Nutrition

APSM 3351 SMU-in-Taos
Instructor: Laura Robinson – Doyle Jan-Term 2019
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Course Description
This course provides an examination of the role that nutrition plays in health and optimal functioning. Through the assessment of literature, this course will address the implications of nutrition on body-image, obesity, heart disease, certain cancers, and various cultures, primarily the Native American population.

Student Learning Outcomes: Community Engagement
Students will apply academic learning to address specific need(s) in a community through a community engagement activity.

Based on individual participation and the use of information learned in the classroom. Students will take nutritional knowledge and apply their understanding and assist in harvesting organic fruits and vegetables at various community gardens in Taos, New Mexico. Students will also serve at the local food pantry handing out bags of food to individuals in the community. Additionally, by visiting the city of Los Alamos, NM students enrolled in APSM 3351 will gain an understanding on how wealth within a community contributes to nutritional choices.

Course Objectives
Upon completion of this course, you will be able to do the following:

SLO for Technology and Mathematics
- Students will demonstrate an understanding of the social or environmental implications of technology.

Additional Learning Objectives
- Provide an overview of the major macro and micronutrients relevant to human health.
- Identify the central role that nutrition plays in health and function across the life span.
- Understand the importance of nutrition in human health and disease.
- Understand the related research to be able to critically judge the validity of nutritional claims.
- Identify evidence-based practices in the area of nutrition.
- Understand how cultural factors influence individual nutritional choices.

Required Text

Nutrition – An- Applied Approach (Thompson and Manore), Fourth edition, 2015. Publisher Pearson, Benjamin, Cummings, ISBN13: 978-0-321-91039-4 (student edition)

Tentative Course Layout

Module 1: Creating a foundation for Nutrition

- Chapter One: Nutrition: Linking Food to Function, and Health
- Chapter two: Designing a Healthful Diet
- Chapter Three: The Human Body: Are we really what we eat?
- Disorders related to food: Chapter 3 in depth
- Fat, Sick, and Nearly Dead
- Food Matters - (Reflection)
- State of Nutrition in Taos (Paper)
- **Module One exams, quizzes, and assignments are Due by Jan 9st @ 11:59pm**.

(Objectives: Understand the related research to be able to critically judge the validity of nutritional claims, Identify evidence-based practices in the area of nutrition, Understand the importance of nutrition in human health and disease, Understand how cultural factors influence individual nutritional choices.)

Module 2 (Opens Jan 9th 12am) Macronutrients

- Chapter 4: Carbohydrates: Plant-derived energy
- Chapter 5: Fats: Essential energy
- Chapter 6: Protein: Crucial components
- Chapter 6 In-depth - Vitamins and Minerals
- Sustainability and Farming – Reflection #2
- Water Rights and their role on the land (Paper)
- **Module Two exams, quizzes, and assignments are Due by Jan 11th @ 11:59pm**

Module 3 (Opens Jan 11th 12am): Nutrients and its involvement

- Chapter 8: Antioxidant Function
- Chapter 9: Bone Health
- Chapter 10: Energy Metabolism
- Chapter 11: Healthful body weight
- Chapter 11 In-depth Quiz

- **Module Three exams and quizzes are Due by Jan 13th @ 11:59pm**.

Module 4 (Opens Jan 13th 12am): Technology and Nutrition

- Chapter 13: Food Safety and Technology
- Chapter 13 In-depth Quiz
- In the Defense of Food – Reflection
- Technology and Nutrition position paper
- Community Engagement Reflection Due
- **Module Four exams, quizzes, and assignments are Due by Jan 16th @ 11:59pm**

(Objective: Provide an overview of the effects of technology on nutrition, farming, and healthy lifestyle habits.)

Off Site Field Experiences

Farmhouse Café and Farm

The Taos Food Status – St. James Episcopal Church

Taos Pueblo – Farming and Sustainability on the Pueblo

Participation
You are expected to attend class and to participate in all course activities, both on and off campus. Documentaries are to be watched outside of class. Be prepared to connect and discuss the science in the classroom as it relates to the film.

