FLORIDA ATLANTIC UNIVERSITY

COURSE CHANGE REQUEST
Undergraduate Programs

Department Exercise Science and Health Promotion

College Science

UUPC Approval 3-28-22
UFS Approval _____
SCNS Submittal _____
Confirmed _____
Banner Posted _____
Catalog _____

***Current* Course Prefix and Number**	PET 4550	***Current* Course Title**	Exercise Testing and Prescription

*Syllabus must be attached for **ANY** changes to current course details. See Template. Please consult and list departments that may be affected by the changes; attach documentation.*

Change title to:

Change prefix
From: **To:**

Change course number
From: **To:**

Change credits*
From: **To:**

Change grading
From: **To:**

Change WAC/Gordon Rule status**
Add ☐ **Remove** ☐

Change General Education Requirements***
Add ☐ **Remove** ☐

*Review Provost Memorandum
**WAC/Gordon Rule criteria must be indicated in syllabus and approval attached to this form. See WAC Guidelines.
***General Education criteria must be indicated in syllabus and approval attached to this form. See GE Guidelines.

Change description to:

Change prerequisites/minimum grades to:

Change corequisites to:
Please remove PET 4550L Exercise Testing Lab as a co-requisite; thus, there will now be no co-requisites.

Change registration controls to:

Please list existing and new pre/corequisites, specify AND or OR and include minimum passing grade (default is D-).

Effective Term/Year for Changes:	Fall 2022	**Terminate course? Effective Term/Year for Termination:**	

Faculty Contact/Email/Phone Michael Zourdos/mzourdos@gmail.com/301-580-7536

Approved by		***Date***
Department Chair	[signature]	2-24-22
College Curriculum Chair	[signature]	3/14/22
College Dean	[signature]	3/15/22
UUPC Chair	Ehlyn Williams	3-28-22
Undergraduate Studies Dean	Dan Moeroff	3-28-22
UFS President		
Provost		

Email this form and syllabus to mjenning@fau.edu seven business days before the UUPC meeting.

COLLEGE OF SCIENCE
DEPARTMENT OF EXERCISE SCIENCE AND HEALTH PROMOTION
PET 4550 Exercise Testing & Prescription
(CRN 15966, Sec 001, 4 Credits)
Spring 2022

Instructor:	Jacob A. Goldsmith, Ph.D.
Office Hours:	By appointment. Continuously available by email, text, or phone.
Phone:	(573) 301-4755 (cell)
Email:	goldsmithj2014@fau.edu
Class Hours:	Asynchronous (Thursdays)
Location:	Distance Learning (Fully Online)

Course Prerequisites

APK 4110 – Exercise Physiology & APK 4110L Lab or equivalent, and HSC 2110 or equivalent. A grade of C or better must have been obtained in these prerequisite courses as well as Anatomy and Physiology 1 & 2 (including labs) and General Chemistry (w/lab). If you do not meet these requirements, you are required to drop the course.

Course Description

A practical course in exercise test administration including program design, present health status assessment, protocols for the evaluation of cardiovascular functions, aerobic capacity, muscular fitness, pulmonary function, body composition, basic electrocardiography, interpretation of test results, and handling emergency situations. Introduces techniques appropriate for screening for exercise, health appraisal, assessment, and exercise prescription for apparently healthy individuals or those who have controlled disease.

Required Textbooks

ACSM Guidelines for Exercise Testing and Prescription. **10th edition**. Philadelphia PA: Wolters Kluwer Health, 2018. ISBN: 9781496339065

Fitness Professional's Handbook **7th edition**. Champaign, IL: Human Kinetics, 2017. ISBN: 9781492523376.

