#### **EPHP 4305, Research Methods**

#### Spring 2022

Texas A&M University-Central Texas

## **COURSE DATES, MODALITY, AND LOCATION**

This is a 100% online course, and uses the A&M-Central Texas Canvas Learning Management System [https://tamuct.instructure.com/].

#### INSTRUCTOR AND CONTACT INFORMATION

Instructor: Julie Kresta, PhD Office: 322M Warrior Hall Phone: 254-519-5428 Email: jkresta@tamuct.edu

#### **Office Hours**

Tuesdays: 10:00am – 12:00pm – Virtual Hours Wednesdays: 10:00am – 1:00pm – Virtual Hours Thursdays: 9:00am – 12:00pm – Virtual Hours

Also by appointment or via email.

#### Student-instructor interaction

Students are encouraged to use email as the primary method to contact the instructor. Email is checked regularly throughout the day up until 9:00pm during the academic week. Email responses will be made within 24-48 hours. Appointments can also be made and are recommended to discuss any course material and/or issues.

# Emergency Warning System for Texas A&M University-Central Texas Emergency Warning System for Texas A&M University-Central Texas

**SAFEZONE.** SafeZone provides a public safety application that gives you the ability to call for help with the push of a button. It also provides Texas A&M University-Central Texas the ability to communicate emergency information quickly via push notifications, email, and text messages. All students automatically receive email and text messages via their myCT accounts.

Downloading SafeZone allows access to push notifications and enables you to connect directly for help through the app.

You can download SafeZone from the app store and use your myCT credentials to log in. If you would like more information, you can visit the <u>SafeZone</u> website [www.safezoneapp.com].

To register SafeZone on your phone, please follow these 3 easy steps:

- 1. Download the SafeZone App from your phone store using the link below:
  - <u>iPhone/iPad</u>: [https://apps.apple.com/app/safezone/id533054756]
  - Android Phone / Tablet
     [https://play.google.com/store/apps/details?id=com.criticalarc.safezoneapp]
- 2. Launch the app and enter your myCT email address (e.g. {name}@tamuct.edu)
- 3. Complete your profile and accept the terms of service

# **COURSE INFORMATION**

## **Course Overview and description**

This course will introduce students to research methodologies, data analysis techniques, and research evaluation for fields related to Exercise Physiology and other Health Sciences.

# **Course Objective or Goal**

The purpose of this course is to increase the student's understanding and appreciation for research and scientific literature as it relates to the field of Exercise Physiology and Health Science.

# **Student Learning Outcomes**

- 1. Identify the components of the scientific research process used in the Exercise Physiology and Health Sciences fields.
- 2. Evaluate peer-reviewed literature related to the field.
- 3. Design a complete research proposal related to Exercise Physiology.

# **Competency Goals Statements (certification or standards)**

N/A

## Required Reading and Textbook(s)

Berg, K.E. and Latin, R.W. <u>Essentials of Research Methods in Health, Physical Education, Exercise Science, and Recreation</u>. 3<sup>rd</sup> <u>Edition</u>. ISBN: 978-0-7817-7036-1

#### **COURSE REQUIREMENTS**

Course Requirements:

**Examinations:** There will be three exams throughout the course. Dates and topics are listed below in the course calendar. All examinations will be delivered online through Canvas on the designated dates. Exams will include questions in various formats including multiple choice, short answer and/or essays. In addition, all examinations may be cumulative and will be explained by the course instructor.

#### **Examination Attendance:**

All examinations must be taken on the dates and times scheduled by the instructor. Any student missing a scheduled exam will receive a 0 for that exam grade. In the

cases of extenuating circumstances, the student may petition for delayed or early examination. Requests for an alternate examination period need to be submitting in writing or via email to the course instructor at least **7** days in advance of the scheduled exam.

For unanticipated events (i.e. illness, car accident, etc.), students should notify the course instructor by email and/or by phone as soon as possible. Appropriate documentation (i.e. Doctor's note, etc.) at the discretion of the course instructor will need to be provided before an examination is rescheduled.

# **Examination Policy:**

The following items are not allowed during testing:

- Book bags, handbags, or any other bag of materials (bags should be placed outside of the room when possible, or at least away from the testing cite)
- No technology/electronic devices other than the computer used for testing.
   This includes (but is not limited to) smart watches, cell phones, tablets, PDAs, etc.
- No other individuals, as all examinations are to be completed independently.

**Weekly Discussions:** On specified weeks, there will be a discussion board created on Canvas to cover specific topics. The course instructor will ask several questions that each student will be asked to answer. Students must comment at least once per discussion board to receive credit and will be graded on the quality of their comments based on a rubric that will be provided to students in advance via Canvas.

