University of Maryland School of Public Health



(UMCP is located on the ancestral lands of the Piscataway People)

KNES 289F – Foundations of Food, Physical Activity, and Health

Semester: Summer 2024

Section: 0101

Classroom and KNI 1105 (in-person)

Time: M/Tu/W/Th/F 9:30-12:30

Course webpage: https://umd.instructure.com/courses/1366516

Instructor: Sarah Kuzmiak-Glancy, she/her

Office Hours: By Appointment
Phone: 301.405.2502
Email: sglancy@umd.edu

Course Description: This course is designed for majors and non-majors to explore the basics of nutrition, activity & exercise, and human health. What is a calorie? What is metabolic rate? How do our daily activities alter our metabolism? What are the short- and long-term benefits of exercise? How do equity and access to food and physical activity affect health? Is sedentary behavior a greater health risk than being overweight? This blended course allows students to investigate nutrition and physical activity they encounter in their everyday life, as well as examine how differences in equity and access can affect health.

Course Pre- and Co-requisites: None.

Course Learning Outcomes:

Upon completing this course, the student will be able to:

- 1. Characterize macro- and micronutrients, discuss their roles in the body, and describe nutritionism.
- 2. Demonstrate an understanding of how physical activity and exercise alter the body's function, both acutely and long-term, and how these adaptations translate to health benefits.
- 3. Develop skills to assess energy expenditure during rest and physical activity.
- 4. Construct a basic exercise training program, plan a balanced meal and diet, and describe the risks of sedentary behavior and obesity.
- 5. Identify barriers that exist regarding access to healthy nutrition and physical activity.

Program Competencies Addressed in this Course:

The following competencies for the Kinesiology Program are addressed in this course:

- 1. Students will connect relevant theories and methods within kinesiology to evaluate research in the field.
- 2. Students will describe how backgrounds and experiences connect with physical activity across diverse populations.
- 3. Students will communicate the relationship between kinesiology and the goals of public health.
- 4. Students will apply knowledge of kinesiology to human movement, including their own physical activity.
- 5. Students will apply principles of kinesiology to human health and disease across the lifespan.
- 6. Students will understand the historical and current impact of discrimination to identify antiracist and anti-bias practices which promote health equity and social justice in kinesiology.

Skills Learned or Reinforced in this Course: critical thinking, reasoning, & global thinking; written communication, verbal communication, problem solving, & teamwork; time management & organization

Required Texts and Other Readings: All readings, videos, and activities will be posted on ELMS.



If you would like a text to accompany the content, I recommend Total Fitness and Wellness Scott K. Powers; Stephen L. Dodd 8th Edition, 2020

Required Technology and Other Materials: In this course, you will be participating in activities assessing diet, physical fitness, and the environment. Students need access to a safe space to perform these activities, a timer, and a calculator. Accommodations will be made as necessary.

Course Communication: All course-related communications will be posted as Announcements on ELMS. Emails to Dr. Glancy must be sent to <sglancy@umd.edu> and should be sent from your UMD email. *Electronic communications to the instructor must include a subject, an opening (e.g. "Dear/Hi/Hello Dr. Glancy,"), the course number (i.e. KNES 289F), a clear statement of a question, and a closing that includes your full name.*

Course Expectations: Students are expected to act with personal integrity, respect others' dignity, and be willing class participants in lectures and activities. Students are expected to be prepared for and attend all lectures, complete reading assignments, and participate in class discussions and activities. In this course, you will be assessing and reflecting on your diet and physical activity habits, which includes making estimations of caloric intake, caloric burn, and body composition. In this classroom, we will respect and refer to people using the names and personal pronouns that they share. Visit here to learn more.

Major Graded Assignments:

		Exam Date/Due Date	Points	Component %	
Exams	Exam 1	Monday, July 15	150	40%	
	Exam 2	Friday, July 19	150		
	Exam 3	Friday, July 26	100		
Activities	Activity 1	Tuesday, July 9	50		
	Activity 2	Wednesday, July 10	50	40%	
	Activity 3	Thursday, July 11	50		
	Activity 4	Friday, July 12	50		
	Activity 5	Thursday, July 18	50		
	Activity 6	Friday, July 19	50		
	Activity 7	Thursday, July 25	50		
	Activity 8	Friday, July 26	50		
Quizzes	Quizzes 1-10	Thursday, July 25 @ 11:59 PM	200	20%	
			1000	100%	

Academic Integrity: The University of Maryland <u>defines academic dishonesty</u> as committing or facilitating cheating, fabrication, plagiarism, or self-plagiarism. Academic integrity is expected and students who do not uphold the UMD Code of Academic Integrity will be referred to the Office of Student Conduct.

