



Spring 2023

INSTRUCTOR: Dr. Reginald B. O'Hara, ACSM-EP
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Note: *please send your email to both addresses*

CLASS TIME: M & W 1:30 – 2:50pm MST; HSSN 211
OFFICE HOURS: By appointment only: Friday 3:00 p.m.- 5:00 p.m.
By appointment only: Saturday 10 a.m.-12:00 p.m.

COURSE DESCRIPTION

The course introduces research methods and designs used in various areas of kinesiology. The course will focus on the nature of research in Kinesiology, how to identify a research problem and search the literature, presenting the problem and formulating the research methods and the statistical analyses needed to examine the data and draw conclusions.

COURSE OBJECTIVES

Upon completion of this course, the student should be able to

1. Conduct a meaningful literature search.
2. Write a basic narrative research review paper.
3. Differentiate between the various types of research articles.
4. Write a basic research pre-proposal.
5. Present the findings of a well-written research review paper.
6. Demonstrate understanding of the concepts and methodological perspectives of conducting research.
7. Demonstrate understanding of the basic statistical techniques for evaluation.

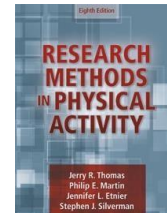
COURSE COMMUNICATION

Directions for scheduling an appointment: Individual phone appointments occur in 20-minute blocks. Please follow the below noted instructions to schedule an appointment with Dr. O'Hara.

- 1) Access and click on the following link: calendly.com/reggieohara
- 2) Once you access My Calendly, find the box titled, "KIN 3325-Research Methods in Kinesiology."
- 3) Next, under "Additional Options" click on "Invitee Questions (fill in your name, and email address).
- 4) Next, under "please share anything that will help prepare for this meeting" type in your question(s) as follows, (Example: "KIN 3325-Question about assignment #1 or "Question about experimental design" etc.).
- 5) Lastly, ensure that you click on "Save & Close."

COURSE MATERIAL

Required Textbook: Research Methods in Physical Activity-8th Edition (ISBN: 9781718201026)



Supporting Texts and Readings

Hall, S. & Getchall N. (2014). *Research Methods in Kinesiology and the Health Sciences*. Baltimore, MD: Lippincott Williams & Wilkens (pp. 1-305).

O'Hara R, Sussman L, Sheehan R, Keizer B, Tiede J. *Flotation-Restricted Environmental Stimulation Technique: A Proposed Therapy for Improving Performance and Recovery in Special Forces-A Narrative Review*. J Spec Oper Med. 2022; 22(4): 65-69.

O'Hara R, Sussman L, Tiede JM, Sheehan R, Keizer B. *Physiological and Psychological Stressors Affecting Performance, Health, and Recovery in Special Forces Operators-A Scoping Review*. J Spec Oper Med. 2022; 22 (2): 139-148.

Vasanthakumari S. *Writing research proposal*. World Journal of Advanced Research and Reviews (WJARAI). 2021; 10 (1): 184-190.

O'Hara, RB & Dodson WW. *Sublingual Caffeine Supplementation and Its Effects on Physical Performance Measures in Highly Fit United States Military Personnel*. International Journal of Research in Exercise Physiology (IJREP). 2022; 17(2): 1-19.

Ferrari R. *Writing narrative style literature reviews*. The European Medical Writers Association. 2015; 24(4): 230-235.