**Article Reviews:** Students will be provided with several journal articles with different methodologies related to the field. Students will be asked to evaluate these articles and write an article summary as well as answer some critical thinking questions based on the article provided. Specific rubrics will be made available to the students in advance.

Assignments: Throughout the course, there will be several assignments that will relate back to the information being discussed in class at the time. These may include statistical calculation, methodology assessments, critical thinking questions, or other activities to help facilitate learning in the various topics. Students will be allowed to work in groups for these assignments, but must each submit their own work to be graded. General descriptions of each assignment are included in the Course Calendar, but more detail will be provided on Canvas in advance.

Research Proposal (300 points, divided as explained below): Students will be asked to design a research study related to exercise physiology and write a formal research proposal. There will be several deadlines for drafts of the different sections throughout the course to allow for feedback from the instructor. These will include an Outline (20 points), Literature Review Draft (20 points), and a Study Design Draft (20 points). The final draft of the proposal will include the major sections of an Introduction (20 points), Statement of the Problem (10 points), Literature Review (40 points), Methods (40 points), Anticipated Results/Discussion (20 points), and References (10 points). In addition to the

formal write-up of the research proposal, students will be asked to present their studies to the class (**100** points). In this presentation, they will discuss and defend their study methodologies in detail. Specific rubrics will be provided in advance for both the written portion and the presentation.

Item	Weight
Exams	30%
Weekly Discussions	10%
Article Reviews	15%
Assignments	15%
Research Proposal	30%
Total	100%

#### **Grading Criteria Rubric and Conversion**

Specific rubrics to be used for grading will be made available via Canvas when the assignment is posted.

# **Posting of Grades**

Grades will be posted within 1 week of the submission deadline, unless stated otherwise. Grades will be posted to the Canvas gradebook for students to view and monitor their progress in the course.

# **Grading Policies**

- Computer Issues
  - If a student should have issues regarding submission of assignments due to technical or computer issues (i.e. computer malfunction, network outage, etc.), the student is responsible for submitting the assignment on time. They should email or phone the course instructor to notify them of the issue and attempt to submit the assignment via email or other means as decided by the course instructor. Submission of a late assignment due to technical computer issues as described above will follow the Late Work Policy. No exceptions will be made for technical problems involving the internet, email, or Canvas.

#### • Late Work

- Students should turn assignments in by their due date and time as indicated by
  the course instructor or syllabus. In the event that assignments are turned in
  after the appropriate designated date/time without prior approval by the course
  instructor, the following course policy applies:
  - On the first offense, the student will receive a decrease in their grade on the assignment by one letter grade in addition to any missed points on the assignment.
  - On the second late offense, or any thereafter, the student will receive a "0" for the assignment.
- No exceptions will be made for technical problems involving the internet, email,

or Canvas. Emergency or illness are some of the only exceptions to this policy. All potential exceptions will be dealt with on an individual case-by-case basis.

- Examination Review
  - Students will be provided with one opportunity to review their examination.
     Students are not permitted to copy, write, reproduce, photograph, or identify in any way examination questions, answers, and/or rationale (hard or electronic formats) provided during an examination review and will be considered an honor code violation if done so. Students may request an appointment with the instructor to review exams and additional time.

# **COURSE OUTLINE AND CALENDAR**

**Complete Course Calendar** 

**COURSE SCHEDULE: 1st 8-WEEK TERM** 

## **WEEK 1 – January 18-21**

- Syllabus and Course Overview
- Book Chapters to Review:
  - Chapters 1-2
- Lectures to Review:
  - Lecture 1 Introduction to Research and Ethics in Human Subject Research
- WEEKLY DISCUSSION #1

# **WEEK 2 – January 24-28**

- Book chapters to Review:
  - Chapters 3-6
- Lectures to Review:
  - Lecture 2 Research Writing
- ASSIGNMENT #1 Writing an Abstract
  - Due Friday January 28 by 11:59pm
- WEEKLY DISCUSSION #2

## WEEK 3 - January 31 - February 4

- EXAM 1 Intro to Research and Research Writing (Posted Monday, January 31)
  - Deadline, Tuesday, February 1 by 11:59pm
- Book Chapters to Review:
  - Chapters 13-14
- Lectures to Review:
  - Lecture 3 Measurement and Data Collection Concepts
  - Lecture 4 Experimental Validity and Control
- ARTICLE REVIEW #1 DUE Friday, February 4 by 11:59pm
- RESEARCH PROPOSAL OUTLINE Due Friday, February 4 by 11:59pm

