

physical activity epidemiology

KINES / PHS 791

• SPRING 2018

• UW - MADISON

COURSE DESCRIPTION

This course will enhance your understanding of the role of epidemiologic study in evaluating the relationships between physical activity and health outcomes. We'll learn about recommendations for and surveillance of physical activity in the U.S., and associations with health and disease at the population level. The emphasis of this course is on measurement techniques, study design and research considerations.

LEARNING OBJECTIVES

At the end of the semester, students will be able to:

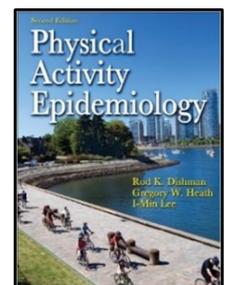
- (1) Identify the strengths and weaknesses of epidemiological study designs and critical issues in the analysis of physical activity-related research.
- (2) Compare and contrast the specific measurement tools used in physical activity surveillance and research and identify the errors associated with these tools.
- (3) Identify current public health recommendations for physical activity and describe how they have evolved.
- (4) Describe the contemporary trends in physical activity in the United States and know how they have been measured.
- (5) Identify the relationships between physical activity and various health conditions/diseases.
- (6) Review and analyze the epidemiologic evidence for a link between physical activity and a specified outcome of interest (e.g. physical activity and depression), and present a review of the evidence

CREDIT ALLOCATION This 3-credit class includes 2.5 hours/week of in-person instruction, 2.5 hours/week of assigned reading, and an 4 hours/week of assignments or studying.

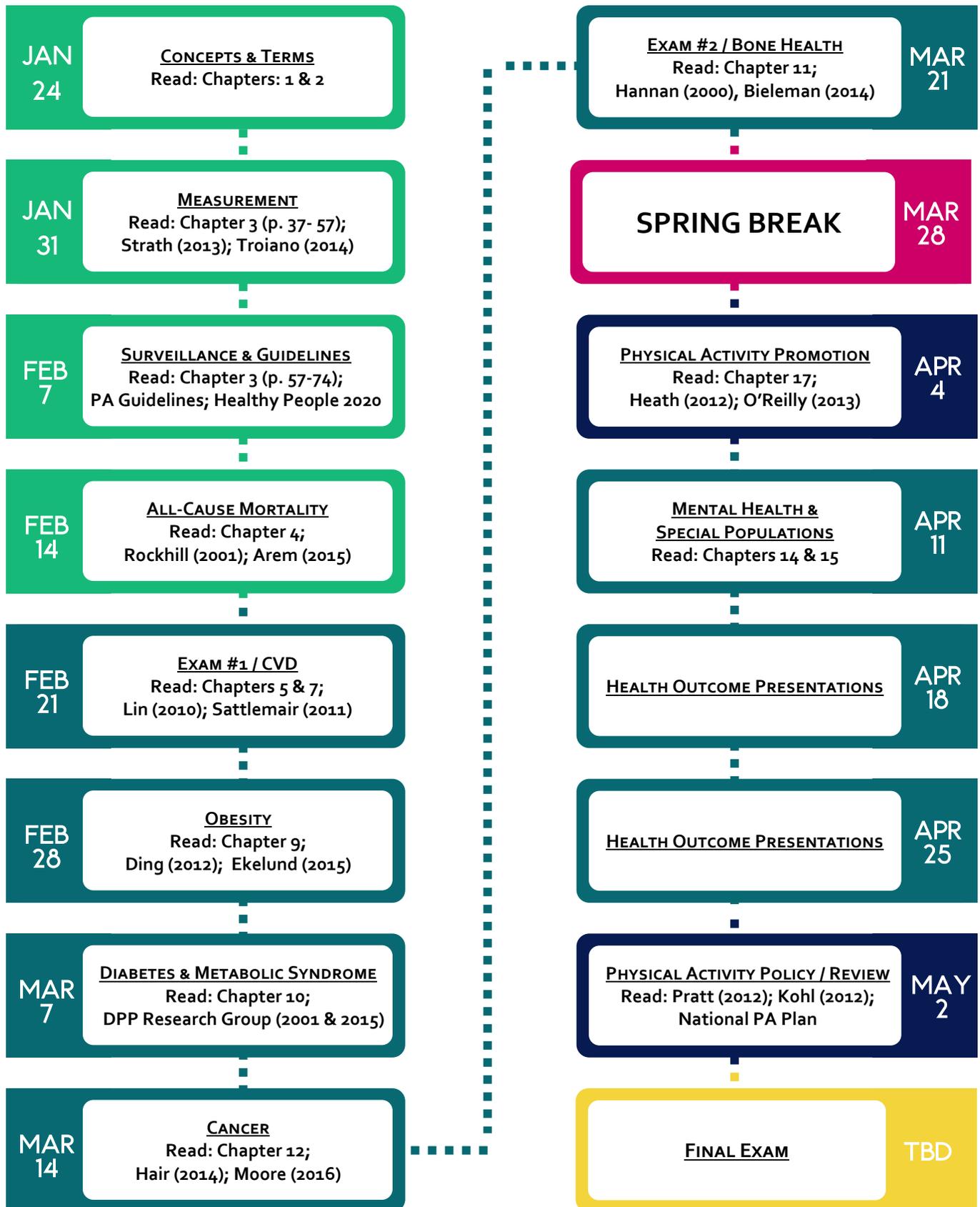
COURSE DETAILS

- **Class:** Wednesdays 9-11:30 AM in Room 1190 Gym-Nat
- **Instructor:** Lisa Cadmus-Bertram (lisa.bertram@wisc.edu)
- **Office hours:** Wed 12-2 or by apt.; Room 2057 Gym-Nat
- **Text:** Physical Activity Epidemiology, 2nd Edition. Other readings online.
- **Course website:** <https://canvas.wisc.edu/courses/90420>

TEXTBOOK ↗



WEEKLY SCHEDULE



KEYS TO SUCCESS IN THIS COURSE

- Do the readings thoroughly — before class. Make note of questions you have or areas that are unclear.
- Participate frequently. Ask questions and contribute comments.
- Ensure you are familiar with the schedule, assignments, and policies laid out in this syllabus.
- Keep good notes throughout as the final exam will be cumulative across the semester.