Food Logs and Reflections
Each day you will record your daily eating habits in a log book. Your log book will be submitted the last day of class. In addition, after each documentary you will write a reflection addressing a brief summary of the film and your provoked thoughts that may have arose during the film. Pay attention to any personal views that may be changing throughout the course.

Article Review
This assignment allows students the opportunity to discover and delve into current peer reviewed nutrition journals and decipher the information by constructing a critical analysis review of the article. This opportunity allows the student the ability to demonstrate their understanding of current theory and practice in a synthesized manner.

Reflection Paper **COMMUNITY ENGAGEMENT**
During the final week of the course you will write a 2-3 page, does not include cover page, reflection paper discussing how your off-site experience broadened your

understanding of the local community, and how access to healthy nutrition impacts human health and disease.
Throughout the course you will be openly discussing your experience with other students in the class. You are free to submit your reflection paper for review at anytime during the final week of the course.

Technology and Nutrition Paper **MATHMATICS & TECHNOLOGY**
Though peer-reviewed articles, course content, community engagement, and class discussions you are to answer the question; How has technology influenced the field of nutrition, agriculture, or ones access to making healthy nutritional decisions? Your position can be focused on the positive or negative side of influence. Detailed explanation and rationale are required to receive a successful grade.
UC grading rubric attached.

Quizzes
Your knowledge and understanding of the content will be assessed with quizzes over content covered. Each quiz will include multiple choice and true false answer.

Exams
Chapter exams are to be completed and submitted on Canvas. Late exams will not be accepted.

Combined Rubric Sample: Technology and Mathematics

Course _____ Student _____ Assignment _____ Date _____

Accomplishment level	Or Earned Score	Pick one that best fits the context of the course.			
		SLO 1a: Students will demonstrate an understanding of post-calculus mathematical concepts.	**SLO 1b: Students will demonstrate an ability to analyze complex mathematical problems that arise in a particular discipline or area.**	**SLO 1c: Students will demonstrate an understanding of how particular technologies work.**	**SLO 1d: Students will demonstrate an understanding of the social or environmental implications of technology.**
ABSENT 1	**< 60**	Student demonstrates no understanding of post-calculus mathematical concepts.	Student demonstrates no ability to analyze complex mathematical problems that arise in a particular discipline or area.	Student demonstrates no understanding of how particular technologies work.	Student demonstrates no understanding of the social or environmental implications of technology.
BEGINNING 2	**60-69**	Student demonstrates little understanding of post-calculus mathematical concepts.	Student demonstrates little ability to analyze complex mathematical problems that arise in a particular discipline or area.	Student demonstrates little understanding of how particular technologies work.	Student demonstrates little understanding of the social or environmental implications of technology.
DEVELOPING 3	**70-79**	Student demonstrates an emerging understanding of post-calculus mathematical concepts.	Student demonstrates an emerging ability to analyze complex mathematical problems that arise in a particular discipline or area.	Student demonstrates an emerging understanding of how particular technologies work.	Student demonstrates an emerging understanding of the social or environmental implications of technology.
ACCOMPLISHED 4	**80-89**	Student demonstrates clear understanding of post-calculus mathematical concepts.	Student demonstrates clear ability to analyze complex mathematical problems that arise in a particular discipline or area.	Student demonstrates clear understanding of how particular technologies work.	Student demonstrates clear understanding of the social or environmental implications of technology.
EXEMPLARY 5	**90-100**	Student demonstrates superior understanding of post-calculus mathematical concepts.	Student demonstrates superior ability to analyze complex mathematical problems that arise in a particular discipline or area.	Student demonstrates superior understanding of how particular technologies work.	Student demonstrates superior understanding of the social or environmental implications of technology.

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