

# **Department of Kinesiology**

EXS 350L: Fitness Assessment & Exercise Prescription Lab

# Spring 2020

Meeting days: Thursday	Instructor: Susan Ganz, PhD, ATC, CFSC	
<b>Meeting times:</b> Section1: 1:30pm – 3:15pm Section 2: 7:30am – 9:15am <b>Office phone:</b> 619-849-2629		
Meeting location: Rohr Cell Phone: 619-701-2567		
Class dates: 1-13-20 through 5-1-20	E-mail: susanganz@pointloma.edu	
Final Exam: No Final	Office hours:	

#### **COURSE DESCRIPTION AND AIM**

This course covers principles of exercise prescription with hands-on experience using various field methods to evaluate cardiorespiratory fitness, muscular fitness, body composition, flexibility and balance. This course is designed for those seeking a career in the health/fitness industry and serves as preparation for certification exams such as the ACSM Certified Health Fitness Specialist or NSCA Strength and Condition Specialist.

#### **PREREQUISITES**

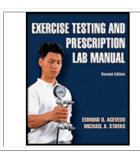
KIN 340: Exercise Physiology & KIN 340L: Exercise Physiology lab

#### STUDENT LEARNING OUTCOMES

Upon completion of this course, the student will:

- 1. Develop knowledge of the principles of physical fitness assessment, interpretation of results, and exercise prescription.
- 2. Have the opportunity for practical experiences using field and laboratory tests for the appraisal of physical fitness status and the design of individualized exercise programs in the following areas:
  - A) health screening & risk stratification
  - B) cardiorespiratory fitness
  - C) muscular strength & endurance
  - D) body composition & weight management
  - E) flexibility & posture
- 3. Learn to assess and design various exercise and conditioning programs for development of each physical fitness component and weight management.
- 4. Learn to assess and develop exercise protocols for individuals with controlled cardiovascular, pulmonary, and metabolic diseases.

#### **REQUIRED TEXT**



Title	Exercise Testing & Prescription Lab Manual 2 <sup>nd</sup> Ed.
Author	Edmund O. Acevedo & Michael A. Starks
ISBN-13	978-0-7360-8728-5
Publisher	Human Kinetics
Publication Date	2011

#### **ACADEMIC ACCOMMODATIONS**

While all students are expected to meet the minimum academic standards for completion of this course as established by the instructor, students with disabilities may require academic accommodations. At PLNU, students requesting academic accommodations must file documentation with the Disability Resource Center, located in the Bond Academic Center. Once the student files documentation, the Resource Center will contact Dr. Sullivan and provide written recommendations for reasonable and appropriate accommodations to meet your individual learning needs. Please accomplish all documentation during the first week of the semester.

\*This policy assists the University in its commitment to full compliance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities (ADA) Act of 1990, and ADA Amendments Act of 2008, all of which prohibit discrimination against students with disabilities and guarantees all qualified students equal access to and benefits of PLNU programs and activities.

#### **FERPA POLICY**

As a student at Point Loma, you have a legal right to privacy as outlined in the federal FERPA (Family Educational Rights and Privacy Act) legislation. If I post grades or return assignments, I'll do so in a way that does not publically reveal your name, PLNU student ID, or social security number without your written permission.

#### **ACADEMIC DISHONESTY**

Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. As stated in the university catalog, "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. Such acts include plagiarism, copying of class assignments, and copying or other fraudulent behavior on examinations. A faculty member who believes a situation involving academic dishonesty has been detected may assign a failing grade for a) that particular assignment or examination, and/or b) the course."

# **Course Assignments**

## Laboratory & Professional Experience & Skills (10 points)

Attendance and participation in laboratory discussions. Assisting other class members with lab testing for class projects.

## Lab Questions (10 @ 10 points )

# I Am My First Client (140 points)

The purpose of this project is to provide you with practical experience in assessing physical fitness levels and in designing individualized exercise programs. You will use yourself as your client for this project.