Course Objectives
At the completion of this course, each student will be able to:

1) Perform health-risk appraisals, including screening and risk stratification of apparently healthy individuals and those with known disease.
2) Demonstrate and perform fitness tests for cardio-respiratory fitness (both maximal and submaximal), body composition, muscular strength and endurance, and flexibility for apparently healthy individuals and those with controlled disease.
3) Demonstrate knowledge and understanding of the normal responses (heart rate, blood pressure, pulmonary ventilation, etc.) to a graded exercise test (GXT).
4) Demonstrate a basic knowledge of the effects of training, age, gender, environment, exercise modality, (etc.) on these responses.
5) Perform a clinical exercise tests and stress tests using different modalities.
6) Demonstrate competency in basic electrocardiogram (ECG) interpretation.
7) Demonstrate a knowledge of the physiologic foundations of fitness assessment and exercise prescription.
8) Understand the benefits of exercise in health and disease.
9) Demonstrate an understanding of the pathophysiology of coronary artery and cardiovascular disease.
10) Identify risk factors for atherosclerotic disease.
11) Understand the design of individualized exercise prescription using the results of fitness and exercise testing.
12) Demonstrate knowledge of the general principles of exercise prescription for apparently healthy individuals and those with controlled disease; be able to write an exercise prescription for apparently healthy individuals and those with controlled disease.
13) Demonstrate a basic knowledge of common medications and their effects on exercise heart rate, blood pressure, etc.
14) Demonstrate knowledge of exercise prescription in cardiac rehabilitation.
15) Demonstrate knowledge of body composition assessment, proper nutrition, and weight management techniques in the context of exercise prescription.

Evaluation

Four (4) exams	75% of final grade
Quizzes and other assignments	25% of final grade

Grading Scale

92.0 – 100 % = A	72.0 – 77.9% = C
90.0 – 91.9% = A-	70.0 – 71.9% = C-
88.0 – 89.9% = B+	68.0 – 69.9% = D+
82.0 – 87.9% = B	62.0 – 67.9% = D
80.0 – 81.9% = B-	60.0 – 61.9% = D-
78.0 – 79.9% = C+	< 60.0% = F

Course Delivery Mode

This course is designated as ***Distance Learning (Fully online),*** meaning that 100% of the course is delivered online. Following this definition, we will not meet face to face during the semester. Course materials will be posted weekly. Exams and quizzes will take place on Thursdays.

The course material (i.e., lectures, quizzes, exams, etc.) is accessible only through FAU's learning management system, Canvas. You must log into Canvas with your FAU ID and Password to access the materials and assignments in this course. If you do not know your FAU ID or Password, contact OIT for help.

****The course schedule is organized by the week. You will need to log into Canvas frequently for announcements. You should also check your FAU email frequently. Doing so will ensure you are current and timely with assignments as well as quizzes and exams. Most lectures will be delivered by video (Mediasite) or PowerPoint presentations with audio.**

Online courses can only be successful when you **organize your time**. Plan to do assignments so that you will have time to complete them in a timely, professional manner. **Do not wait to the last minute** to read the assigned chapters or articles. Allow adequate time to prepare for quizzes and exams.

- **Deadlines are set to help you pace out your workload.** Adequate time will be given for the completion of all assignments and preparation for quizzes and exams.
- Assignments are due on the date and time provided. **Late submissions will not be accepted unless documentation of an emergency is provided.**
- Students are expected to take quizzes and exams as scheduled. **Prior approval by course instructor is prerequisite for make-up quizzes and exams.**
- **Quizzes are based on reading(s) assigned for that week. If** the student has read/studied the assigned material, this should represent no problem or undue hardship.
- **Exams are based on the material presented in the lectures**. A comprehensive review in the form of a video and PowerPoint presentation will precede each exam.
- **The instructor reserves the right to give quizzes without prior notice.**
- **When uploading documents (assignments, etc.) please use a widely accessible format (i.e., Microsoft Word document or PDF).**

Hardware and Computer Requirements

- Dependable computer
- Computer speakers

- Webcam

Software

- Microsoft 365 Suite
- Reliable web browser (recommended Chrome or Firefox)
- Canvas mobile app: Download instructions for iOS device or Android device
- Adobe Reader
- Adobe Flash Player

Internet Connection

- Recommended: Broadband Internet connection with a speed of 4 Mbps or higher.
- To function properly, Canvas requires a high-speed Internet connection (cable modem, DSL, satellite broadband, T1, etc.). The minimum Internet connection speed to access Canvas is a consistent 1.5 Mbps (megabits per second) or higher.
- Check your Internet speed here.

