

**Virtual Campus**

**Don. A Williams School of Education**

**UNIVERSITY MISSION STATEMENT**

Wayland Baptist University exists to educate students in an academically challenging, learning-focused, and distinctively Christian environment for professional success and service to God and humankind.

**COURSE NUMBER & NAME:**

EXSS 3312.VC01 – Physiology of Exercise

**TERM:**

Spring II VC 2024

**INSTRUCTOR:**

Dr. Carley D. Hunt, PT, DPT, Cert. DN

**CONTACT INFORMATION:**

WBU Email: [carley.hunt@wayland.wbu.edu](mailto:carley.hunt@wayland.wbu.edu) (E-mail is the best way to reach me)

Skype: carleydhhunt@gmail.com (I will be available via Skype during virtual office hours)

Zoom: carleydhhunt@gmail.com (I will be available via Zoom during virtual office hours)

**OFFICE HOURS, BUILDING, & LOCATION:**

Virtual office hours: Monday: 6:45-7:30pm

Tuesday: 6:45-7:30pm

Friday: 2:30-3:30pm

E-mail is the best way to reach me.

**COURSE MEETING TIME & LOCATION:**

WBU’s Virtual Campus: [WBU Blackboard](https://wbu.blackboard.com/)

**CATALOG DESCRIPTION:**

Examines extensive practical and clinical applications to evaluate body’s acute response to exercise and chronic adaptation to exercise training.

**PREREQUISITE(S):**

BIOL 1400

EXSS 1301

**REQUIRED TEXTBOOK & RESOURSE MATERIAL:**

For all undergraduate courses, textbooks and course materials are a part of the **Pioneer Academic Access** program. This program provides students with access to eBooks and other interactive learning materials on the first day of class through their Blackboard course(s). If the course requires a physical book, it can be ordered through the University Bookstore at bookstore.wbu.edu. The costs of these course materials are automatically billed to student accounts based on the number of credit hours in which a student enrolls. Students may choose to opt-out, but in doing so, they will lose access to all course materials and will have to source those materials through third-party vendors. (Students will receive additional course material details via email and/or in their Blackboard courses.)

* Kenney, W. L., Wilmore, J. H., & Costill, D. L. (2020). *Physiology of Sport and Exercise* (8th ed.). Champaign, IL: Human Kinetics.
  + Edition notes: Older editions are available. If you choose to use an older edition, be aware that 1) the information may be out of date – new research may have changed our understanding of key concepts, 2) page and reference points made to the text in class materials are directed to the information in the current text edition – these may not match the pages in the previous editions or they me wholly absent from previous editions, and 3) many professionals choose to keep their textbooks for desk reference material for years after college graduation – you may want the latest edition possible.
* Access to Blackboard and WBU e-mail along with access to a computer with internet are also required for successful completion of the course. WBU technical requirements are listed [here.](https://www.wbu.edu/wbu-online/current-students/technical-requirements.htm)

**Optional Materials:**

* Access to [WBU Learning Resources Center](https://www.wbu.edu/academics/library/)
* Resources available through WBU and Online libraries, especially including [www.pubmed.gov](http://www.pubmed.gov)

**COURSE OUTCOMES & COMPETENCIES:**

Upon the conclusion of this course, students actively engaged in learning will be able to:

1. The student will apply knowledge of human anatomy and physiology to various physical activities.
2. The student will demonstrate an understanding of the normal and abnormal responses to acute and chronic exercise of various types.
3. The student will demonstrate proficiency in performing appropriate clinical and laboratory testing on clients to determine physical fitness levels.
4. The student will demonstrate an understanding of training for muscular strength and endurance.
5. The student will demonstrate an understanding of training for increasing flexibility.
6. The student will demonstrate an understanding of training for speed and endurance.
7. The student will demonstrate aspects of nutrition, body composition, and weight control as they apply to physiology.

The more the student puts into the course, the higher his or her outcome competencies will be.

**ATTENDANCE REQUIREMENTS:**

As stated in the Wayland Catalog, students enrolled at one of the University’s external campuses should make every effort to attend all class meetings. All absences must be explained to the instructor, who will then determine whether the omitted work may be made up. When a student reaches that number of absences considered by the instructor to be excessive, the instructor will so advise the student and file an unsatisfactory progress report with the campus executive director. **(NOTE) Any student who misses 25 percent or more of the regularly scheduled class meetings may receive a grade of F in the course.** Additional attendance policies for each course, as defined by the instructor in the course syllabus, are considered a part of the University’s attendance policy.

\*\*Because this is an online course and because we will not regularly meet synchronously, your attendance for the course is largely dependent on your contribution to the discussion board’s topics and other participation grades. In keeping with the on-site attendance policy, failure to provide a full response for at least 75% of the discussion topics will result in an F for the course.\*\*

**STATEMENT ON PLAGIARISM & ACADEMIC INTEGRITY:**

Wayland Baptist University observes a zero-tolerance policy regarding academic dishonesty. Per university policy as described in the academic catalog, all cases of academic dishonesty will be reported, and second offenses will result in suspension from the university. See the full policy [here](https://www.wbu.edu/faculty-and-staff/policies-and-procedures-private/01_documents_march272020/8_4_1%20Academic%20Integrity1.pdf).