# WEEK 4 – February 7-11

- Book Chapters to Review:
  - Chapters 15-17
- Lectures to Review
  - Lecture 5 Experimental Research and Design
  - Lecture 6 Descriptive Research
  - Lecture 7 Qualitative Research Methods
- LITERATURE REVIEW DRAFT Due Friday, February 11 by 11:59pm
- WEEKLY DISCUSSION #3

# **WEEK 5 – February 14-18**

- EXAM 2 Measurement and Research Design (Posted Thursday, February 17)
  - Deadline: Sunday, February 20 by 11:59pm
- ARTICLE REVIEW #2 Due Friday, February 18 by 11:59pm

# **WEEK 6 – February 21-25**

- Book Chapters to Review:
  - Chapters 7-10
- Lectures to Review:
  - Lecture 8 Statistics #1 Basic Concepts, Central Tendency, Variability, Normal Curve
  - Lecture 9 Statistics #2 Probability, Hypothesis Testing, Relationships and Predictions
- RESEARCH PROPOSAL METHODS DRAFT Due Friday, February 25 by 11:59pm

## WEEK 7 - February 28 - March 4

- Book Chapters to Review:
  - Chapters 11-12
- Lectures to Review:
  - Lecture 10 Statistics #3 Comparing Means, Select Nonparametric Statistics
- ASSIGNMENT #2 Statistical Calculations and Interpretation
  - Due Friday, March 4 by 11:59pm
- WEEKLY DISCUSSION #4

#### **WEEK 8 – March 7-11**

- EXAM 3 Statistics (Posted Monday, March 7)
  - Deadline: Wednesday, March 9 by 11:59pm
- RESEARCH PROPOSAL FINAL DRAFT Due Friday, March 11 by 11:59pm
- RESEARCH PROPOSAL PRESENTATIONS Due Thursday, March 10 by 11:59pm

#### **Important University Dates**

January 25, 2021 – Deadline to drop first 8-week classes with no record February 25, 2021 – Deadline to drop first 8-week classes with a Quit (Q) or Withdraw (W) https://www.tamuct.edu/registrar/academic-calendar.html

# **TECHNOLOGY REQUIREMENTS AND SUPPORT**

# **Technology Requirements**

This course will use the A&M-Central Texas Instructure Canvas learning management system. We strongly recommend the latest versions of Chrome or Firefox browsers. Canvas no longer supports any version of Internet Explorer.

Logon to A&M-Central Texas Canvas [https://tamuct.instructure.com/] or access Canvas through the TAMUCT Online link in myCT [https://tamuct.onecampus.com/]. You will log in through our Microsoft portal.

Username: Your MyCT email address. Password: Your MyCT password

# **Canvas Support**

Use the Canvas Help link, located at the bottom of the left-hand menu, for issues with Canvas. You can select "Chat with Canvas Support," submit a support request through "Report a Problem," or call the Canvas support line: 1-844-757-0953.

For issues related to course content and requirements, contact your instructor.

#### Online Proctored Testing

A&M-Central Texas uses Proctorio for online identity verification and proctored testing. This service is provided at no direct cost to students. If the course requires identity verification or proctored testing, the technology requirements are: Any computer meeting the minimum computing requirements, plus web camera, speaker, and microphone (or headset). Proctorio also requires the Chrome web browser with their custom plug in.

## **Other Technology Support**

For log-in problems, students should contact Help Desk Central, 24 hours a day, 7 days a week

Email: <a href="mailto:helpdesk@tamu.edu">helpdesk@tamu.edu</a> Phone: (254) 519-5466

Web Chat: [http://hdc.tamu.edu]

Please let the support technician know you are an A&M-Central Texas student.

#### UNIVERSITY RESOURCES, PROCEDURES, AND GUIDELINES

# **Drop Policy**

If you discover that you need to drop this class, you must complete the <u>Drop Request</u> Dynamic Form through Warrior Web.

[https://dynamicforms.ngwebsolutions.com/casAuthentication.ashx?InstID=eaed95b9-f2be-45f3-a37d-

46928168bc10&targetUrl=https%3A%2F%2Fdynamicforms.ngwebsolutions.com%2FSubmit%2FForm%2FStart%2F53b8369e-0502-4f36-be43-f02a4202f612].

