

NUTR (EPID) 810: Physical Activity Epidemiology and Public Health
University of North Carolina at Chapel Hill
Spring Semester 2017

Course Meeting: Fridays from 9:05 am-12:05 pm, 3 credit hours, meeting in 241 Rosenau Hall (alternate classroom 2305 McGavran-Greenberg Hall)

Instructors:

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Guest Instructor: Tope Erinosh, PhD, Research Assistant Professor, Department of Nutrition

Office hours: By appointment

Pre-requisites: Completion of EPID 600 or EPID 710, or by permission of instructor

Text: There is no textbook required for this class. Instead, readings will be available on the class website at <http://sakai.unc.edu>

Course Overview: The course is designed to give graduate students from a variety of disciplines a broad introduction to the role of physical activity and how it affects the public's health. Throughout the semester, we will cover topics such as the current recommendations for physical activity, the beneficial effects of physical activity on various health-related outcomes, determinants of physical activity, how to measure physical activity at both the individual and population levels, and strategies used to promote physical activity. Graduate students within all areas of public health and disciplines outside of public health (e.g., medicine, nursing, pharmacy, social work, and psychology) could benefit from this course.

Course Objectives:

1. To understand the current recommendations for physical activity and the context in which they were developed.
2. To describe current methodology, including advantages and disadvantages, for assessing physical activity at both the individual and population levels.
3. To understand the historical context from which the study of physical activity arose and how this background affects the research and practice of physical activity epidemiology.
4. To identify the prevalence of physical activity overall; and to relate issues of surveillance, measurement and intervention to adults, as well as to special populations, including ethnic minorities, children, women, and elders.

5. To understand the relationship between physical activity and chronic disease and its associated risk factors.
6. To specify the relationship of amount of physical activity (dose) and impact (effect) of physical activity as it pertains to chronic disease and associated risk factors
7. To identify the personal, psychological, social, and environmental correlates affecting physical activity behavior.
8. To understand the current approaches and settings for promotion of physical activity in individuals and populations
9. To describe relevant behavioral theories which have the greatest application for use in physical activity interventions.
10. To describe how policy affects physical activity behavior.
11. To identify the problem of inactivity and how it differs in impact and behavior to activity.
12. To learn what are the economic impacts of a sedentary lifestyle

Graded Work:

Student grades will be based on successful completion of course assignments, class participation, and a take-home exam. Specific details about each graded assignment and the take home exam will be posted on the course's Sakai site. As indicated below, class attendance and participation will be incorporated into the final grade.

Grading for the class will be determined as follows:

H Student reads and critically engages with all of the assigned material. Participation in discussion and written assignments exhibit the ability not only to apply the material, but also to extrapolate ideas, expand into new areas, and contribute to the body of scholarship in the area. Reserved for truly extraordinary work (i.e., $\geq 90\%$).

P Student usually reads and engages critically with the assigned material. Able to apply material and extrapolate ideas. Consistently good work done on time (i.e., 76%-89%).

L Student reads and engages critically with only some of the assigned material. Able to apply the material and extrapolate ideas in only some instances (i.e., 65%-75%).

F Student occasionally misses class, does not always read the material, fails to critically engage with it, and is unable or unwilling to apply the material (i.e., below <65%).

Assignments (60%):

1. Media assignments (Media Brief & Tweet; News Minute): 10%
2. Physical activity measurement project: 10%
3. Biological plausibility presentation: 10%
4. Review paper: 20%
5. Review paper presentation: 10%

Attendance and Participation (10%): As a seminar-type course, attendance is important and your contributions add to class quality. Please avoid missing more than 1 class period. Grades may be reduced due to excess absences. Participation will be assessed by both the quantity and quality of a student's contributions to each class. It is expected that you come prepared to contribute by completing course readings and assignments ahead of each class. This is intended to promote class discussions where all students are engaged and feel comfortable contributing to the discussion.

Final Exam (30%): The final exam will be a take-home exam and will be assigned on April 28 with a **due date of May 5 at 12 noon** Special directions as to completion will be provided on the date assigned.