You are expected to submit original work in this class. This means the work you submit for this class cannot be from another course. Further, plagiarism in this course will not be tolerated. Plagiarism is constituted at stealing words or ideas from another source and passing them as your own. Students who plagiarize or recycle work in this class will receive a zero for the assignment and will be subject to university policies regarding plagiarism (See Policy on Plagiarism and Academic Integrity in Blackboard)

**DISABILITY STATEMENT:**

In compliance with the Americans with Disabilities Act of 1990 (ADA), it is the policy of Wayland Baptist University that no otherwise qualified person with a disability be excluded from participation in, be denied the benefits of, or be subject to discrimination under any educational program or activity in the university. The Disability Services Coordinator and Academic Coach serves as the coordinator of students with disabilities and must be contacted concerning accommodation requests (office (806) 291-1057. Documentation of a disability must accompany any request for accommodations.

**DUE DATES & LATE PENALITIES:**

**(NOTE) Assignments are due by 11:59 p.m. (*Central Time Zone*) on the date posted.** Be sure that your clock matches the clock in WBU’s Blackboard. All assignments must be submitted to the Blackboard site to receive a grade. These deadlines, like most things in life, are not negotiable. **(NOTE) Any late assignment will receive a 10-point deduction per day late, up to five days. Any assignment submitted more than five days late will receive a 50-point deduction.**

**EXPECTATIONS, COMMUNICATION, & OTHER INFORMATION:**

While the nature of an online course allows students to work at their own pace, you are expected to keep up with the course material weekly. *Please note, this is not a self-paced course and not every assignment is due on a Sunday.* This means that you should keep up with the readings and assignments by the posted due date. Students who get behind in the weekly requirements will likely not do well in the course. Remember, also, that your attendance for the course is measured by your participation in the discussion board. Announcements and important information will be posted on the Blackboard site. Be sure to check the site often. Additional information may be sent to your WBU emails, so make sure you’ve set up a WBU email and are checking it often. Always feel free to email me if you are concerned about the course or your progress. I am available to help you, provide resources, and give direction – but I cannot help you if I do not know you’re struggling.

In an effort to accommodate the schedules and preferences of online students, all major assignments are due on Sundays, but you will have other assignments due at other times during each week. Although major assignments are due on Sunday, this does not mean you should wait until the end of the week to think about them, particularly if you need help from me. I am happy to answer questions about assignments; however, please note that while I typically answer email within 24 hours M-F, I am not always as tied to a computer on the weekends. This means if you need help with an assignment, you’ll need to get in touch with me by Thursday or Friday at the latest.

If you ever have a major life event that will affect your participation in the course, it’s imperative that you communicate with me as soon as possible. I try to work with students as best as I can, but I can be more flexible and gracious if you tell me in advance rather than after the fact. In an online course, communication is *key.* As I mention above, I cannot help you if I do not know you’re struggling. This is a 3000-level course, which means it ought to challenge you more than your previous courses.

**COURSE REQUIREMENTS & GRADING CRITERIA:**

More specific descriptions of the course requirements will be made available in course modules on the WBU Blackboard site: [WBU Blackboard](http://wbu.blackboard.com/). However, the assignments and weights are posted below.

Required First Assignment (Not Graded):

Read the Academic Integrity Statement and complete this Blackboard survey ASAP. This is required to be considered in attendance for census purposes and must be completed to avoid disenrollment from the course. This does not count for a grade.

Discussion Board Posts and Responses/Journal Reflections (20% total):

Students will complete weekly discussion board posts and responses or journal reflections.

Week 1 discussion board posts will be an introduction where you tell me (and your classmates) more about yourself. Additional information will be found in the discussion board instructions in your weekly module.

Week 2 discussion board posts will be over textbook material, specifically hormones and their function. Additional information will be found in the discussion board instructions in your weekly module.

Discussion board posts for weeks 3 and 6 will be as follows:

Students will select topics containing (1) course-related primary-source research article published in the last 5 years and provide a summary of the article. The summary should include the following:

1. No direct quotes- this is a summary and displays your thoughts and understandings from the project
2. Key findings of the authors
3. Methodology and subjects’ description
4. Your thoughts/reaction to the article
5. Reference to the article in APA format at the end of the discussion post

Please write at least 2 thorough paragraphs including all of the above listed information.

Weeks 4, 5, and 7 will be journal reflections. Each reflection should be at least 350 words. More detail regarding specific topics and guidelines will be found in Blackboard in the weekly module/journal assignment.

Reading Quizzes (20% total):

Students will complete (almost) weekly quizzes based on the corresponding chapter readings. There will not be quizzes the week of an examination.

