# DIE 2002: Personalized Nutrition

# I. General Information

### **Prerequisites**

Students must complete a UF Quest 1 course with a minimum grade of C before taking a UF Quest 2 course.

#### **Number of credits**

Three (3)

## **Class Meetings**

- Fall 2025
- Tuesdays Period 4 (10:40 AM 11:30 AM), and Thursday Periods 4-5 (10:40 AM 12:35 PM)
- Classroom: AND 0032 (Tuesdays); MAT 0005 (Thursdays)

#### **Instructors**

- Zhiyong Cheng
- FSHN Building (Building 475), Room 265
- Office Hours: Wednesdays 2:00am-3:00pm or by appointment via email
- Email: z.cheng@ufl.edu
- Laura Acosta
- Building 120, Room 104D
- Office Hours: Wednesdays 3:00-4:30pm by appointment. (Please email me at Ijacosta@ufl.edu
  to make an appointment. I will send you a Zoom link, or we can arrange an in-person meeting if
  you would prefer.)
- Email: ljacosta@ufl.edu
- Diana Taft
- FSHN Building (Building 475), Room 409A
- 30 minutes after class or by appointment.
- Email: dianataft@ufl.edu

## **Course Description**

This course will grapple with how and where nutrition should fit in an emerging era of precision medicine, by exploring the challenges of malnutrition and the growing epidemic of metabolic disease (e.g., obesity, diabetes, cardiovascular disease, and cancer). Based on the disciplines of molecular science, dietetics, epidemiology, and data analysis (including artificial intelligence), the course will investigate and reflect on the causes and consequences of malnutrition, and how dietary or nutrient choices can be personalized to prevent metabolic disease. Major themes include the molecular determinants of differences among individuals and nutritional contributions, malnutrition and metabolic disorders, and the application of personalized nutrition in disease prevention. This course affords students the ability to critically examine and evaluate the principles of the scientific method, model construction, and use the scientific method to explain natural experiences and phenomena.

## **Course Objectives**

- Students will study nutrients in foods
- Students will study human responses to foods
- Students will study how foods and nutrients impact human health

### **Quest and General Education Credit**

- Quest 2
- Biological Sciences

This course accomplishes the Quest and General Education objectives of the subject areas: <a href="https://undergrad.aa.ufl.edu/qeneral-education/qen-ed-program/subject-area-objectives/">https://undergrad.aa.ufl.edu/qeneral-education/qen-ed-program/subject-area-objectives/</a>. A minimum grade of C is required for Quest and General Education credit. Courses intended to satisfy Quest and General Education requirements cannot be taken S-U.

# Required Readings and Works

Materials and Supplies Fees: n/a

This course has no required textbook. Lecture slides and weekly readings will be posted on Canvas.

## Potential trigger warning

As instructors, we are aware that eating disorders exist. We have tried to be sensitive to students, this is why the alternative assignment to the FFQ exists. You can request the alternative assignment for any reason, no explanation required. If you have an eating disorder, we STRONGLY suggest you request the alternative assignment. That said, this is a course on a nutrition and diet, and much of the material can be triggering. If you find yourself struggling with the topics discussed in the class, please let us know as soon as possible and seek professional support from your counselor about if this course is appropriate for you.

# II. Student Learning Outcomes (SLOs)

At the end of this course, students will be expected to have achieved the <u>Quest</u> and <u>General Education</u> learning outcomes as follows:

**Content**: Students demonstrate competence in the terminology, concepts, theories and methodologies used within the discipline(s).

- Identify and describe fundamental principles of nutritional genetics. (Aligns with Gen Ed and Quest II *Content* SLOs,)
  - Assignments:
    - Weekly Quizzes
    - In-class Debate
- Identify examples of how genetic variations among individuals may contribute to differences in nutritional needs. (Aligns with Gen Ed and Quest II *Content* SLOs.)
  - Assignments:
    - Weekly Quizzes
    - In-class Debate
    - Mock Meal Plan
- Explain the study designs used to study nutrition. (Aligns with Gen Ed and Quest II *Content* SLOs.)
  - Assignments:
    - Food Frequency Questionnaire
    - Position Paper

**Critical Thinking**: Students carefully and logically analyze information from multiple perspectives and develop reasoned solutions to problems within the discipline(s).