COMPUTER REQUIREMENTS

Basic Computer Specifications for Canvas

- Operating system: Windows 10 or macOS Sierra (or higher).
- Specifications

Peripherals

- A backup option should be available to minimize the loss of work. This can be an external hard drive, a USB drive, cloud storage, or your folder on the FAU servers.

Software

- Once logged in to Canvas make sure your Internet browser is compatible.
- Other software may be required for specific learning modules.

Minimum Technical Skills Requirements

The general and course-specific technical skills you must have to succeed in the course include but are not limited to:

- Accessing Internet.
- Using Canvas (including taking tests, attaching documents, etc.).
- Using email with attachments.
- Creating and submitting files in commonly used word processing program formats such as Microsoft Office Tools.
- Copying and pasting functions.
- Downloading and installing software.
- Using presentation, graphics, and other programs.

Technical Support

In the online environment, technical issues are always possible (e.g., lost connection, hardware or software failure). Many of these can be resolved relatively quickly, but if you wait until the last minute before due dates, the chances of these glitches affecting your success are greatly increased. Please plan appropriately. If a problem occurs, it is essential you take immediate action to document the issue so your instructor can verify and take appropriate action to resolve the problem. Most issues in Canvas can be resolved by clicking on the "Help" tab located on the menu bar.

When a problem occurs, click "Help" to:

- Report a Problem
- Live Chat with Canvas Support
- Search Canvas Guides

Additional Technical Support

1. Contact the eLearning Success Advisor for assistance: 561-297-3590
2. If you can, make a Print Screen of the monitor when the problem occurs. Save the Print Screen as a .jpg file. If you are unfamiliar with creating a Print Screen file, see Print Screen instructions.
3. Complete a Help Desk ticket. Make sure you complete the form entirely and give a full description of your problem so the Help Desk staff will have the pertinent information in order to assist you properly. This includes:
    a. Select "Canvas (Student)" for the Ticket Type.
    b. Input the Course ID.
    c. In the Summary/Additional Details section, include your operating system, Internet browser, and Internet service provider (ISP).
    d. Attach the Print Screen file, if available.
4. Send a message within Canvas to your instructor to notify him/her of the problem. Include all pertinent information of the incident (2b-d above).
5. If you do not have access to Canvas, send an email to your instructor with all pertinent information of the incident (2b-d above).
6. If you do not have access to a computer, call your instructor with all pertinent information of the incident. If he/she is not available, make sure you leave a detailed message.
7. If you do not hear back from the Help Desk or your instructor within a timely manner (48 hours), it is your responsibility to follow up with the appropriate person until you obtain a resolution.

COVID-19 INFORMATION

Due to the status of the COVID-19 pandemic in our service areas, wearing a mask indoors is currently a personal preference but please be thoughtful of the concerns of

those around you. Students experiencing flu-like symptoms (fever, cough, shortness of breath), or students who have come in contact with confirmed positive cases of COVID-19, should immediately contact FAU Student Health Services (561-297-3512). Symptomatic students will be asked to leave the classroom to support the safety and protection of the university community. For additional information visit https://www.fau.edu/coronavirus/ . In classes with face-to-face components, quarantined students should notify me immediately as you will not be able to attend class. I will not be able to offer an online version of the class but will make reasonable efforts to assist students in making up the work.

STUDENTS WITH DISABILITIES: "In compliance with the Americans with Disabilities Act Amendment Act 2008 (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with the Student Accessibility Services and follow all SAS procedures."
SAS has offices across three of FAU's campuses – in Boca Raton, SU 133 (561-297-3880); in Davie, LA 131 (954-236-1222); or in Jupiter, SR 111 (561-799-8585) – however disability services are available for students on all campuses. For more information, please visit the SAS website at www.fau.edu/sas/ .