Quizzes will be open book and open note, but you are expected to work alone. You will have two attempts on all quizzes, and they are timed.

Examinations (60%):

Exam 1 (10%)

Exam 2 (15%)

Exam 3 (15%)

Final exam (20%)

Exams will be open book and open note, but you are expected to work alone. You will only have one attempt on all exams, and they are timed. Your final exam is considered comprehensive and will include questions from exams 1-3.

**Grade Appeal Statement:** “Students shall have protection through orderly procedures against prejudices or capricious academic evaluation. A student who believes that he or she has not been held to realistic academic standards, just evaluation procedures, or appropriate grading, may appeal the final grade given in the course by using the student grade appeal process described in the Academic Catalog. Appeals may not be made for advanced placement examinations or course bypass examinations. Appeals are limited to the final course grade, which may be upheld, raised, or lowered at any stage of the appeal process. Any recommendation to a lower course grade must be submitted through the vice president of academic affairs to the Faculty Assembly Grade Appeals Committee for review and approval. The Faculty Assembly Grade Appeals Committee may instruct that the course grade be upheld, raised, or lowered to a more proper evaluation.”

# **The University has a standard grade scale:**

A = 90-100, B = 80-89, C = 70-79, D = 60-69, F= below 60, W = Withdrawal, WP = withdrew passing, WF = withdrew failing, I = incomplete. An incomplete may be given within the last two weeks of a long term or within the last two days of a micro term to a student who is passing, but has not completed a term paper, examination, or other required work for reasons beyond the student’s control. A grade of “incomplete” is changed if the work required is completed prior to the last day of the next long (10 to 15 weeks) term unless the instructor designates an earlier date for completion.  If the work is not completed by the appropriate date, the I is converted to an F.

**TENTATIVE SCHEDULE:**

The schedule below is a tentative outline for the term. The schedule and assignments that appear below are subject to change before the term begins. Even after the beginning of the term, this schedule will be subject to change with advance notification, of course.

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| Weekly Topic | Reading | Discussion/Journal Topic | Assignment(s) |
| Week 1 (3/25-3/31):  Introductions, Structure and function of exercising muscle, Bioenergetics and muscle metabolism | Chapters 1, 2 | Introductions (initial post and 2 responses) | * Discussion board introductions (initial post due 3/27, two responses due 3/28) * Chapters 1, 2 quizzes (due 3/28) |
| Week 2 (4/1-4/7):  Neural control of exercising muscle, Hormonal control during exercise | Chapters 3, 4 | Hormones and their function (initial post and **1** response) | * Discussion board over hormones and their function (initial post due 4/3, **one** response due 4/7) * **Exam 1 (chapters 1-4) (due 4/7)** |
| Week 3 (4/8-4/14):  Energy expenditure, Fatigue, muscle soreness, and muscle cramps | Chapters 5, 6 | Scholarly article summary (see discussion board section above; initial post and 2 responses) | * Discussion board article summary (initial post due 4/10, two responses due 4/14) * Chapters 5, 6 quizzes (due 4/14) |
| Week 4 (4/15-4/21):  The cardiovascular system and its control, The respiratory system and its regulation, Cardiorespiratory responses to acute exercises, Principles of exercise training | Chapters 7, 8, 9, 10 | Journal reflection – course material | * Journal reflection (due 4/17) * **Exam 2 (chapters 5-10) (due 4/21)** |
| Week 5 (4/22-4/28): Adaptations to resistance training, Adaptations to aerobic and anaerobic training, Prescription of exercise for health and fitness, Exercise in hot and cold environments | Chapters 11, 12, 13, 14 | Journal reflection – performance enhancing drugs | * Journal reflection (due 4/24) * Chapters 11, 12, 13, 14 quizzes (due 4/28) |
| Week 6 (4/29-5/5):  Altitude, hyperbaric environments, and microgravity, Training for sport, Nutrition, body composition, and obesity, Ergogenic aids in sport | Chapters 15, 16, 17, 18 | Scholarly article summary (see discussion board section above; initial post and 2 responses) | * Discussion board article summary (initial post due 5/1, two responses due 5/5) * **Exam 3 (chapters 11-18) (due 5/5)** |
| Week 7 (5/6-5/12):  Children and adolescents in sport and exercise, Aging in sport and exercise, Sex difference in sport and exercise, Cardiovascular disease and physical activity | Chapters 19, 20, 21, 22 | Journal reflection – course material | * Journal reflection (due 5/8) * Chapters 19, 20, 21, 22 quizzes (due 5/12) |
| Week 8 (5/13-5/18):  Final exam (NO LECTURES) | NO READINGS | NO DISCUSSION | **Final exam (due 5/18)**  **LATE SUBMISSIONS NOT ACCEPTED** |

**ALL ASSIGNMENTS MUST BE SUBMITTED TO BLACKBOARD TO RECEIVE CREDIT.**