- Analyze a food frequency questionnaire. (Aligns with Gen Ed and Quest II Critical Thinking SLOs.)
  - Assignment:
    - Food Frequency Questionnaire (FFQ) Analysis
- Contrast public health nutrition with personalized nutrition. (Aligns with Gen Ed and Quest II Critical Thinking SLOs.)
  - Assignments:
    - Supermarket Field Trip Reflection
    - Position Paper

**Communication**: Students communicate knowledge, ideas and reasoning clearly and effectively in written and oral forms appropriate to the discipline(s).

- Articulate the challenges in implementing a personalized nutrition paradigm. (Aligns with Gen Ed and Quest II Communication SLOs.)
  - o Assignment:
    - Supermarket Field Trip Reflection
    - Mock Meal Plan

- Debate topics relevant to personalized nutrition, and justify a position scientifically. (Aligns with Gen Ed and Quest II *Communication* SLOs.)
  - Assignments:
    - In-class Debate
    - Position Paper
    - Mock Meal Plan

**Connection**: Students connect course content with meaningful critical reflection on their intellectual, personal, and professional development at UF and beyond.

- Apply nutrition principles to practical everyday activities, such as grocery shopping and meal preparation. (Aligns with Quest II *Connection* SLO.)
  - Assignments:
    - Supermarket Field Trip Reflection
    - Mock Meal Plan

## III. Graded Work

## **Description of Graded Work**

10 Weekly Quizzes (closed book):

Multiple choice, matching, and fill-in-the-blank style questions

5 points each, lowest score dropped. Make-up for a missed quiz is possible IF a request is made within 7 days.

Total: 45 points (30% of final grade)

#### Supermarket Field Trip Reflection:

1 page, 400-600 word paper summarizing what you learned from the supermarket field trip, and how you can apply what you learned to your daily life as you select foods.

Total: 15 points (10% of final grade)

#### Food Frequency Questionnaire (FFQ) Analysis:

Complete the DHQ III from the National Institutes of Health. Then complete a worksheet summarizing and synthesizing the results. Alternate assignment is available if completing a Food Frequency Questionnaire is in any way a problem for your health or mental health. Explanation is not required; simply request the alternate assignment.

Total: 15 points (10% of final grade)

#### **Dietary Recommendations:**

Read the context information, made dietary recommendations for the individuals described in the context, and explain why the rationales for your recommendations.

Total: 15 points (10% of grade)

In-Class Debate and Position Paper:

Choose from these topics: 1) Should nutrition interventions be applied to everyone (as part of public health initiatives)? 2) Is food medicine? 3) Is the information available to dietitians today enough to design a truly personalized diet? If not, what is needed? If so, what information qualifies? 4) Are current tools to measure dietary intake sufficient to develop personalized nutrition?

Based on class discussions, formulate an opinion. Then, participate in an in-class debate (15 points), presenting and defending your position. (Or, change your mind if the other side was compelling.) After the debate, compose a 500-1000 word position paper (30 points), describing your final stance on the issue and justifying your position scientifically.

Total: 45 points (30% of final grade)

Attendance and Participation: 15 points (10% of final grade)

#### **Grade Breakdown Table**

Quizzes	10*5 pts each = 50 pts, lowest dropped, 45 pts	30%
Supermarket Field Trip Reflection	15 pts	10%
Food Frequency Questionnaire	15 pts	10%
Mock meal plan	15 pts	10%
In-class debate (group project)	15 pts	10%
Position paper	30 pts	20%
Participation	15 pts	10%
Total	150 pts	100%

## **Grading Scale**

For information on how UF assigns grade points, visit: <a href="https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/">https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/</a>

А	94.0 – 100.0%	С	74.0 – 76.9%
A-	90.0 – 93.9%	C-	70.0 – 73.9%
B+	87.0 – 89.9%	D+	67.0 – 69.9%
В	84.0 – 86.9%	D	64.0 – 66.9%
B-	80.0 – 83.9%	D-	60.0 – 63.9%
C+	77.0 – 79.9%	E	<60.0

## **Grading Rubrics**

**Attendance and Participation (Grading Rubric)** 

Criteria	Unsatisfactory- Beginning	Satisfactory- Developing	Excellent- Accomplished	Total
Attendance	2 points	4 points	6 points	/6