ASSIGNMENTS AND GRADING

The

This course's format and assignments are specifically designed to give you a working knowledge of epidemiologic concepts and the evidence base surrounding physical activity and health outcomes. To support your learning, there will be 4 written assignments, 2 presentations, and 3 exams. The contributions of these assignments to your grade are outlined below. A general overview of assignments and exams is provided on the next page; detailed instructions for writing assignments and presentations will be provided as we go.

GRADING SCALE	A	93-100%
	AB	88-92%
	B	83-87%
	BC	78-82%
	C	70-77%
	D	60-69%
	F	<60%

ASSIGNMENT WEIGHTING

Measurement	5%	Assignments: 20%
Article analysis #1	5%	
Article analysis #2	5%	
Intervention plan	5%	
Presentation	15%	Presentation: 15%
Exam #1	15%	Exams: 55%
Exam #2	15%	
Final exam	25%	
Epi workshops	5%	Other: 10%
Participation	5%	

WRITTEN ASSIGNMENTS

measurement

You will complete a series of assessments, including wearing an accelerometer for 7 days and completing questionnaires. You'll then write 1 page reflecting on completing these measures from a participant's perspective + 1 page about the concordance between the methods. **2 pages. Due 02/14.**

article analysis

We'll do this assignment twice. Each time, you'll receive an article to read and critique. This includes identifying the study design, addressing how the measurement and other methods may have affected the results, and assessing strengths and limitations. **2 pages. Due 03/07 & 04/04.**

intervention plan

You will work in pairs to develop and write up an intervention plan to address physical inactivity in a specific context and population. You will specify and justify your intervention's physical activity goals, approach, components, and evaluation strategy. **5 pages + refs. Due 05/02.**

PRESENTATION

You will prepare and present a 10-minute presentation on the relationship between physical activity and a specific health outcome of your choice. You will also answer questions from the class about the evidence on your topic. **Due 04/18 or 4/25.**

EXAMS

All exams use a combination of standard question types: multiple choice, fill-in-the-blank, and short answer/essay. Exams cover material from assigned reading and lecture. They will not ask you to recall or provide specific information from the articles that are presented by your peers but you may be asked to apply knowledge learned in class to material from those or other novel articles. Exam 1 will cover material through 02/14. Exam 2 will cover material from 02/11 through 03/14. The final exam will be comprehensive but will focus more heavily on the material from the end of the semester.

OTHER

in-class epi workshops

At several points during the semester, we will "workshop" an assigned journal article. Students will work in groups and present informally to the class.

participation

General class participation, including attendance as well as active engagement, comments, and questions.

COURSE POLICIES

ATTENDANCE. Regular attendance is required and recorded. You're allowed 1 unexcused absence. After this, your participation grade will be lowered unless you provide documentation about the circumstances preventing your attendance.

PARTICIPATION GRADE. This is based on your attendance and active, thoughtful involvement. A perfect attendance record is not sufficient to get a high participation grade. You must contribute substantially to class by asking and answering questions, volunteering your thoughts, and actively engaging with your classmates and instructor. Your questions and comments are welcome at any point.

COURSE WEBSITE. Our Canvas website will be used to post materials, including the syllabus, assignments, and articles. I'll post my lecture slides prior to class for those of you who like to take notes directly on the slides.

READINGS. All readings are required. You should be ready to ask and answer questions and discuss the material. The lectures will clarify and extend the readings, not replace them.

CELL PHONES AND LAPTOPS. Out of consideration for your classmates, turn off your phone. You may use a laptop for taking notes if that is what helps you to best organize the information. (However, consider that research shows that taking notes by hand is associated with better comprehension and retention of information.) During class, don't use your laptop for e-mail, social media, or other purposes unrelated to the course.

SEEKING ASSISTANCE. I am committed to giving you personal attention and helping you with whatever issues arise in this course. Feel free to email me and I will reply within 2 days (often more quickly). I encourage you to visit me during office hours. If they don't fit with your schedule, email me to set up an appointment.

LATE ASSIGNMENTS. These are penalized 10 percentage points per day (or partial day), unless you have prior approval, or in the case of an unforeseen emergency. Documentation is required in both cases. To ensure fairness to all, assignments are "late" if the website's time stamp shows they were submitted past the assigned due date and time, even if only by a little bit.

ACCOMMODATIONS. Please let me know if you have a McBurney visa or are otherwise in need of special accommodations in the curriculum, instruction, or assessments to enable you to participate fully. I'll make every effort to maintain the confidentiality of the information you share. For accommodations due to religious observances, please let me know early in the semester which dates you'll need adjustment.

ACADEMIC INTEGRITY. Read and abide by the university's code of academic integrity (<https://conduct.students.wisc.edu/academic-integrity/>). The work you submit must be entirely your own, with quotations properly marked and citations provided. Cases of plagiarism/cheating will result in an automatic F for the assignment and will be reported to the Dean of Students.