- Phase I: Health/Lifestyle Assessment (20 points)
- Phase II: CR Fitness Assessment/Aerobic Exercise Program (30 points)
- Phase III: Body Composition Assessment (30 points)
- Phase IV: Strength & Resistance Training Program (30 points)
- Phase V: Flexibility & Stretching Program (30 points)

## **Course Grading**

Item		Total Points
Lab & Professional Experience     Labs Questions     Lab Write ups	10 points 10 @ 10 pts 1@20pts; 4@30 pts (140)	10 100 140
Total		200

GRADE		POINT VALUE
A		94-100
A-	90-93	
B+		88-89
В		84-87
B-		80-83
C+		78-79
С		74-77
C-		70-73
D+		68-69
D		64-67
D-		60-63
F		0-59

#### Course Rules/Guidelines

## Class Attendance and Participation

Class experiences contain information that you will need in order to do well in this course. A pattern of missing classes will cause your grade to be lowered or you may be "de-enrolled" (Six misses, total from all sections, will qualify you for de-enrollment). Each student is required to be in every class meeting without fail. Responsible attendance and promptness are essential to gain the maximum benefits from this class. There are no allowed or excused absences. (Exceptions: When necessitated by certain college-sponsored activities and are approved in writing by the Academic Dean.)

Excused absences for emergencies are accepted with notification ASAP. Role will be taken and students missing more than 6 classes will be de-enrolled from the class. If an eclass quiz is due on the day a student misses class the student will receive a 0 on that quiz whether it was completed or not.

#### Late Work

Assignments not turned on the day and time that they are due will be 10% off every day it is late.

## Make-Ups

No make-up labs will be allowed unless excused by the school and the professor is notified of the excused absence prior to the missed class or if the student has a legitimate emergency.

#### **Email**

Email will be the <u>MAIN</u> form of communication used by the professor outside of class. Students are expected to check their email at least <u>ONCE A DAY</u>. If you know of issues with your @pointloma.edu account please notify the professor immediately.

#### 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 others' 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.

#### Adding/Dropping

✓ It is the student's responsibility to maintain his/her class schedule. Should the need arise to drop this course (personal emergencies, poor performance, etc.), the student has the responsibility to follow through (provided the drop date meets the stated calendar deadline established by the university), not the instructor. Simply ceasing to attend this course or failing to follow through to arrange for a change of registration (drop/add) may easily result in a grade of F on the official transcript.

# **Cheating and Plagiarism**

✓ Cheating is the actual or attempted practice of fraudulent or deceptive acts for the purpose of improving one's grade or obtaining course credit; such acts also include assisting another student to do so. Plagiarism is a specific form of cheating which consists of the misuse of the published and/or unpublished works of others by misrepresenting the material (i.e., their intellectual

property) so used as one's own work. Penalties for cheating and plagiarism range from a 0 or F on a particular assignment, through an F for the course, to expulsion from the university. For more information on the University's policy regarding cheating and plagiarism, refer to the student handbook: http://www.pointloma.edu/Handbook/Policies/Academic Honesty.htm

# **Important Dates**

- January 14 Classes Begin
- January 20 MLK Day (No Class)
- January 24 Last Day to add Semester Class
- March 9-13 Spring Break (No Class)
- March 27 Last Day to Drop Semester Class
- April 9-13 Easter Recess (No Class)
- May 1 Classes End
- May 4 May 8 Finals Week