(3 absences are allowed with no questions asked and no grade penalty. You do not need to provide an explanation or documentation. Absences beyond 3 will be penalized if prior approval is not received).	7+ absences (unexcused)	4-6 absences (unexcused)	Besides the 3 penalty-free absences, attended all class sessions or received approval for necessary absences	
Contributions to	1 point	2 points	3 points	/3
class activities and discussion - Frequency	Student does not initiate contribution & does not participate without prompting from the instructor.	Student sometimes initiates contribution, but does so infrequently (fewer than half of the class sessions)	Student initiates contribution in at least half of the class sessions	
	1 point	2 points	3 points	/3
Contributions to class activities and discussion - Quality	Comments are uninformative and lacking in appropriate terminology. Heavy reliance on opinion and personal taste.	Comments are sometimes constructive, but not always relevant to the discussion. Student sometimes uses appropriate terminology.	Comments are mostly insightful & constructive; student mostly uses appropriate terminology.	
Attentiveness	1 points	2 points	3 points	/3
	Does not listen to others; regularly talks while others speak or does not pay attention while others speak; detracts from discussion; sleeps, etc.	Student is mostly attentive when others present materials and perspectives, but sometimes needs to be reminded of the class focus.	Student listens attentively when others present materials and perspectives, as indicated by comments that build on others' remarks, i.e., student hears what others say & contributes to the dialogue.	
				/15

Adapted from Carnegie Mellon (The point values and distribution are weighted by the relative contribution of each item to class success)

#### **Debate (Grading Rubric, Group-based grade\*)**

Criteria	Unsatisfactory- Beginning (1 point)	Satisfactory- Developing (2 points)	Excellent-Accomplished (3 points)	Earned Points
Information	Some information was accurate and credible, but there were some minor inaccuracies	Most information was clear, accurate, and credible, but was not usually thorough	All information was clear, accurate, credible, and thorough	/3
Rebuttal	Some counter arguments were weak and irrelevant	Most counterarguments were accurate, relevant, but several were weak	All counterarguments were accurate, relevant and strong	/3
Use of facts	Some points were supported well, others were not	Every major point was supported with the highest quality of evidence but the relevance of some was questionable	Every major point was well supported with the highest quality evidence	/3
Organization	Some arguments were tied to the topic but not logical in presentation	Most arguments were clearly tied to the topic but not organized in a tight, logical fashion	All arguments were clearly tied to the topic and organized in a tight, logical fashion	/3
Understanding of topic	The team seemed to understand the main points of the topic, but didn't present with ease	The team seemed to understand the main points of the topic and presented those with ease	The team clearly understood the topic in depth and presented their information forcefully and convincingly	/3
Total (15 possib	le points)			/15

#### Adapted from <a href="http://course1.winona.edu/shatfield/aire/classdebate.pdf">http://course1.winona.edu/shatfield/aire/classdebate.pdf</a>

(The point values and distribution are weighted by the relative contribution of each item to the project)

<sup>\*</sup> A signed statement of the % (a) and details of contribution is required from each student in a group. In the meantime, a peer evaluation will be implemented to let others in the group member rate the % (b) of contribution. The average of items (a) and (b) will be calculated for each student. If your average is less than 15% (in reference to 25% in a 4-person group), you will lose one point from the group grade per 5%: i.e., if your average is 10-14%, you will lose 1 point, 5-9% you will lose 2 points, 1-4% you will lose 3 points. If a student does not have a defined contribution to the project, they will earn a 0.

## **Position Paper (Grading Rubric, Individual Grade)**

If student performance is sufficiently low for any criteria, instructors reserve the right to assign a zero for that category. For example, a reference that does not exist will result in a 0 for depth of content.