Physical Activity Commitment Pledge: Everyone in the class (including instructors) will be asked (at the second class) to make a Commitment to Physical Activity for this semester. The Commitment

will have two parts: 1. Your own personal physical activity program and 2. Offering help/support to someone else. If you are already pleased with your participation/achievement, your commitment can be to maintain your current level or participation. If you are not pleased, this is a time to make a public commitment to improve. As to offering help/support to others, as public health professionals interested in physical activity, use this as a time to help someone else get started or maintain an active lifestyle. This might be a friend, partner, relative, or client. You choose. Just Do It! You will be asked at the last class how you fulfilled your semester's commitment. *Extra Credit (5 points): Monitor your progress (from baseline assessment to end of semester) and prepare a report. Also, describe what you did to support someone else's physical activity. For the extra credit, you must COMMIT to this by the 2nd class and provide your baseline assessment, suggested plan, and a thought about who you might assist.*

Honor Code:

Students must observe the Honor Code in all course assignments. You are expected to produce your own work, except where group work is specifically allowed. In all written assignments, you must not plagiarize the work of others. The instrument defining the Honor Code defines plagiarism as "deliberate or reckless representation of another's words, thoughts, or ideas as one's own without attribution in connection with submission of academic work, whether graded or otherwise." If you have questions about your responsibility under the honor code, please bring them to one of the instructors or consult with the office of the Dean of Students or the Instrument of Student Judicial Governance. This document, adopted by the Chancellor, the Faculty Council, and the Student Congress, contains all policies and procedures pertaining to the student honor system.

Please include the following pledge on all written assignments: "On my honor, I have neither given nor received unauthorized aid on this assignment."

Syllabus Changes: The instructors reserve the right to make changes to the syllabus (e.g., readings), including project due dates and test dates, when unforeseen circumstances occur. For updated reading assignments, we will attempt to make these within two weeks of the required date. These and others changes will be announced as early as possible so that students can adjust their schedules.

Class Schedule:

Date	Topic	Readings and/or Assignments
January 13	Introduction <ul style="list-style-type: none">• Course overview<ul style="list-style-type: none">○ Review requirements○ Sign-up for assignments• Historical perspective of PA epidemiology• Individual vs. public health approaches Room: Rosenau 241	[see reading list in separate document]
January 20	Physical Activity Guidelines Class Activity: <ul style="list-style-type: none">• News Minute 1 & 2 Handouts: <ul style="list-style-type: none">• PA log• Accelerometers Room: McGavran-Greenberg 2305	
January 27	Measuring Physical Activity: self-report and consumer devices Class Activity: <ul style="list-style-type: none">• Return accelerometers & PA logs• News Minute 3 & 4• Bio Plausibility 1 & 2 Room: Rosenau 241	
February 3	Measuring Physical Activity: analyzing objective monitoring data Class Activity: <ul style="list-style-type: none">• Analysis of Accelerometer data• News Minute 5 & 6• Bio Plausibility 3 & 4 Room: Rosenau 241	

<p>February 10</p>	<p>Physical Fitness</p> <p>Cass Activity:</p> <ul style="list-style-type: none"> • Fitness assessment demonstration <p>Room: EXSS Lab in Fetzer Gym (number TBD)</p>	
<p>February 17</p>	<p>Inactivity: sedentary behavior</p> <p>Class Activity:</p> <ul style="list-style-type: none"> • News Minute 7 & 8 • Bio Plausibility 5 & 6 <p>Room: Rosenau 241</p> <p>Assignment:</p> <ul style="list-style-type: none"> • Paper proposal due 	
<p>February 24</p>	<p>Physical Activity Surveillance</p> <p>Class Activity:</p> <ul style="list-style-type: none"> • News Minute 9 & 10 • Bio Plausibility 7 & 8 <p>Room: Rosenau 241</p>	
<p>March 3</p>	<p>Physical Activity Policy</p> <p>Room: McGavran-Greenberg 2305</p>	
<p>March 10</p>	<p>Individual and Interpersonal PA Correlates, Determinants and Interventions</p> <p>Assignment:</p> <ul style="list-style-type: none"> • Media Brief & Tweet due <p>Class Activity:</p> <ul style="list-style-type: none"> • News Minute 11 & 12 • Bio Plausibility 9 & 10 <p>Room: Rosenau 241</p>	

March 17	SPRING BREAK	
March 24	PA through the lifecycle Room: Rosenau 241	
March 31	Organizational and Environmental PA Correlates, Determinants and Interventions Class Activity: <ul style="list-style-type: none"> Bio Plausibility 11 & 12 Room: McGavran-Greenberg 2305	
April 7	Disease Outcomes Diabetes, CVD, Dementia/Alzheimer's, mental health Assignment: Review Paper Due Class Activity: <ul style="list-style-type: none"> Class presentations Room: Rosenau 241	
April 14	HOLIDAY	
April 21	Disease Outcomes Obesity and Cancer Class Activity: <ul style="list-style-type: none"> Class Presentations Room: McGavran-Greenberg 2305	
April 28	Course wrap-up Class Activity: <ul style="list-style-type: none"> Course evaluation Room: Rosenau 241	