ASSESSMENT METHODS AND EVALUATION

GRADING BREAKDOWN	POINTS	GRADING SCALE**
Class Assignments (9 x 40 pts each)	360	A = 90 -100%
Exam #1 (In-class)	120	B = 80 - 89.99%
Exam #2 (Research pre-proposal)	120	C = 70 - 79.99%
Exam #3 (Research review paper)	120	D = 60 - 69.99%
Unannounced quizzes (5 x 20 pts each) *	100	F = below 60%
Final Exam (Research presentation)	180	
Total Points	1000	

*(Please see detail description of each section, later in the syllabus) *Course Instructor reserves the right to change the grading criteria, if needed. * The lowest quiz score will be dropped. **Grading will not be rounded and there are no final grading curves for this course.*

DESCRIPTION OF COURSE ASSESSMENT METHODS

Course Assignments

This course has nine assignments worth a total of 360 points. Tasks include research article writing critiques, writing summaries, research reference style formatting, writing informed consents, and writing annotated bibliographies. All assignments are listed and described in the tentative course outline. Some assignments may be added/dropped at the instructor's discretion. In this case, the grading scale will be adjusted.

Examinations

This course will have one in-class written examination worth 120 points. The research pre-proposal (LOI) and final research review paper will be counted as examinations #2 and #3 and are worth a total of 240 points. One written examination (e.g., exam #1) will be given in class, covering any of the material we discussed in class and from assigned chapter readings. Make-up exams will only be given for university-excused absences. All in-class written exams must be taken in class.

The exam questions will consist of short answers, multiple choice, and true/false and will only cover those topics discussed in class and key concepts in the assigned readings. It would be best if you had an extensive understanding of all concepts discussed in the lecture and the assigned course readings. The examination questions will test your knowledge of key concepts rather than memorization skills. Students will **only** be allowed to make up missed examinations with **prior** arrangements made in the case of an emergency. Specific questions on the exams that are missed by a high percentage (>50%) of students will not be counted, and students will receive total points for the question(s) missed. In other words, if >50% of students are answering the exam question(s) incorrectly on an exam; then the professor will consider that to mean the question(s) needed to be better constructed and not understood by most students. Hence, total points will be awarded for the specific question(s) missed.

Unannounced Quizzes

There will be five short quizzes worth a total of 100 points. The lowest quiz score will be dropped and replaced with the highest one. These unannounced quizzes will be given throughout the semester to assess your preparedness for class discussions. It would be best if you had an extensive understanding of all concepts discussed in the lecture and the assigned readings. The quiz questions will assess your knowledge of key concepts rather than memorization skills.

The quizzes will be 25 to 30 minutes long and consist of multiple-choice, short-answer, and true-false questions. If you come to class late/leave early – you will not be allowed to make up the quiz. Specific questions on the quizzes that are missed by a high percentage (>50%) of students will not be counted, and students will receive total points for the question(s) missed. In other words, if >50% of students answer the quiz question(s) incorrectly on a quiz, then the professor will consider that to mean the question was not well constructed and not understood by most students. Hence, total points will be awarded for the specific question(s) missed.

Final Paper

The final research review paper is counted as examination # 3 and is worth 120 points. Students will work in groups on the research review paper and the research groups will consist of 4 to 5 students (max). Members of each research group **must contribute equally** to the research writing process. Group members must choose research team leads. The research team leads must describe each member's contributions to the project under the author contributions section in the final research review paper submitted. Students in each group can still be graded individually based on other students' feedback. Hence, I reserve the right to adjust the group grade for any individual group member who does not contribute equally.

The final research review paper must include: 1) a structured abstract, 2) keywords under the abstract, 3) a clear introduction not exceeding 500 words, 4) a primary/secondary research question, 5) a detailed methods section (search strategy, study selection, and data extraction), 6) a results section, which must include a PRISMA flow chart describing the search, 7) a detailed discussion section that highlights the key concepts, and 8) one paragraph conclusion section summarizing the research findings. While there are no set limits, the minimum page length is eight (not including references). Research papers must follow APA style format.

Research Group Presentation

Research group presentations will be counted as the final examination and is worth a total of 180 points. The presentation must be on the same topic as the research review paper your group submitted and must use the IMRaD-C style when formatting the PowerPoint slide show. Each group will have 20 minutes to present their research review paper findings to the class. The group presentation must strictly adhere to the 20-minute timeline, or points will be deducted in increments of 2 points for each minute over the 20-minute timeline. A specific grading format will be used by the professor and described to all research groups weeks before the group presentations.