Criteria	Unsatisfactory- Beginning (2 points)	Satisfactory- Developing (4 points)	Excellent-Accomplished (6 points)	Earned Points
Organization	Paper is poorly organized and difficult to follow.	Paper is generally clear and well organized. A few minor points were confusing.	Paper is clear, logical, and organized. Easy to follow line of reasoning.	/6
Depth of Content	Background information not provided, paper not justified, objective not stated, and explanations of key concepts with support from the literature and explanations of research related to topic inaccurate or incomplete. Little attempt made to tie research papers together.	Some background information provided, objective not stated, explanations of key concepts with support from the literature and explanations of research related to topic mostly accurate and complete, but weak in some areas.	Extensive background information provided, objective clearly stated, explanations of key concepts with support from the literature and explanations of research related to topic very accurate and complete.	/6
Quality and citation of evidence or literature	The evidence was not credentialed or peer reviewed. Citation of was not accurate.	Most evidence was credentialed/peer reviewed. Citation was accurate in general but with a few errors.	All evidence was credentialed or peer reviewed. Citation was accurate.	/6
Formatting	Most sections of the paper did not follow the formatting instruction.	Most sections of the paper followed the formatting instruction, with a few areas that need reformatting.	All sections of the paper followed the formatting instruction, with a few areas that need reformatting.	/6
Grammar/Word Choice	Sentences are often incomplete, and grammatical errors are evident throughout the	For the most part, sentences are complete, grammatically sound. Some sections of the	Sentences are consistently complete and grammatically	/6

Total points (30		appear choppy.	well throughout.	/30
	paper. Paper does not flow well at all.	paper flow well, however others	sound. The paper flows well throughout.	

(The point values and distribution are weighted by the relative contribution of each item to the paper)

(The point values and distribution are weighted by the relative contribution of each item to the project)

Note: Lack of submission will result in zero point.

#### Supermarket Field Trip Reflection (Grading Rubric, Individual Grade)

If student performance is sufficiently low for any criteria, instructors reserve the right to assign a zero for that category. For example, if a student does not attend the field trip and does not obtain the information covered, analysis will likely score 0 because it will be disconnected from the material covered.

Criteria	Unsatisfactory- Beginning (3 points)	Satisfactory- Developing (4 points)	Excellent-Accomplished (5 points)	Earned Points
Completeness	Addresses the assignment prompt, but only partially. OR Does not adhere to required length.	Almost completely answers the assignment prompt. Adheres to required length.	Clearly and completely answers the assignment prompt. Adheres to required length.	/5
Analysis	Slight or unclear attempt to integrate relevant facts, relationships, and the student's self.	Clear attempt to integrate relevant facts, relationships, and the student's self.	Clear integration of relevant facts, relationships, and the student's self. Includes insightful conclusions and synthesis of ideas, including how new learning can be applied to personal behaviors and choices.	/5
Writing	Includes observations but no critical reflection.	Includes observations with some critical reflection.	Includes observations with excellent critical reflection (i.e. exploration and	/5

<sup>\*</sup> A signed statement of the % (a) and details of contribution is required from each student in a group. In the meantime, a peer evaluation will be implemented to let others in the group member rate the % (b) of contribution. The average of items (a) and (b) will be calculated for each student. If your average is less than 15% (in reference to 25% in a 4-person group), you will lose one point from the group grade per 5%: i.e., if your average is 10-14%, you will lose 1 point, 5-9% you will lose 2 points, 1-4% you will lose 3 points. If a student does not have a defined contribution to the project, they will earn a 0.

	Acceptable spelling and grammar with some errors.	Good spelling and grammar with only minor errors.	critique of assumptions, beliefs, and/or biases). Excellent spelling and grammar with no or minimal errors.	
Total (15 possib	ele points)			/15

Adapted from: USC Center for Teaching Excellence. Lack of submission will result in zero point.

(The point values and distribution are weighted by the relative contribution of each item to the project)

#### **Dietary Recommendations (Grading Rubric, Individual Grade)**

If student performance is sufficiently low for any criteria, instructors reserve the right to assign a zero for that category. For example, a reference that does not exist will result in a 0 for analysis.