Use of Course Assistance Websites and Online Group Forums: Course assistance websites, such as CourseHero and others, are not permitted resources for SPH courses, unless the professor explicitly gives permission for you to use one of these sites. Material pulled from these sites can be deemed unauthorized material and a violation of academic integrity. However, collaboration on graded assignments is strictly prohibited. Examples include asking classmates for answers on quizzes or exams, asking for access codes to clicker polls, etc. Additional information on academic integrity is found in University Course Related Policies, below.

University Course Related Policies: University of Maryland policy descriptions, resources, and links to official policy documents, including Academic Integrity, Code of Student Conduct, Sexual Misconduct, Non-Discrimination, Accessibility, Attendance, Absences, or Missed Assignments, Student Rights Regarding Undergraduate Courses, Official UMD Communication, Mid-Term Grades, Complaints About Course Final Grades, Copyright and Intellectual Property, Final Exams, Course Evaluations, and Campus Resources can be found here: http://www.ugst.umd.edu/courserelatedpolicies.html

Basic Needs Security: http://go.umd.edu/basic-needs (If you have insufficient access to food; safe spaces)

Campus Building Amenities: https://maps.umd.edu/map/ (For all gender-restrooms, lactation rooms, etc.)

Student Name Change in ELMS-Canvas: https://go.umd.edu/change_name_in_ELMS Canvas

Course Procedures and Policies:

<u>Inclement Weather / University Closings / Emergency Procedures</u>: In the event that the University has a delayed opening or is closed for an emergency or extended period of time, the instructor will communicate to students regarding schedule adjustments, including rescheduling of examinations and assignments due to inclement weather and campus emergencies.

Late Work and Missed Class:

The graded assignments in this course are Quizzes, Activities, and Exams.

Quizzes

- All Quizzes are due Thursday, July 25 @ 11:59 PM.
- You have unlimited attempts but must work independently. This highest score is kept.
- Quizzes will not be accepted late.

Activities

- Activities 1-7: Due in-person at 9:30 AM on due dates See Major Graded Assignments.
- Activity 9: Due Friday, July 26 at the end of class (12:30 PM)
- Activity assignments will be accepted 1 day late, losing 10 points (out of 50) per day late.

Exams

- Exams 1-3 are in-person (7/15, 7/19, & 7/26) See Major Graded Assignments.
- A missed exam due to illness may be made up <u>with appropriate documentation and permission from Dr. Glancy</u>. You must contact Dr. Glancy within 24 hours of missing the exam in order to make it up.
 - Students must provide documentation from a physician or the University Health Center in order to make-up a missed exam.
- In the case of religious observances, athletic events, and planned absences known at the beginning of the semester, the student must inform the instructor during the schedule adjustment period.
- For all absences, students are responsible for making provision to determine what course material they have missed.
- All other policies regarding absences follow University of Maryland's Attendance Policies.

Course Calendar:

Monday	Tuesday	Wednesday	Thursday	Friday
8 Introduction Nutrition 1	9 Nutrition 2-4	10 Nutrition 5-7	11 Metabolism 1&2	12 Metabolism 3&4 Exam 1 Review
Activity 1	Activity 2	Activity 3	Activity 4	
15 Exam 1	16 Physical Activity 1-3	Physical Activity 4-6 Activity 5	18 Exam 2 Review Activity 6	19 Exam 2
Equity & Access 1&2 (online) No in-person class	23 Equity & Access 3 Activity 7	Risks of Sedentary Behavior & Obesity 1&2	25 Risks of Sedentary Behavior & Obesity 3 Exam 2 Review	26 Exam 3 Activity 8

Nutrition

- 1: Introduction to Nutrition
- 2: Carbohydrates
- 3: Fat
- 4: Protein
- 5: Micronutrients & Supplements
- 6: Glucose Absorption & Diabetes
- 7: Special Diets

Metabolism

- 1: What is a Calorie?
- 2: Metabolic Rate
- 3: ATP & Energy Available in Macronutrients
- 4: Connecting Calories to Oxygen Consumption

Physical Activity

- 1: Principles of Exercise Training
- 2: Heart Rate & Aerobic Exercise
- 3: Aerobic Exercise Energy Expenditure
- 4: Short & Long-Term Effects of Aerobic Exercise
- 5: Short & Long-Term Effects of Resistance Exercise
- 6: Planning a Basic Exercise Training Program

Equity & Access

- 1: Neighborhood Inequalities in America
- 2: Access to Nutrition
- 3: Physical & Social Impediments to Physical Activity

Risks of Sedentary Behavior & Obesity

- 1: Calories In, Calories Out
- 2: Body Composition & Health
- 3: Sedentary Behavior & Health

Activities

- 1 Normalizing Serving Sizes
- 2 Analyzing a Light Lunch
- 3 Tracking your Food Intake

Activity

4 – Estimating Metabolic Rate

Activities

- 5 Estimating Aerobic Fitness& Caloric Burn
- 6 Assessing Muscular Strength Using Functional Tests

Activity

7 – Physical Activity & the Built Environment

Activity

8 – Sedentary Behavior & Body Composition