Faculty cannot drop students; this is always the responsibility of the student. The Registrar's Office will provide a deadline on the Academic Calendar for which the form must be completed. Once you submit the completed form to the Registrar's Office, you must go into Warrior Web and confirm that you are no longer enrolled. If you still show as enrolled, FOLLOW-UP with the Registrar's Office immediately. You are to attend class until the procedure is complete to avoid penalty for absence. Should you miss the drop deadline or fail to follow the procedure, you will receive an F in the course, which may affect your financial aid and/or VA educational benefits.

# **Academic Integrity**

Texas A&M University-Central Texas values the integrity of the academic enterprise and strives for the highest standards of academic conduct. A&M-Central Texas expects its students, faculty, and staff to support the adherence to high standards of personal and scholarly conduct to preserve the honor and integrity of the creative community. Any deviation by students from this expectation may result in a failing grade for the assignment and potentially a failing grade for the course. All academic misconduct concerns will be referred to the Office of Student Conduct. When in doubt on collaboration, citation, or any issue, please contact your instructor before taking a course of action.

For more <u>information regarding the Student Conduct process</u>, [https://www.tamuct.edu/student-affairs/student-conduct.html].

If you know of potential honor violations by other students, you may <u>submit a report</u>, [https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout\_id=0].

#### **Academic Accommodations**

At Texas A&M University-Central Texas, we value an inclusive learning environment where every student has an equal chance to succeed and has the right to a barrier-free education. The Warrior Center for Student Success, Equity and Inclusion is responsible for ensuring that students with a disability receive equal access to the university's programs, services and activities. If you believe you have a disability requiring reasonable accommodations, please contact the Office of Access and Inclusion, WH-212; or call (254) 501-5836. Any information you provide is private and confidential and will be treated as such.

For more information, please visit our <u>Access & Inclusion</u> Canvas page (log-in required) [https://tamuct.instructure.com/courses/717]

# Important information for Pregnant and/or Parenting Students

Texas A&M University-Central Texas supports students who are pregnant and/or parenting. In accordance with requirements of Title IX and related guidance from US Department of Education's Office of Civil Rights, the Dean of Student Affairs' Office can assist students who are pregnant and/or parenting in seeking accommodations related to pregnancy and/or parenting. Students should seek out assistance as early in the pregnancy as possible. For more information, please visit <a href="Student Affairs">Student Affairs</a> [https://www.tamuct.edu/student-affairs/pregnant-and-parenting-students.html]. Students may also contact the institution's Title IX Coordinator. If you would like to read more about these <a href="requirements and guidelines">requirements and guidelines</a> online, please visit the website [http://www2.ed.gov/about/offices/list/ocr/docs/pregnancy.pdf].

Title IX of the Education Amendments Act of 1972 prohibits discrimination on the basis of sex and gender—including pregnancy, parenting, and all related conditions. A&M-Central Texas is able to provide flexible and individualized reasonable accommodation to pregnant and parenting students. All pregnant and parenting students should contact the Associate Dean in the Division of Student Affairs at (254) 501-5909 to seek out assistance. Students may also contact the University's Title IX Coordinator.

# **Tutoring**

Tutoring is available to all A&M-Central Texas students, both virtually and in-person. Student success coaching is available online upon request.

If you have a question, are interested in becoming a tutor, or in need of success coaching contact the Warrior Center for Student Success, Equity and Inclusion at (254) 501-5836, visit the Warrior Center at 212 Warrior Hall, or by emailing <a href="mailto:WarriorCenter@tamuct.edu">WarriorCenter@tamuct.edu</a>.

To schedule tutoring sessions and view tutor availability, please visit <u>Tutor Matching</u>
<u>Services</u> [https://tutormatchingservice.com/TAMUCT] or visit the Tutoring Center in 111
Warrior Hall.

Chat live with a remote tutor 24/7 for almost any subject from on your computer! Tutor.com is an online tutoring platform that enables A&M-Central Texas students to log in and receive online tutoring support at no additional cost. This tool provides tutoring in over 40 subject areas except writing support. Access Tutor.com through Canvas.

# **University Writing Center**

University Writing Center: Located in Warrior Hall 416, the University Writing Center (UWC) at Texas A&M University—Central Texas (A&M—Central Texas) is a free service open to all A&M—Central Texas students. For the Spring 2022 semester, the hours of operation are from 10:00 a.m.-5:00 p.m. Monday thru Thursday in Warrior Hall 416 (with online tutoring available every

hour as well) with satellite hours available online only Monday thru Thursday from 6:00-9:00 p.m. and Saturday 12:00-3:00 p.m.