STRATEGIES FOR EARNING AN “A” IN THIS CLASS

- Complete all reading assignments and take notes. Start by understanding the basic definitions, and key concepts for all assigned readings, handouts, articles, and any of the key concepts we discuss in class.
- Be wise in choosing research project group members. Be sure that your team members are just as invested as you are.
- Show up to every class on time and prepare yourself to be mentally engaged.
- Read and review the assigned course readings and take good notes based on class discussions (key concepts, articles, handouts etc.).
- Re-write your notes in your own words at the end of each class for no less than 2-hours.
- Reach out to the Professor if you face challenges **before** the assignment deadlines. Remember, procrastination can lead to chaos.
- Complete all assigned individual and group project activities before the deadline. Do not wait until the last minute to complete any of the class assignments.

CLASS STRUCTURE

Class lectures will not be delivered in a conventional sense (e.g., power point). Rather, class discussions will follow the Socratic method. *What is the Socratic method?* A teaching style that uses conversation-prompting questions that may enhance the value of student input in learning. When the instructor asks probing questions rather than simply provide information, students can actively engage in the dialogue and explore new concepts related to the topic of discussion.

The Socratic method seeks to enhance individual expression by focusing on what the individual has to say about the concept/topic being discussed, productive discomfort (students/groups being called on randomly to answer probing questions), complex topics (there may be more than one meaning or answer to the question), and thoughtful questions (summarize your key take-aways from the assigned reading, what seemed more important and why?).

By employing the Socratic method, we seek to 1) Enhance critical thinking skills, 2) Improve our ability to think on our feet, 3) Promote active learning, 4) Inspire preparedness and attentiveness, 5) Improve our in-depth analytical abilities, and 6) Recognize difference of opinion and foster inclusivity.

Lastly, the instructor only serves to lead the dialogue that focuses on key concepts found in the assigned chapter readings, and any homework assignments (e.g., discussion of assigned articles). This classroom experience is a shared dialogue, whereby the instructor asks probing questions related to the assigned readings, and the students also asks and answers questions. Collectively, we look to explore fascinating concepts from our readings that may transform the world and our life through intellectual dialogue and the exchange of ideas.

COURSE REQUIREMENT AND POLICIES

- Students must check the Blackboard site and emails for the course daily for announcements and assignments.
- Students must check their emails daily. Student must use their UTEP email ID, put their full name, course name and be professional over email. Emails without this information will not be acknowledged.
- Take all quizzes at designated times. There will be no make-up quizzes. For the following documented circumstances, please contact your professor: 1) illness/ hospitalization; 2) death of family member; 3) official university business; 4) legal matter.
- Review of grades and any discrepancies/mistakes in grades can be done within a week from the grade posted. After the one-week period, assignments cannot be reviewed.
- **Electronic Devices:** If you are using cell phones, computers, &/or other electronic devices for purposes that are not related to meeting the learning objectives of this course, then it will be considered as disruptive behavior. Personal calls, texts, &/or emails should be completed outside of class time.
- The course material posted are subject to the copyright law of the United States (Title 17 U.S. Code) and is for the use of students in KIN 3325 only. Further reproduction or distribution is prohibited.
- Complete and submit all assignments on time. Late assignments will not be accepted, except in unusual circumstances at the discretion of the instructor (to be arranged well in advance).
- Students are expected to be familiar with and adhere to the UTEP Handbook of Operating Procedures.

****Failure to follow any of these rules may result deduction of points and/or in disciplinary action, including an instructor-initiated drop from the course.***

TECHNOLOGY REQUIREMENTS

Some of the course content may be delivered via the Internet through the Blackboard learning management system (LMS). The professor will alert you when any of the course content is delivered through the Blackboard. However, most of the course material is noted in the tentative class outline section. Ensure your UTEP e-mail account is working and that you have access to the Web. You may use any of the primary Web browsers—Explorer, Google Chrome, Firefox, Safari, etc. When having technical difficulties, try switching to another browser.

