Note:

Course content may be changed, term to term, without notice. The information below is provided as a guide for course selection and is not binding in any form, and should <u>not</u> be used to purchase course materials.

COURSE SYLLABUS

EXSC 637
EXERCISE PRESCRIPTION FOR SPECIAL POPULATIONS: CHRONIC HEALTH CONDITIONS

COURSE DESCRIPTION

This course provides the foundational understanding for the pathophysiological processes of various common chronic conditions. A clinical understanding of limitations and special needs will be provided, which allows the exercise scientist to appropriately interact and serve the clinical client.

RATIONALE

Clinical exercise physiology is one of the main areas of employment for graduate students in the Exercise Science field. Therefore, the purpose of this course is to provide the student with an understanding and overview of the diverse complications for adults and children with special health-related issues. A proper understanding of these elements contributes to the successful implementation and organization of an exercise program.

I. PREREQUISITE

For information regarding prerequisites for this course, please refer to the Academic Course Catalog.

II. REQUIRED RESOURCE PURCHASE

Click on the following link to view the required resource(s) for the term in which you are registered: http://bookstore.mbsdirect.net/liberty.htm

III. ADDITIONAL MATERIALS FOR LEARNING

A. Computer with basic audio/video output equipment

B. Internet access (broadband recommended)

C. Microsoft Office

IV. MEASURABLE LEARNING OUTCOMES

Upon successful completion of this course, the student will be able to:

A. Describe normal anatomy and physiology.

B. Identify the pathophysiology present in numerous chronic diseases.

C. Differentiate between normal and abnormal responses to exercise based on chronic disease conditions.

D. Develop safe and effective exercise prescriptions based on chronic conditions and comorbidities.

E. Identify the pathological limitations of individuals in special populations.

F. Assess case studies to assemble an appropriate plan of action for a patient's exercise program.

G. Promote exercise prescription for special populations with a Christian worldview when applicable.

V. COURSE REQUIREMENTS AND ASSIGNMENTS

A. Textbook readings and lecture presentations

B. Course Requirements Checklist

After reading the Course Syllabus and Student Expectations, the student will complete the related checklist found in Module/Week 1.

C. Discussion Board Forums (2)

Discussion boards are collaborative learning experiences. Therefore, the student is required to create a thread in response to the provided prompt for each forum. Each thread must be at least 500 words, demonstrate course-related knowledge, and include at least 2 scholarly references and at least 1 biblical principle in addition to the course textbook. In addition to the thread, the student is required to reply to at least 2 other classmates' threads. Each reply must be at least 300 words and reference the course textbook and/or 1 other scholarly or biblical source. All citations must be in current APA format.

D. Chapter Essay Questions (6)

The student must evaluate chapter questions and write a 200–250-word essay response per question. Each assigned module/week contains 4 separate questions for the student to answer in essay form. The student must reference the course textbook and at least 1 other scholarly source in each essay response.

E. Midterm Exam and Final Exam (2)

The student must take a Midterm Exam and a Final Exam in Modules/Weeks 4 and 8. Each exam will be open-book/open-notes and will cover the Reading & Study material from previous modules/weeks and the assigned module/week. The Midterm Exam will contain 60 multiple-choice and true/false questions and have a time limit of 1 hour and 30 minutes. The Final Exam will contain 75 multiple-choice and true/false questions and have a time limit of 2 hours.

VI.   COURSE GRADING AND POLICIES

A.   Points

Course Requirements Checklist	10
Discussion Board Forums (2 at 50 pts ea)	100
Chapter Essay Questions (6 at 100 pts ea)	600
Midterm Exam	150
Final Exam	150
Total	1010

B.   Scale

A = 940–1010   A- = 920–939   B+ = 900–919   B = 860–899   B- = 840–859

C+ = 820–839   C = 780–819   C- = 760–779   D+ = 740–759   D = 700–739

D- = 680–699   F = 0–679

C.   Disability Assistance

Students with a documented disability may contact Liberty University Online's Office of Disability Academic Support (ODAS) at LUOODAS@liberty.edu to make arrangements for academic accommodations. Further information can be found at www.liberty.edu/disabilitysupport.

COURSE SCHEDULE

EXSC 637

Textbooks: American College of Sports Medicine, *ACSM's Guidelines for Exercise Testing and Prescription* (2018).
Ehrman et al., *Clinical Exercise Physiology* (2013).

MODULE/ WEEK	READING & STUDY	ASSIGNMENTS	POINTS
1	ACSM Guidelines: pp. 268–298 Ehrman et al.: ch. 6 Bible Readings 1 presentation	Course Requirements Checklist Class Introductions DB Forum 1	10 0 50
2	ACSM Guidelines: pp. 287–291 Ehrman et al.: ch. 7 1 presentation	Chapter Essay Questions	100
3	Ehrman et al.: ch. 10 1 presentation	Chapter Essay Questions	100
4	ACSM Guidelines: pp. 255–260 Ehrman et al.: ch. 17 1 presentation	Chapter Essay Questions Midterm Exam	100 150
5	ACSM Guidelines: pp. 302–311 Ehrman et al.: ch. 20 1 presentation	Chapter Essay Questions	100
6	ACSM Guidelines: pp. 297–301 Ehrman et al.: ch. 22 1 presentation	Chapter Essay Questions	100
7	ACSM Guidelines: pp. 345–347 Ehrman et al.: ch. 23 1 presentation	Chapter Essay Questions	100
8	ACSM Guidelines: pp. 339–334, 311, 314–319 Ehrman et al.: chs. 26–27 Bible Readings 1 presentation	DB Forum 2 Final Exam	50 150
		TOTAL	1010

DB = Discussion Board

NOTE: Each course module/week begins on Monday morning at 12:00 a.m. (ET) and ends on Sunday night at 11:59 p.m. (ET). The final module/week ends at 11:59 p.m. (ET) on **Friday**.