Criteria	Unsatisfactory- Beginning (3 points)	Satisfactory- Developing (4 points)	Excellent-Accomplished (5 points)	Earned Points
Completeness	Answered the questions partially.	Answered the questions completely.	Answered the questions completely and convincingly.	/5
Analysis	The rationales were weak, lacked logic and evidence, and dissociated from the recommendation	The rationales integrated evidence and partially support the recommendations	The rationales were logical, integrated evidence, and fully support the recommendations	/5
Writing	Acceptable spelling and grammar with some errors. Did not adhere to the formatting guideline.	Good spelling and grammar with only minor errors. Adhered to the formatting guideline.	Excellent spelling and grammar with no or minimal errors. Adhered to the formatting guideline.	/5
Total (15 possil	ple points)			/15

# IV. Annotated Weekly Schedule

Week	Topics, Homework, and Assignments
Week 1: August 21-22 Dr. Acosta	<ul> <li>Topic: Introduction to Personalized Nutrition</li> <li>Summary: This week we will get oriented to the course and the concept of personalized nutrition. We will discuss the syllabus and expectations. You will take a pre-test (not graded) that will help us evaluate your current knowledge of personalized nutrition and tailor the course to your interests.</li> <li>Required Readings/Works: video watch (Too good to be true - Battling Bad Science, 14 min): <a href="https://www.youtube.com/watch?v=h4MhbkWJzKk">https://www.youtube.com/watch?v=h4MhbkWJzKk</a></li> <li>Assignment: Pre-test (homework, due Tuesday, August 26, not graded but worth 1 extra credit point if completed on time)</li> </ul>
Week 2 August 25-29 Dr. Acosta	<ul> <li>Topic: The Meaning of the Mean (i.e., inter-individual variability in nutrition research)</li> <li>Summary: As you read nutrition research literature, you will often encounter results reported as means (averages). Because nutrition studies are often observational epidemiological studies, it's important to understand how statistics work on the population level. This week we will critically evaluate the meaning of these results, how to interpret them, and whether we can make assumptions about individuals based on aggregate data. What are the implications of using "averages" in the context of individual patient or client care?</li> <li>Required Readings/Works: Rose T. The Invention of the Average. In: The End of Average. New York: HarperOne. 2016;19-38.</li> <li>Assignment: Complete pre-test by Tuesday, August 26 (for 1 extra credit point)</li> </ul>
Week 3 September 1-5 Dr. Taft	<ul> <li>Topic: How we differ in response to foods, and how we don't</li> <li>Summary: There are a wide variety of diets reported in the popular press, some of which claim to be based on your genetics. This week, we will discuss the difficulties in communicating nuanced dietary information to a lay audience, and cases where diet must be individualized (i.e., PKU). We will also discuss how populations need to be studied to identify individual factors important to selecting diet.</li> <li>Required Readings/Works: Chapter 3 - Eat Right for Your Type Complete (no page numbers for online version); Phenylketonuria NIH rare diseases website - <a href="https://rarediseases.info.nih.gov/diseases/7383/phenylketonuria">https://rarediseases.info.nih.gov/diseases/7383/phenylketonuria</a> [about the disease pages on disease at a glance, symptoms, causes, next steps]; University of Washington What is the diet for PKU webpage - <a href="https://depts.washington.edu/pku/about/diet.html">https://depts.washington.edu/pku/about/diet.html</a></li> <li>Assignment: Quiz 1, Tuesday, September 2</li> </ul>
Week 4 September 8-12 Dr. Taft	<ul> <li>Topic: Why do we target everyone with interventions?</li> <li>Summary: What is public health nutrition? What does it mean to say that "good public health is invisible"? What examples of successful public health interventions can be found in a grocery store, and what do these interventions mean for individual diet choices?</li> </ul>