You will need to have or have access to a functional computer/laptop. Check that your computer hardware and software are up-to-date and able to access all parts of the course. **If you encounter technical difficulties of any kind, contact the [Help Desk](#).**

CLASSROOM GUIDELINES

- Always consider your audience. Remember that members of the class and the instructor will read any postings.
- Respect and courtesy must be provided to classmates and the professor. No harassment or inappropriate postings will be tolerated.
- When reacting to someone else's message, address the ideas, not the person. Post only what anyone would comfortably say in a face-to-face situation.
- A course brings together a group of diverse individuals with various backgrounds. Students are influenced and shaped by ethnicity, gender, sex, physical abilities, religious and political beliefs,

national origins, and sexual orientations. We expect to learn from each other in an atmosphere of positive engagement and mutual respect. Students are responsible for treating others courteously and respectfully and should promote group cohesion to create a safe learning environment.

- Blackboard is not a public internet venue; all postings should be private and confidential. Whatever is posted in these online spaces is intended for classmates and professors only. Please do not copy documents and paste them to a publicly accessible website, blog, or other area. If students wish to do so, they have the ethical obligation first to request the permission of the writer(s).

EXCUSED ABSENCES AND/OR COURSE DROP POLICY

According to UTEP Curriculum and Classroom Policies, “When, in the judgment of the instructor, a student has been absent to such a degree as to impair his or her status relative to credit for the course, the instructor may drop the student from the class with a grade of “W” before the course drop deadline and with a grade of “F” after the course drop deadline.” See academic regulations in the UTEP Undergraduate Catalog for a list of excuse absences. Therefore, if I find that, due to non-performance in the course, you are at risk of failing, I may decide to drop you from the course. I will provide 24 hours advance notice via email.

ACCOMODATIONS POLICY

The University is committed to providing reasonable accommodations and auxiliary services to students, staff, faculty, job applicants, applicants for admissions, and other beneficiaries of University programs, services and activities with documented disabilities in order to provide them with equal opportunities to participate in programs, services, and activities in compliance with sections 503 and 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act (ADA) of 1990 and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. Reasonable accommodations will be made unless it is determined that doing so would cause undue hardship on the University. Students requesting an accommodation based on a disability must register with the [UTEP Center for Accommodations and Support Services](#) (CASS). Contact the Center for Accommodations and Support Services at 915-747-5148, or email them at cass@utep.edu, or apply for accommodations online via the [CASS portal](#).

DEADLINES, LATE WORK, AND ABSENCE POLICY

Deadlines for all the assignment are outlined in the tentative course outline. Students are strongly recommended to complete the assessment at least a day ahead of deadline to accommodate any unforeseen challenges with internet, technology etc. Students will not be allowed to make-up a missed assessment without **prior** arrangement made in case of emergency.

Make-up work will be given *only* in the case of a *documented* emergency. Note that make-up work may be in a different format than the original work, may require more intensive preparation, and may be graded with penalty points. If you miss an assignment and the reason is not considered excusable, you will receive a **zero**. Hence, it’s very important to reach out to me—in advance if possible—and explain with proper documentation why you missed a given course requirement. Once a deadline has been established for make-up work, no further extensions or exceptions will be granted.

COVID-19 PRECAUTION

Please stay home if you have been diagnosed with COVID-19 or are experiencing COVID-19 symptoms. If you are feeling unwell, please let me know as soon as possible, so that we can work on appropriate accommodations. If you have tested positive for COVID-19, you are encouraged to report your results to covidaction@utep.edu, so that the Dean of Students Office can provide you with support and help with communication with your professors. The Student Health Center is equipped to provide COVID-19 testing.