COUNSELING AND PSYCHOLOGICAL SERVICES (CAPS) CENTER: Life as a university student can be challenging physically, mentally, and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counselling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to www.fau.edu/counseling/ .

CODE OF ACADEMIC INTEGRITY: Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards because it interferes with the university mission to provide high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see University Regulation 4.001 - https://www.fau.edu/ctl/4.001_Code_of_Academic_Integrity.pdf

Bibliography

1) ACSM Guidelines for Exercise Testing and Prescription. 7th edition. Baltimore, MD: Lippincott, Williams, and Wilkins, 2000.
2) Health Fitness Instructor's Handbook. 4th edition. Champaign, IL: Human Kinetics, 2003
3) Rapid Interpretation of EKG's. 6th edition. Author: Dale Dubin; Tampa, FL: Cover Publishing, 2000.
4) Cardiac Rehabilitation, Adult Fitness, and Exercise Testing. 3rd edition. Baltimore, MD: Williams and Wilkins, 1995. ISBN # 0-683-03031-0
5) Exercise Testing and Exercise Prescription for Special Cases. 2nd edition. Philadelphia, PA: Lea and Febiger, 1993. ISBN # 0-8121-1440-X
6) Essentials of Strength Training and Conditioning. 2nd edition. Champaign, IL: Human Kinetics, 2000. ISBN # 0-7360-0089-5
7) Stress Testing: Principles and Practice. 4th edition. Philadelphia, PA: F. A. Davis Co., 1996. ISBN # 0-8036-0055-0.
8) Essentials of Cardiopulmonary Exercise Testing. Champaign, IL: Human Kinetics, 1996. ISBN # 0-87322-636-4
9) Exercise and the Heart. 4th edition. Philadelphia, PA: W. B. Saunders, 2000. ISBN # 0-7216-8450-5.
10) Clinical Electrocardiography – A Simplified Approach. 6th edition. St. Louis, MO: Mosby Inc., 1999. ISBN # 0-323-00252-8.
11) Clinical Electrocardiography: PreTest Self-Assessment and Review. New York, NY: McGraw Hill, Inc., 1994. ISBN # 0-07-052008-9.

PET 4550 Exercise Testing & Prescription
TENTATIVE Schedule
Spring 2022

Week (Week of)	Topic and/or Assignment	Reading	
		Fit Pro Hdbk	ACSM
1 (Jan 13)	Introduction & orientation, syllabus, Health screening and pre-testing procedures	Ch. 1 & 2	Ch. 2-4
2 (Jan 20)	Benefits of Exercise **Quiz 1**	Ch. 7	Ch. 2-4
3 (Jan 27)	Acute & chronic responses to aerobic exercise Procedures for conducting GXT's	Ch. 7	Ch. 2-4

4 (Feb 3)	Lactate threshold testing **Review for Exam 1**	Assigned Reading	
5 (Feb 10)	**Exam 1** Principles of aerobic exercise prescription		
6 (Feb 17)	Principles of aerobic exercise prescription	Ch. 11	Ch. 6
7 (Feb 24)	Cardiac Rehabilitation **Quiz 2**	Ch. 19	Ch. 9
8 (Mar 3)	Body composition assessment **Quiz 3** **Review for Exam 2 (March 10th)**	Ch. 8	Ch. 4
9 (Mar 5-13)	**SPRING BREAK**		
10 (Mar 17)	**Exam 2** Exercise, weight management, and diabetes	Ch. 21	Ch. 10
11 (Mar 24)	Pulmonary function testing (PFT)	Ch. 22	Ch. 9
12 (Mar 31)	Pulmonary rehabilitation	Ch. 22	Ch. 9
13 (Apr 7)	ECG Basics **Review for Exam 3**	Ch 24	Appendix C
14 (Apr 14)	**Exam 3** ECG interpretation Assessing muscular strength	Ch 24	Appendix C
15 (Apr 21)	ECG interpretation Principles of strength training **Review for Exam 4**	Ch 24	Appendix C
Apr 25	**Last Day of Classes**		
Apr 26 – 27	**Reading Days**		
Apr 28	**Exam 4**		