Week	Topics, Homework, and Assignments
	<ul> <li>Required Readings/Works: History of US Iodine Fortification and Supplementation Nutrients pg 1740-1746 doi 10.3390/nu4111740; The Contribution of Public Health and Improved Social Conditions to Increased Life Expectancy: An analysis of public awareness Journal of Community Medicine and Health Education doi: 10.4172/2161-0711.1000311 (5 pages)</li> <li>Assignment: Quiz 2, Tuesday, September 9; Field Trip on Thursday, September 11</li> </ul>
Week 5 September 15-19 Dr. Cheng	<ul> <li>Topic: Metabolites and Metabolic Memory (i.e., how we differ in genetic and epigenetic makeup)</li> <li>Summary: What is metabolite? What is metabolic memory? How does metabolic memory affect an individual's metabolic health?</li> <li>Required Readings/Works: NCBI Bookshelf – Metabolism (pp. 1-5); Video watch (Epigenetics– 13 min) https://www.youtube.com/watch?v=avWwfuJYnnI&amp;t=33s</li> <li>Assignment: Quiz 3, Tuesday, September 16; Supermarket Field Trip Reflection Due Thursday, September 18</li> </ul>
Week 6 September 22-26 Dr. Cheng	<ul> <li>Topic: Spotlight on carbohydrates in Metabolic Memories</li> <li>Summary: Are all carbohydrates the same? How does lifestyle impact carbohydrate status? How do carbohydrates influence an individual's metabolic memory and health?</li> <li>Required Readings/Works: NCBI Bookshelf – carbohydrates (pp. 1-5)</li> <li>Assignment: Quiz 4, Tuesday, September 23</li> </ul>
Week 7 September 29 - October 3 Dr. Cheng	<ul> <li>Topic: Spotlight on Fat in Metabolic Memories</li> <li>Summary: Are all fats the same? How does lifestyle impact fat status? How do fats influence an individual's metabolic memory and health?</li> <li>Required Readings/Works: NCBI Bookshelf – Lipids (pp. 1-7)</li> <li>Assignment: Quiz 5, Tuesday, September 30</li> </ul>
Week 8 October 6-10 Dr. Taft	<ul> <li>Topic: Spotlight on the Microbiome</li> <li>Summary: What do our gut microbes eat? How do we acquire them? What epidemiological study designs are needed to understand our gut microbes?</li> <li>Required Readings/Works: Diet and the human gut microbiome: an international review, Digestive Diseases and Sciences pgs. 723-740, doi: https://doi.org/10.1007/s10620-020-06112-w</li> <li>Assignment: Quiz 6, Tuesday, October 7</li> </ul>
Week 9 October 13-17 Dr. Cheng	<ul> <li>Topic: Spotlight on Proteins in Metabolic Memories</li> <li>Summary: Are all proteins the same? How does lifestyle impact protein status? How do proteins or amino acids influence an individual's metabolic memory and health?</li> <li>Required Readings/Works: NCBI Bookshelf – Proteins (pp. 1-13)</li> <li>Assignment: Quiz 7, Tuesday, October 14</li> <li>Topic: Debate</li> </ul>

Week	Topics, Homework, and Assignments
October 20-24 Drs. Acosta, Cheng, Taft	<ul> <li>Summary: There are ongoing controversies over personalized nutrition.         Depending on class size we will debate one or more of these topics:         <ol> <li>Should nutrition interventions be applied to everyone (as part of public health initiatives)?</li> <li>Is food medicine?</li> <li>What qualifies as personalized nutrition (i.e. does a diet plan developed by a dietitian today count?)</li> <li>Is breastmilk personalized nutrition?</li> </ol> </li> <li>Required Readings/Works: None for this week</li> <li>Assignment: In-Class Debate, Tuesday/Thursday, October 21/23</li> </ul>
Week 11 October 27-31 Dr. Cheng	<ul> <li>Topic: Spotlight on Vitamins in Metabolic Memories</li> <li>Summary: What is a vitamin? How does lifestyle impact vitamins status? How do vitamins influence an individual's metabolic memory and health?</li> <li>Required Readings/Works: NCBI Bookshelf – Protein Enzymes (pp. 1-5)</li> <li>Assignment: Quiz 8, Tuesday, October 28; Position Paper Due Thursday, October 30</li> </ul>
Week 12 November 3-7 Dr. Cheng	<ul> <li>Topic: Spotlight on Minerals in Metabolic Memories</li> <li>Summary: What is a mineral? How does lifestyle impact minerals status?         How do minerals influence an individual's metabolic memory and health?</li> <li>Required Readings/Works: NCBI Bookshelf – Minerals (pp. 12-34); National Library of Medicine Definitions of Health Terms – Minerals (pp. 1-4)</li> <li>Assignment: Quiz 9, Tuesday, November 4</li> </ul>
Week 13 November 10-14 Dr. Taft	<ul> <li>Topic: Food Frequency Analysis and Study Designs</li> <li>Summary: How do we measure diet in humans? What are the basic types of human studies, and what are their strengths and limitations? How do limitations of tools influence epidemiological studies?</li> <li>Required Readings/Works: Study design and hypothesis testing: issues in the evaluation of evidence from research in nutritional epidemiology The American Journal of Clinical Nutrition pgs. 1315S-1321S doi: https://doi.org/10.1093/ajcn/69.6.1315S</li> <li>Supplementary/Bonus Readings: NutriTools website, Strengths and Weakness of Dietary Assessment Tools (DATs) - https://www.nutritools.org/strengths-and-weaknesses (please note, clicking on the tool name on the website will provide more detail on each tool)</li> <li>Assignment: FFQ Analysis Worksheet Due Thursday, November 13</li> </ul>
Week 14 November 17-21 Dr. Taft	<ul> <li>Topic: Artificial Intelligence and the Future of Personalized Nutrition: The Opportunities and Challenges</li> <li>Summary: What is AI? How can AI help with nutrition? What are the ethical challenges of using AI for personalized nutrition? Reflecting upon this course, what are the next steps? Where do you see the future of personalized nutrition? What are the opportunities, and what are the challenges?</li> </ul>