TITLE IX STATEMENT

The University of Texas at El Paso is committed to maintaining a learning and working environment that is free from discrimination based on sex in accordance with Title IX of the Education Amendments of 1972 (Title IX), which prohibits discrimination on the basis of sex in any federally funded educational programs or activities. Title IX protects students, employees, applicants for admission and employment, and other persons from all forms of sex discrimination including sexual misconduct, sexual harassment, and acts of sexual violence. Sexual violence may include rape, sexual assault, sexual battery, sexual coercion, stalking, and relationship violence. Title IX prohibits institutions from excluding, separating, denying benefits, or otherwise treating individuals differently on the basis of sex. Sex based discrimination is prohibited at UTEP both by law and by University and UT System policies.

SCHOLASTIC INTEGRITY

Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or providing information to another student, possessing unauthorized materials during a test, or falsifying research data on laboratory reports. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another as ones' own. Collusion involves collaborating with another person to commit any academically dishonest act. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. All suspected violations of academic integrity at The University of Texas at El Paso must be reported to the [Office of Student Conduct and Conflict Resolution \(OSCCR\)](#) for possible disciplinary action. To learn more, please visit [HOOP: Student Conduct and Discipline](#).

CLASS RECORDINGS

You may not share recordings outside of this course. Doing so may result in disciplinary action.

COPYRIGHT STATEMENT FOR COURSE MATERIALS

All materials used in this course are protected by copyright law. The course materials are only for the use of students currently enrolled in this course and only for the purpose of this course. They may not be further disseminated.

COURSE RESOURCES: Where you can go for assistance

UTEP provides a variety of student services and support:

Technology Resources

- [Help Desk](#): Students experiencing technological challenges (email, Blackboard, software, etc.) can submit a ticket to the UTEP Helpdesk for assistance. Contact the Helpdesk via phone, email, chat, website, or in person if on campus.

Academic Resources

- [UTEP Library](#): Access a wide range of resources including online full-text access to thousands of journals and eBooks plus reference service and librarian assistance for enrolled students.
- [University Writing Center \(UWC\)](#): Submit papers here for assistance with writing style and formatting, ask a tutor for help and explore other writing resources.
- [RefWorks](#): A bibliographic citation tool; check out the RefWorks tutorial and Fact Sheet and Quick-Start Guide

Individual Resources

- [Military Student Success Center](#): Assists personnel in any branch of service to reach their educational goals.
- [Center for Accommodations and Support Services](#): Assists students with ADA-related

accommodations for coursework, housing, and internships.

- [Counseling and Psychological Services](#): Provides a variety of counseling services including individual, couples, and group sessions as well as career and disability assessments.

TENTATIVE COURSE OUTLINE (subject to change with fair notice)

Learning Modules	Week	Date	Topic(s)	Reading(s)	Instructor/assignment(s) Due/In-class tasks
Module 1: <i>Understanding the Research Process</i>	1	18 Jan	Professor/student introduction, syllabus, class structure, discuss applied vs. basic research, and ecological validity.	Chapter 1	For next class read Chapter 1- Introduction to Research . Be prepared to discuss the key concepts in the chapter.
<i>Understanding the Research Process</i>	2	23 Jan	Scientific method, types of research, intro to IMRaD-C	Chapter 1	For next class read Chapter 2- Developing the Problem and using the Literature . Be prepared to discuss the key concepts in the chapter.
		25 Jan	Continue discussion on IMRaD-C, research problem/topic, purpose of lit review, lit search strategies, how to construct a critical appraisal form.	Chapter 2	Assignment # 1 (individual) - Develop a critical appraisal summary form, and then summarize the article below. Be prepared to discuss in class. <i>Flotation-Restricted Environmental Stimulation Technique: A Proposed Therapy for Improving Performance in Special Forces Operators-A Narrative Review DOI: 10.55460/98PG-19VH</i>
<i>Understanding the Research Process</i>	3	30 Jan	Class discussion on Assignment #1- turn in assignment and attach article with summary sheet. Discuss how to write sections of IMRaD-C in detail, basics of research writing style, and use of citations (AMA, APA styles).	Chapter 2/3	Assignment # 1- due. Assignment # 2 (individual) - Find and download the following scoping review. Use your same critical appraisal summary form for assignment one, and then summarize the below article and be prepared to discuss. <i>Physiological and Psychological Stressors Affecting Performance, Health, and Recovery in Special Forces Operators: Challenges and Solutions. A Scoping Review DOI: 10.55460/904J-601A</i>
		01 Feb	Class discussion on Assignment #2- turn in assignment and attach article with summary sheet. Article title, abstract, writing the introduction, purpose, question, variables, hypothesis.	Chapter 3	Assignment # 2- due. Assignment # 3 (individual) - Select a topic of interest to you in Kinesiology. Next, find either a narrative, scoping or systematic published review article about your selected topic. List the main points in the introduction section. Then take your outline of main points and rewrite the introduction in your own words . Cite only the references listed in the intro of your chosen paper using the AMA style format. Cite the sources at the end of your introduction re-write.

