

CEP585 Research Seminar (1 credit hour) Course Syllabus

Course Description

Students will actively consume and present existing research in clinical exercise physiology. Class meetings will consist of student-led discussions and presentations of current research in clinical exercise physiology and relevant professional applications. Students will explore research in the areas of exercise as a means to manage and/or prevent cardiovascular, pulmonary, metabolic, immunologic, and hematologic diseases. The lead instructor will approve all discussions and presentations.

Course Learning Outcomes

By the end of this course, you will be able to:

- 1. Read and interpret research articles in clinical exercise physiology and suggest appropriate applications to professional practice.
- 2. Critically examine research articles to delineate limitations for professional application.
- 3. Assess existing research to make evidence-based decisions concerning pre-participation screening, pre-exercise evaluation, exercise testing, and exercise prescription for patients with cardiovascular, pulmonary, and metabolic diseases.
- 4. Design professional quality audio/visual materials for the presentation of evidence-based recommendations in clinical exercise physiology.
- 5. Present research findings in a manner conducive to both educational and professional settings.

Required Textbook(s) and Resources

For this course, there is no textbook to purchase. All materials are provided within the course.

Be sure to also review the weekly **Explore** sections for additional library or web resources. For access to databases, research help, and writing tips, visit the <u>Tiffin University Library</u>.

Time Commitment

Effective time management is possibly the single most critical element to your academic success. To do well in this online class you should plan your time wisely to maximize your learning through the completion of readings, discussions, and assignments. Because of our accelerated, seven-week term, TU online courses are designed with the expectation that you dedicate a little over **six (6)** hours per credit hour to course activities and preparation **each week**. For example, for successful completion of a three-credit, seven-week online course you should reserve roughly **twenty (20) hours per week**.

To help plan your time and keep on track toward successful course completion, note the distinctive rhythm of assignment due dates:

All times assume Eastern Time (GMT-4).

Weeks begin at 12:00 a.m. ET on Monday and end at 11:55 p.m. ET on Sunday.

Unless otherwise noted, initial assignments or discussion posts are due by **11:55 p.m. ET** on **Wednesdays.**

Additional assignments or follow-up discussion posts are due by **11:55 p.m. ET** on **Saturdays, and**

Major assignments and reflections are typically due by 11:55 p.m. ET on Sundays.

Learning Activities

In weeks 1-6, students will be assigned a research article by the professor. For each article, students will be expected to complete a 5-page (double spaced) summary of the article with recommendations for the article's application to professional practice AND upload a 15-minute power point presentation of their summary. During week 7, students will wright 3-5 paragraph reflection for each topic covered (Week #1: Coronary Artery Disease, Week #2: COPD, Week #3: Type I Diabetes, Week #4: Type II Diabetes, Week #5: Weight Loss, Week #6: Cancer).

Grading

The chart below identifies the individual contributions from each type of activity, per week.

Activity	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Total
Weekly Article Summaries	75	75	75	75	75	75		450
Weekly Presentations	75	75	75	75	75	75		450
Reflection							100	100
Total	150	150	150	150	150	150	100	1000

Grading Scale

A: 90-100% | B: 80-89% | C: 70-79% | F: <69%

Course Outline and Weekly Checklist

Торіс	Learning Activities (Due by 11:55 p.m. ET on day designated)
Start Here	Activity 1.1: Do You Haiku?
Week 1: Coronary Artery Disease	 SAT: Activity 1.2: Weekly Article Summary SUN: Activity 1.3: Weekly Presentation
Week 2: Exercise Testing & Interpretation	 SAT: Activity 2.1: Weekly Article Summary SUN: Activity 2.2: Weekly Presentation
Week 3: Metabolic Calculations	 SAT: Activity 3.1: Weekly Article Summary SUN: Activity 3.2: Weekly Presentation
Week 4:	 SAT: Activity 4.1: Weekly Article Summary SUN: Activity 4.2: Weekly Presentation

Торіс	Learning Activities (Due by 11:55 p.m. ET on day designated)
Cardiorespiratory Exercise Prescription	
Week 5: Resistance Training and Flexibility	 SAT: Activity 5.1: Weekly Article Summary SUN: Activity 5.2: Weekly Presentation
Week 6: Special Considerations in Exercise Prescription	 SAT: Activity 6.1: Weekly Article Summary SUN: Activity 6.2: Weekly Presentation
Week 7: Behavior Change & Comprehensive Review	SAT: Activity 7.1: Final Reflection

Tips for Success

Online learning requires self-discipline and self-direction. As seekers of the truth, we should be willing to challenge one another's academic work in a spirit of respectful comradery. Your course is a place for you to grow as you benefit from the expertise, experience, and diverse perspectives of your instructor and peers. Constructive feedback will challenge you to stretch your own thinking, thereby expanding your knowledge and understanding.

To get the most out of your learning experience, you should actively engage (participate) in **ALL** course activities. Course elements are arranged chronologically. To complete a week, simply work your way "down the page" through all of the course materials and activities.

For More Information:

Be sure to review the Support, Policies, and Procedures addendum.