# **Class Outline**

Date	Topic	Assignments Due	Required Reading
1-16-20(R)	NO CLASS		
	Introduction; & Expectations will be		
	covered in EXS 3050		
1-23-20 (R)	Risk Factor Evaluation, Medical History,		Ch. 3 & 12
	Informed Consent & Goals		
1-30-20 (R)	Glucose & Blood Lipids		
2-6-20 (R)	Orientation to Lab & Calibration	Phase!	Ch. 1
2-13-20 (R)	HR, BP & ECG		Ch. 4 & 10
2-20-20 (R)	Submaximal Exercise Test Protocols		Ch. 7
2- 27-20(R)	Prescription for initial improvement,		Ch. 11 & 13
	conditioning & maintenance (work on		
	Phase II)		
3-5-20 (R)	Evaluating Muscular Strength &	Phase II	Ch. 8
	Endurance		
3/9 – 3/13	SPRING BREAK – NO CLASS		
3-19-20 (R)	Prescription for Muscular Strength &		
	Endurance (Work on Phase III)		
3-26-20 (R)	Skinfold &Circumference Assessment	Phase III	Ch. 5, 6
	Techniques; Assessing Body Composition		
4-2-20 (R)	Prescription for Body Composition		
. 2 20 (11)	(Work on Phase IV)		
	(vroncon mass iv)		
4/9 – 4/13	EASTER RECESS – NO CLASS		
4-16-20(R)	Evaluating Posture; FMS – Corrective		Ch. 9
	Exercises		
4-23-20 (R)	Evaluating of Flexibility	Phase IV	
4-30-20 (R)	Prescription for Posture & Flexibility (work		
	on Phase 5)		
5/4 – 5/8	FINALS WEEK – NO FINAL	Phase V	

# Knowledge, Skills, and Abilities (KSAs) for students in Exercise Science ACSM Certified Health Fitness Specialist

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KSA#'s	KSA description	
	GENRAL POPULATION/CORE:EXERCISE PHYSIOLOGY AND RELATED EXERCISE SCIENCE	
1.1.28	Knowledge of and ability to describe the implications of ventilatory threshold (anaerobic threshold) as it relates to	
1.1.29	exercise training and cardiorespiratory assessment.  Knowledge of and ability to describe the physiologic adaptations of the pulmonary system that occur at rest and	
	rest and during submaximal and maximal exercise following chronic aerobic and anaerobic training.	

1.1.37	Knowledge of and skill to demonstrate exercises designed to enhance muscular strength and/or endurance of specific
	major muscle groups.
1.1.38	Knowledge of and skill to demonstrate exercises for enhancing musculoskeletal flexibility.
	GENERAL POPULATION/CORE: PATHOPHYSIOLOGY AND RISK FACTORS
1.2.1	Knowledge of the physiologic and metabolic responses to exercise associated with chronic disease (heart disease, hypertension, diabetes mellitus, and pulmonary disease).
	GENERAL POPULATION/CORE: HEALTH APPRAISAL, FITNESS AND
	CLINICAL EXERCISE TESTING
1.3.4	Knowledge of and the ability to perform risk stratification and its implications toward medical clearance before administration of an exercise test or participation in an exercise program.
1.3.7	Knowledge of the advantages/disadvantages and limitations of the various body-composition techniques including but not limited to, air displacement plethysmography (BOD POD), dual-energy x-ray absorptiometry (DEXA), hydrostatic weighing, skinfolds and bioelectrical impedence.
1.3.8	Skill in accurately measuring heart rate and blood pressure, and obtaining rating of perceived exertion (RPE) at rest and during exercise according to established guidelines.
1.3.9	Skill in measuring skinfold sites, skeletal diameters, and girth measurements used for estimating body composition.
1.3.15	Ability to explain the purpose and procedures and perform the monitoring (heart rate, RPE, and blood pressure) of clients before, during, and after cardiorespiratory fitness testing.
1.3.16	Ability to instruct participants in the use of equipment and test procedures.
1.3.17	Ability to explain the purpose of testing, determine an appropriate submaximal or maximal protocol, and perform an assessment of cardiovascular fitness on the treadmill or cycle ergometer.

	CARDIOVASCULAR: PATHOPHYSIOLOGY AND RISK FACTORS
2.2.4	Knowledge the effects of the above diseases and conditions on the cardiorespiratory responses
	at rest and
	during exercise.