Understanding the Research Process	4	06 Feb	Key components of the methods, results, and conclusion sections of a research article.	Chapter 4	Assignment # 3- due. Assignment # 4 (individual)- Using the same topic you selected in assignment #3 conduct a search of the literature and prepare a bibliography of 20 citations of secondary and primary sources from the research literature relevant to your topic. Next, choose a journal in kinesiology/physiology that you will you pretend you are sending your paper to for peer review. Next, use your selected journal's required reference style format. Restrict your bibliography to those published in the past 10 years that are directly relevant to your topic. Lastly, ensure to provide the name of the journal you selected and that journal's required reference style format.
		08 Feb	Class discussion and review session for Exam # 1.	Key concepts from Chapters 1-4.	Prepare for Exam # 1 on 13 Feb.
Understanding the Research Process	5	13 Feb	In class exam only- true/false, short answer, and multiple choice.	Read the review article titled, " <i>Writing research proposal.</i> "	Assignment # 4- due. Exam # 1- covers all topics/concepts discussed in class and key concepts from all assigned readings. Assignment # 5 (individual)- For next class read and summarize the assigned article below using your critical appraisal form. Bring this review article to class, "Writing Research Proposal" Author: S. Vasanthakumari, 2021, Cross Ref DOI: 10.30574/wjarr
		15 Feb	Developing a research pre-proposal, letter of intent/abstract guidelines.	Discuss Review article: " <i>Writing research proposal.</i> "	Be prepared to discuss the assigned review article in class. Key concepts covered in the next class.
Module 2- Understanding Different Types of Research	6	20 Feb	Class discussion on key components of- Research Letter of Intent (R-LOI).	Review class handout on <i>What is a R-LOI and How do I Write a Great One?</i>	Assignment # 5- due. Research project group members share their research project and initial presentation ideas with the class. Break into groups to discuss writing the research LOI (Due 8 March) and focus on starting assignment #6.