Week	Topics, Homework, and Assignments
	<ul> <li>Required Readings/Works: Artificial intelligence in nutrition research: perspectives on current and future research Applied Physiology, Nutrition, and Metabolism pgs. 1-8 doi <a href="https://doi.org/10.1139/apnm-2021-0448">https://doi.org/10.1139/apnm-2021-0448</a></li> <li>Assignment: Quiz 10, Tuesday, November 18; Dietary Recommendations Due Thursday, November 20.</li> </ul>
Week 15 November 24-28	Holiday week
Week 16: December 1-5 Dr. Acosta	<ul> <li>Topic: Personalized Nutrition: The Opportunities and Challenges</li> <li>Summary: Reflecting upon this course, what are the next steps? Where do you see the future of personalized nutrition? What are the opportunities, and what are the challenges?</li> <li>Required Readings/Works: None this week</li> <li>Assignment: Dietary Recommendations Due Monday, December 1st at 11:59 pm)</li> </ul>

# V. Quest Learning Experiences

## 1. Details of Experiential Learning Component

<u>Supermarket Field Trip</u>: There will be two components to this activity. During the class prior to the trip, we will present a lecture on what a public health nutrition intervention is, and what makes a successful public health intervention. It will include discussion about how good public health interventions are invisible. This will prepare students for the field trip. Because supermarkets contain a number of highly successful public health interventions, the class will then take a trip to a supermarket where we will walk through the aisles and highlight a number of successful public health interventions. This will make the invisible visible and give students a chance to see the number of public health nutrition interventions they encounter on a daily basis, likely without knowing it.

<u>Food Frequency Questionnaire Analysis</u>: Personalized Nutrition relies on being able to accurately measure diet in a research setting. Completing a food frequency questionnaire will give students direct experience of what tools researchers use to measure diet, and the time research participants spend completing questionnaires for nutrition studies. As food frequency questionnaires can cause problems for individuals struggling with eating disorders, an alternative assignment that does not require the completion of a food frequency questionnaire is available to any student who asks, without need for any explanation of why the alternative assignment was requested. Students who can complete a food frequency questionnaire are encouraged to do so, for the insight into the nature of nutrition research that the questionnaire provides.

## 2. Details of Self-Reflection Component

<u>Supermarket Field Trip Reflection</u>: Following the Supermarket Field Trip, students will write a 1 page reflection paper in which they summarize what they learned from the supermarket field trip, and how they can apply what they learned to their daily lives. They will reflect on how they can make more informed, conscious food choices, and how public health initiatives influence the availability and location of foods on grocery store shelves.

<u>Position Paper</u>: Following the in-class debate, students will compose a position paper in which they articulate the opinion they have formed after participating in the debate. They will reflect on how their thinking has evolved, describe their final stance, and justify their position scientifically.

# VI. Required Policies

#### **Academic Policies & Resources**

Visit the kink: https://syllabus.ufl.edu/syllabus-policy/uf-syllabus-policy-links/

### **Attendance Policy**

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:

https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/

## **Students Requiring Accommodation**

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting <a href="https://disability.ufl.edu/students/accommodations/">https://disability.ufl.edu/students/accommodations/</a>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

#### **UF Evaluations Process**

Student assessment of instruction is an important part of efforts to improve teaching and learning. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online.

