

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

Semester: Summer 2023 Section: 0101 Classroom and M/Tu/W/Th/F 9:30-12:30 Time: Course webpage: 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 interpret, synthesize, and critically analyze research underlying the kinesiological dimensions of physical activity and health.
- 2. Students will develop principled reasoning skills necessary to apply and extend kinesiology knowledge to address problems that are relevant to physical activity and the health of diverse populations.
- 3. Students will integrate, interrogate, and communicate the connection between the scholarship of kinesiology and the goals of public health.
- 4. Students will engage in a diversity of physical activities both within and outside their formal curriculum.
- 5. Students will integrate their physical activity experiences with kinesiology sub-disciplinary knowledge.

**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

Lab Fee: \$40

**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 <u>here</u> to learn more.

		Exam Date/Due Date	Format Due	Points	Component %	
Exams	Exam 1	Monday, July 17	In-Person	100		
	Exam 2	Friday, July 21	In-Person	75	35%	
	Exam 3	Wednesday, July 26	In-Person	100		
	Exam 4	Friday, July 28	Online	75		
Activities	Activity 1	Wednesday, July 12 @ 9:30 AM	In-Person	50	45%	
	Activity 2	Friday, July 14 @ 9:30 AM	In-Person	50		
	Activity 3	Monday, July 17 @ 9:30 AM	In-Person	50		
	Activity 4	Tuesday, July 18 @ 9:30 AM	In-Person	50		
	Activity 5	Wednesday, July 19 @ 9:30 AM	In-Person	50		
	Activity 6	Friday, July 21 @ 9:30 AM	In-Person	50		
	Activity 7	Monday, July 24 @ 9:30 AM	In-Person	50		
	Activity 8	Thursday, July 27 @ 9:30 AM	In-Person	50		
	Activity 9	Thursday, July 27 @ 11:59 PM	Online	50		
Quizzes	Quizzes 1-10	Thursday, July 27 @ 11:59 PM	Online	200	20%	
			Total:	1000	100%	

#### Major Graded Assignments:

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 KNES 289F, Summer 2023 Dr. Kuzmiak-Glancy 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. <u>Material pulled from these sites can be deemed unauthorized material and a violation of academic integrity</u>. These sites offer information that might not be accurate and more generally stifle the learning process. In addition, it is understandable that students may use one of a variety of online or virtual forums for course-wide discussion (e.g., GroupME, WeChat, etc.). Collaboration in this way regarding concepts discussed in this course is permissible. 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: <a href="http://www.ugst.umd.edu/courserelatedpolicies.html">http://www.ugst.umd.edu/courserelatedpolicies.html</a>

Basic Needs Security: <u>http://go.umd.edu/basic-needs</u> (If you have insufficient access to food; safe spaces) Campus Building Amenities: <u>https://maps.umd.edu/map/</u> (For all gender-restrooms, lactation rooms, etc.) Student Name Change in ELMS-Canvas: <u>https://go.umd.edu/change\_name\_in\_ELMS\_Canvas</u>

#### 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 27 @ 11:59 PM.
- □ You have unlimited attempts, *but must work independently*. This highest score is kept.
- Quizzes will not be accepted late.

#### Activities

- Activities 1-8: Due in-person at 9:30 AM on due dates See Major Graded Assignments.
- □ Activity 9: Due Thursday, July 27 @ 11:59 PM See Major Graded Assignments.
- Activity assignments will be accepted 1 day late, losing 10 points (out of 50) per day late.

#### Exams

- Exams 1-3 are in-person (7/17, 7/21, & 7/26) See Major Graded Assignments.
- Exam 4 is ONLINE Friday, July 28 9:30-11:30 AM See Major Graded Assignments.
- A missed exam due to illness may be made up <u>with appropriate documentation and</u> <u>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
<b>10</b> Introduction Syllabus Requirements	11 Nutrition 1&2	<b>12</b> Nutrition 3-5	13 Nutrition 6&7	14 Exam 1 Review
	Activity 1	10	Activity 2	Activity 3
17 Exam 1	<b>18</b> Metabolism 1&2	<b>19</b> Metabolism 3&4	<b>20</b> Exam 2 Review Physical Activity 1&2	21 Exam 2
Activity 4	Activity 5		Activity 6	Activity 7
<b>24</b> Physical Activity 4-6 Exam 3 Review	25 Equity & Access 1-3 Activity 8	26 Exam 3	27 Risks of Sedentary Behavior & Obesity 1-3 Activity 9	28 Exam 4

#### 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 What's a Light Lunch?
- 3 Diet Analysis

# Activity

5 - Estimating Metabolic Rate

# Activities

- 4 PAR-Q and You
- 6 Estimating Aerobic Fitness & Caloric Burn
- 7 Assessing Muscular Strength Using Functional Tests

## Activity

8 – Physical Activity & the Built Environment

# Activity

9 – Sedentary Behavior & Body Composition

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