		22 Feb	Class discussion on writing a LOI- How to construct a sample research budget for a LOI.	What should you consider prior to constructing your group LOI budget?	Assignment # 6 (group)- Each group must generate 8 to 10 articles related to their proposed project idea. Each team member must abstract 2-3 articles and then share their findings. Using the articles related to your proposed group project idea to write a 2–3-page research LOI for your group project pre- proposal.
Understanding Different Types of Research	7	27 Feb	Class discussion on components of Informed Consent and the IRB.	Chapter 5	Assignment # 6- due Assignment # 7 (individual)- download the following article: <i>Sublingual Caffeine Supplementation and Its Effects on Physical Performance Measures in Highly Fit United States Military Personnel</i> , International Journal of Exerc. Physiology 17(2), Spring 2022: 1-19. https://ijrep.org Using this article construct a document of informed consent for participation that meets the format specifications of UTEP. Must be written in your own words (Do not copy any text directly from the article). For next class , read chapter 15 and be prepared to discuss research survey's/questionnaires.
		01 Mar	Class discussion on writing research surveys/ questionnaires, and informed consent document.	Chapter 15	Assignment # 7 (individual)- Continue working on Informed Consent document. For next class , read chapter 16 and be prepared to discuss descriptive research methods.
Understanding Different Types of Research	8	06 Mar	Class discussion on descriptive research methods.	Chapter 16	Assignment # 7 due.
		08 Mar	Class discussion on physical activity epidemiology research.	Chapter 17	Research-Letter of Intent (LOI) class discussion and questions. For next class , be prepared to turn in exam # 2 (individual)- Research-Letter of Intent.
Spring Break	9	13 Mar			
		15 Mar			
Understanding Different Types of Research	10	20 Mar	Class discussion on experimental and quasi-experimental research methods	Chapter 18	Exam # 2 due- Research-LOI For next class , download, read and then take notes for the class discussion on the following article titled, "Randomized factorial mixed method pilot study in hemodialysis patients: DAILY-SIZE! doi:10.1136/bmjopen-2016-012085 .
		22 Mar	Class discussion on mixed methods experimental design	Discuss assigned mixed methods research article.	Assignment # 8 (individual)- For next class, describe factors that could have affected internal validity of the Randomized Factorial Mixed Method Pilot Study.

Module 3 – <i>Understanding Statistics and Measurement in Research</i>	11	27 Mar	Conclude with discussion on mixed methods experimental design Begin class discussion on basic statistical concepts	Chapter 6	Assignment # 8 due For next class , read Chapter 6 and be prepared to discuss.
		29 Mar	Class discussion on basic statistical concepts.	Chapter 6	For next class , read Chapter 22 and be prepared to discuss components of an oral and poster presentation.
<i>Understanding Statistics and Measurement in Research</i>	12	03 Apr	Class discussion on how to deliver research presentations.	Chapter 22	For next class , read Chapter 8 and be prepared to discuss relationships among variables.
		05 Apr	Class discussion on finding relationships among variables.	Chapter 8	For next class , read Chapter 9 and be prepared to discuss finding differences among groups.
<i>Understanding Statistics and Measurement in Research</i>	13	10 Apr	Class discussion on finding differences among groups.	Chapter 9	For next class , read Chapter 11 and be prepared to discuss measurement of variables in research.
		12 Apr	Class discussion on measurement of variables in research. Discussion on writing an annotated bibliography.	Chapter 11	Assignment # 9 (individual) - Perform a search using the terms “concurrent validity” plus choose a specialty area in health sciences (e.g., exercise science, sports psychology, nutrition). Select at least three distinct studies that interest you. Create an annotated bibliography of these studies. For next class , read Chapter 17 and be prepared to discuss physical activity epidemiology research.
<i>Understanding Statistics and Measurement in Research</i>	14	17 Apr	Class discussion on components of physical epidemiological research.	Chapter 17	Assignment # 9 due. For next class , download and read the following research article Rossella Ferrari. <i>Writing narrative style literature reviews</i> , Medical Writing, 24 (4), 2015: 230-235.
		19 Apr	Class discussion on differences between narrative vs. systematic reviews. Discuss the general framework for NRs.	Review of research article. Assign order of research group presentations.	Student Q&A on assigned group narrative review papers due 24 April. For next class , research groups should compose specific questions relevant to their group presentation to be addressed by the professor in class.

<i>Understanding Statistics and Measurement in Research</i>	15	24 Apr	Review/Discuss critical components of research group presentations.	Assign order of research group presentations.	Exam # 3 (group)- Final narrative review research papers due from all research groups. For next class, research presentations begin (Final Exam).
		26 Apr	Research presentations		Final Exam (group)- research presentations begin.
<i>Understanding Statistics and Measurement in Research</i>	16	01 May	Research presentations		Final Exam (group)- research presentations continue.
		03 May	Research presentations		Final Exam (group)- research presentations conclude.
<i>Final Exams</i>	17	8-12 May	Completed-No class.	None assigned	Completed- no comprehensive final.