Bands, Chains etc.). Each group will learn relevant information about and become "experts" about their topics. Groups will have approximately half a class period (~40 mins.) to introduce the training methods to the class in a "hands-on" participation session, explain the pros and cons of why one would choose to use or not use this method of working out, and what types of athletes would benefit from this type of training. Each person needs to do their fair share of the group's work. This includes organization, set-up, speaking/teaching. This project is intended to give all class members a professional and correct representation of your group's training methods, therefore extra effort needs to be given to preparation and mastery of the training method prior to your presentation days.

Tentative Course Schedule

DATE PRESENTED	CLASS CONTENT	ASSIGNMENT DUE
Aug 29th	Introduction/Ch. 1 Structure and Function of Body Systems	
Aug 30th	Ch. 14 Warm-up (flexibility) **(Lab 1)**	Ch. 1 Quiz & Ch. 14 Quiz
Sept 4th	Labor Day (No Class)	
Sept 6th	Ch. 2 Biomechanics of Resistance Training	Ch. 2 Quiz Warm-up (flexibility) **lab**
Sept 11th	Ch. 15 Exercise Technique **(Lab 2)**	Ch. 15 Quiz
Sept 13th	Ch. 3 Bioenergetics of Exercise and Training	Ch. 3 Quiz

Sept 18th	Ch. 4 Endocrine Responses to Resistance Training	Exercise Technique **lab** Ch. 4 Quiz
Sept 20th	In weight room: Weightlifting Techniques **(Lab 3 - part 1)**	
Sept 25th	In weight room: Weightlifting Techniques (**Lab 3 - part 2)**	
Sept 27th	Ch. 5 Adaptations to Resistance Training	Ch. 5 Quiz
Oct 2nd	Ch. 17 Program Design for Resistance Training	Weightlifting Technique **Lab** Ch. 17 quiz
Oct 4th	Ch. 12 Principles of Test Selection and Administration **(lab – 4 part 1)**	Ch. 12 Quiz
Oct 9th	Ch. 13 Administration, Scoring, and Interpretation of Tests **(lab – 4 part 2)**	Ch. 13 quiz
Oct 11th	**Midterm**	**Weightlifting/Powerlifting Videos** Test Selection and Administration **Lab**
Oct 16th	Ch. 6 Adaptations to Aerobic Training	Ch. 6 quiz
Oct 18th	Ch. 16 Exercise Technique for Alternative Modes of Training **(Lab 5)**	Ch. 16 quiz
Oct 23rd	Ch. 20 Program Design Aerobic Training **(Lab 6)**	Ch. 20 quiz
Oct 25th	Aerobic Capacity Lab	Alternative Training **Lab**
Oct 30th	Ch. 18 Program Design and Technique for Plyos **(Lab 7)**	Ch. 18 quiz
Nov 1st	Ch. 19 Program Design and Technique for Speed and Agility **(Lab 8)**	Ch. 19 quiz Aerobic Capacity **Lab**
Nov 6th	Group Presentations	
Nov 8th	Group Presentations	
Nov 13th	Ch. 21 Periodization	Ch. 21 quiz Plyo **Lab**
Nov 15th	Ch. 7 Age- and Sex- Related Differences	Speed and Agility **Lab** Ch. 7 quiz
Nov 20th	Ch. 8 Psychology of Athletic Prep and Performance	Ch. 8 quiz
Nov 22rd	Ch. 9 Basic Nutrition Factors	Ch. 9 quiz
Nov 27th	Ch. 10 Nutrition Strategies for Maximizing Performance	Ch. 10 Quiz
Nov 29th	Ch. 11 PEDs	Ch. 11 Quiz
Dec 4th	Ch. 22 Rehab and Reconditioning	Ch. 22 Quiz
Dec 6th	Ch. 23 and 24 Facility Design and Policies/Review	Ch. 23 and 24 Quiz **Individual Project**
Dec 11th	**Final Exam**	

REQUIRED TEXTS AND RECOMMENDED STUDY RESOURCES

1. Haff, GG, and Triplett, NT, eds. *Essentials of Strength Training and Conditioning*, 4th ed. Champaign, IL: Human Kinetics, 2016.

ASSESSMENT AND GRADING

Grade scale:	
A=93-100	C=73-76
A-=92-90	C-=70-72
B+=87-89	D+=67-69
B=83-86	D=63-66
B-=80-82	D-=60-62
C+=77-79	F=0-59

INCOMPLETES AND LATE ASSIGNMENTS

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

FINAL EXAMINATION POLICY

Successful completion of this class requires taking the final examination **on its scheduled day**. The final examination schedule is posted on the Class Schedules site. No requests for early examinations or alternative days will be approved.

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

If you have a diagnosed disability, please contact PLNU's Disability Resource Center (DRC) within the first two weeks of class to demonstrate need and to register for accommodation by phone at 619-849-2486 or by e-mail at DRC@pointloma.edu. See Disability Resource Center for additional information.

PLNU ATTENDANCE AND PARTICIPATION POLICY

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 Undergraduate Academic Catalog.