Tutors are prepared to help writers of all levels and abilities at any stage of the writing process. While tutors will not write, edit, or grade papers, they will assist students in developing more effective composing practices. By providing a practice audience for students' ideas and writing, our tutors highlight the ways in which they read and interpret students' texts, offering guidance and support throughout the various stages of the writing process. In addition, students may work independently in the UWC by checking out a laptop that runs the Microsoft Office suite and connects to WIFI, or by consulting our resources on writing, including all of the relevant style guides. Whether you need help brainstorming ideas, organizing an essay, proofreading, understanding proper citation practices, or just want a quiet place to work, the UWC is here to help!

Students may arrange a one-to-one session with a trained and experienced writing tutor by making an appointment via <a href="WCOnline">WCOnline</a> [https://tamuct.mywconline.com/]. In addition, you can email Dr. Bruce Bowles Jr. at bruce.bowles@tamuct.edu if you have any questions about the UWC, need any assistance with scheduling, or would like to schedule a recurring appointment with your favorite tutor by making an appointment via <a href="WCOnline">WCOnline</a> [https://tamuct.mywconline.com/]. In addition, you can email Dr. Bruce Bowles Jr. at bruce.bowles@tamuct.edu if you have any questions about the UWC, need any assistance with scheduling, or would like to schedule a recurring appointment with your favorite tutor.

## **University Library**

The University Library provides many services in support of research across campus and at a distance. We offer over 200 electronic databases containing approximately 250,000 eBooks and 82,000 journals, in addition to the 85,000 items in our print collection, which can be mailed to students who live more than 50 miles from campus. Research guides for each subject taught at A&M-Central Texas are available through our website to help students navigate these resources. On campus, the library offers technology including cameras, laptops, microphones, webcams, and digital sound recorders.

Research assistance from a librarian is also available 24 hours a day through our online chat service, and at the reference desk when the library is open. Research sessions can be scheduled for more comprehensive assistance, and may take place virtually through WebEx, Microsoft Teams or in-person at the library. Schedule an appointment [https://tamuct.libcal.com/appointments/?g=6956]. Assistance may cover many topics, including how to find articles in peer-reviewed journals, how to cite resources, and how to

Our 27,000-square-foot facility on the A&M-Central Texas main campus includes student lounges, private study rooms, group work spaces, computer labs, family areas suitable for all ages, and many other features. Services such as interlibrary loan, TexShare, binding, and laminating are available. The library frequently offers workshops, tours, readings, and other

piece together research for written assignments.

events. For more information, please visit our <u>Library website</u> [http://tamuct.libguides.com/index].

#### **OPTIONAL POLICY STATEMENTS**

#### A Note about Sexual Violence at A&M-Central Texas

Sexual violence is a serious safety, social justice, and public health issue. The university offers support for anyone struggling with these issues. University faculty are mandated reporters, so if someone discloses that they were sexually assaulted (or a victim of Domestic/Dating Violence or Stalking) while a student at TAMUCT, faculty members are required to inform the Title IX Office. If you want to discuss any of these issues confidentially, you can do so through Student Wellness and Counseling (254-501-5955) located on the second floor of Warrior Hall (207L).

Sexual violence can occur on our campus because predators often feel emboldened, and victims often feel silenced or shamed. It is incumbent on ALL of us to find ways to actively create environments that tell predators we don't agree with their behaviors and tell survivors we will support them. Your actions matter. Don't be a bystander; be an agent of change. For additional information on campus policy and resources visit the <a href="Ittle-IX"><u>Title-IX webpage</u></a> [https://www.tamuct.edu/compliance/titleix.html].

#### **Behavioral Intervention**

Texas A&M University-Central Texas cares about the safety, health, and well-being of its students, faculty, staff, and community. If you are aware of individuals for whom you have a concern, please make a referral to the Behavioral Intervention Team. Referring your concern shows you care. You can complete the <a href="referral">referral</a> online [https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout id=2].

Anonymous referrals are accepted. Please see the <u>Behavioral Intervention Team</u> website for more information [https://www.tamuct.edu/bit]. If a person's behavior poses an imminent threat to you or another, contact 911 or A&M-Central Texas University Police at 254-501-5805.

#### OTHER POLICIES

## **Copyright Notice**

Students should assume that all course material is copyrighted by the respective author(s). Reproduction of course material is prohibited without consent by the author and/or course instructor. Violation of copyright is against the law and Texas A&M University-Central Texas' Code of Academic Honesty. All alleged violations will be reported to the Office of Student Conduct.

Copyright. (2022) by (Julie Kresta) at Texas A&M University-Central Texas, (College of Education and Human Development); 1001 Leadership Place, Killeen, TX 76549; 254-519-5428; (jkresta@tamuct.edu).