Students can complete evaluations in three ways:

- 1. The email they receive from GatorEvals,
- 2. Their Canvas course menu under GatorEvals, or
- 3. The central portal at https://my-ufl.bluera.com

Guidance on how to provide constructive feedback is available at <a href="https://gatorevals.aa.ufl.edu/students/">https://gatorevals.aa.ufl.edu/students/</a>. Students will be notified when the evaluation period opens.

Summaries of course evaluation results are available to students at <a href="https://gatorevals.aa.ufl.edu/public-results/">https://gatorevals.aa.ufl.edu/public-results/</a>.

## **University Honesty Policy**

UF students are bound by The Honor Pledge which states "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Conduct Code specifies a number of behaviors that are in violation of this code and the possible sanctions. See the <u>UF Conduct Code website for more information</u>. If you have any questions or concerns, please consult with the instructor or TAs in this class.

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: (New Link: <a href="https://policy.ufl.edu/regulation/4-040/">https://policy.ufl.edu/regulation/4-040/</a>)

## **In-Class Recordings**

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

## Use of artificial intelligence (AI) tools

Note that the accuracy and credibility of information from AI-based platforms have been questioned. If students use AI tools to prepare their assignments, it is the students' responsibility to ensure the information credibility, acknowledge the AI assistance and sources, and abide by the UF Honor Code. AI tools are not allowed for closed-book guizzes or exams.

## **Campus Helping Resources**

Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

**Whole Gator App** and website connects UF students with resources dedicated to supporting overall health and well-being. In addition to many of the resources below it also has strategies to practice self-care. https://one.uf.edu/whole-gator/topics

#### Health and Wellness

- U Matter, We Care: If you or someone you know is in distress, please contact <u>umatter@ufl.edu</u>, 352-392-1575, or visit <u>U Matter, We Care website</u> to refer or report a concern and a team member will reach out to the student in distress.
- Counseling and Wellness Center: <u>Visit the Counseling and Wellness Center website</u> or call 352-392-1575 for information on crisis services as well as non-crisis services.
- Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or <u>visit the Student Health Care Center website</u>.
- University Police Department: <u>Visit UF Police Department website</u> or call 352-392-1111 (or 9-1-1 for emergencies).
- UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit the UF Health Emergency Room and Trauma Center website.
- GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the <u>GatorWell website</u> or call 352-273-4450.
- Hitchcock Field and Fork Pantry. Food and toiletries for those experiencing food insecurity.
- Student Success Initiative, <a href="http://studentsuccess.ufl.edu.">http://studentsuccess.ufl.edu.</a>

#### Academic Resources

• E-learning technical support: Contact the <u>UF Computing Help Desk</u> at 352-392-4357 or via e-mail at <u>helpdesk@ufl.edu</u>.

- <u>Career Connections Center</u>: Reitz Union Suite 1300, 352-392- 1601. Career assistance and counseling services.
- <u>Library Support</u>: Various ways to receive assistance with respect to using the libraries or finding resources. Call 866-281-6309 or email ask@ufl.libanswers.com for more information.
- <u>Teaching Center</u>: 1317 Turlington Hall, 352-392-2010 or to make an appointment 352-392-6420. General study skills and tutoring.
- Writing Studio: Daytime (9:30am-3:30pm): 2215 Turlington Hall, 352-846-1138 | Evening (5:00pm-7:00pm): 1545 W University Avenue (Library West, Rm. 339). Help brainstorming, formatting, and writing papers.
- Academic Complaints: Office of the Ombuds; <u>Visit the Complaint Portal webpage for more information.</u>
- Enrollment Management Complaints (Registrar, Financial Aid, Admissions): <u>View the Student</u> Complaint Procedure webpage for more information.
- <u>Dean of Students Office</u>. 202 Peabody Hall, 392-1261. Among other services, the DSO assists students who are experiencing situations that compromises their ability to attend classes. This includes family emergencies and medical issues.

#### **Student Complaints:**

- Residential Course: <a href="https://www.ombuds.ufl.edu/complaint-portal/">https://www.ombuds.ufl.edu/complaint-portal/</a>
- Online Course: <a href="https://pfs.tnt.aa.ufl.edu/state-authorization-status/#student-complaint">https://pfs.tnt.aa.ufl.edu/state-authorization-status/#student-complaint</a>