

Course Bulletin

144488	Serving a Healthy Diet			
Subject: UC	Catalog Nbr: NUTM01	2025 SPRG	Primary	Diane McKay diane.mckay@tufts.edu
<p>In a world of conflicting food messages, how do we know which foods are good for us? What is the evidence for why you might want to incorporate foods like leafy greens, beans and berries more often into the meals you prepare? How do you construct a menu that tastes good, meets the nutrient and health requirements for an individual or group, and is culturally appropriate and responsibly sourced?</p> <p>Planning and implementing healthy meals for customers, clients, family, and friends can pose a challenge. In this course we explore the relationship between diet and health by examining the habitual eating patterns, e.g., Mediterranean-style, vegetarian, etc., that have been shown to prevent chronic diet-related conditions such as heart disease, hypertension, type 2 diabetes, and certain cancers. We learn about the nutritional components of the foods and beverages commonly present in these healthy eating patterns and to implement strategies that will help those we serve make better food choices.</p> <p>Course Objectives:</p> <p>By the end of this course, participants will be able to</p> <ul style="list-style-type: none"> • Describe healthful dietary patterns and summarize their common factors. • Identify the healthful properties of foods, how to responsibly source those foods, and how preparation influences their properties. • Create a healthful dish based on principles of maximizing flavor while mitigating chronic disease risk. 				

146105	Probability for Machine Learning			
Subject: UC	Catalog Nbr: DIS201			
<p>(Cross-listed as ES 201) A foundational understanding of important concepts in probability as they relate to machine learning. Random variables, probability densities, expectation, variance, covariance, bias, Bayes' theorem, regularization, entropy, and applications in practical approaches to regression, classification, and clustering.</p>				

146106	Matrix Methods for Machine Learning			
Subject: UC	Catalog Nbr: DIS202			
<p>(Cross-listed as ES 202) Basic linear algebra operations and their use in approximations underlying machine learning, with applications to solving regression, classification, and clustering problems.</p>				

146107	Introduction to Bayesian Modeling			
Subject: UC	Catalog Nbr: DIS211			
<p>(Cross-listed as ES 211) Concepts and practices of Bayesian modeling. Models with conjugate priors, illustrating with the Beta-Binomial and Gamma-Poisson models. Markov Chain Monte Carlo (MCMC) and</p>				

Course Bulletin

variational inference (VI) methods for Bayesian inference. Semi-conjugate models, including Bayesian linear regression, Bayesian mixture models, and Bayesian hidden Markov models. Models for which there are not conjugate priors, such as Bayesian logistic regression, Bayesian multiclass regression, a racially polarized voting model, and Bayesian deep learning.

146108	Deep Learning in PyTorch			
Subject:	Catalog Nbr:			
UC	DIS212			
(Cross-listed as ES 212) An introduction to the PyTorch deep learning software library, from implementing basic machine learning models to implementing cutting-edge deep learning methods. Training various deep learning architectures, including image classifiers. Using PyTorch data management tools. Best practices for writing maintainable and reusable PyTorch code.				

146864	Accelerated Development of Excellence in Physical Therapy			
Subject:	Catalog Nbr:			
UCOE	0120			
2025 SUMR	Primary	Amy Schlessman	Amy.Schlessman@tufts.edu	
The ADEPT (Accelerated Development of Excellent in Physical Therapy) Program is an on-ramp program for students who wish to pursue their Doctorate in Physical Therapy. Students will learn introductory content in Neuroscience, Movement Science, Physiology, and Anatomy, as well as study and cognitive learning skills. This program is delivered through the Department of Rehabilitation Sciences (DRS) in partnership with University College.				

147074	Food is Medicine 101: Translating Evidence to Action			
Subject:	Catalog Nbr:			
UC	NUTM02			
2025 SPRG	Primary	Diane McKay	diane.mckay@tufts.edu	
2025 SPRG	Primary	Allison Mcqueen	Allison.Mcqueen@tufts.edu	
The Food is Medicine 101 continuing education (CE) course aims to educate medical professionals on the critical link between nutrition and health and its application to the healthcare setting. This 1-hour course will provide definitions of Food is Medicine (FIM) and its related programs; context of FIM within the current state of chronic disease, healthcare costs, and health inequities; evidence-based information about interventions that integrate FIM into patient care; practical strategies for applying FIM in clinical settings; patient experiences; policy directions; and resources for further learning. This is a continuing medical education module, intended for healthcare providers, including doctors, nurses, other health professionals who qualify for continuing ed credit from ACCME and/or ANCC (e.g. physician assistants, registered dietitians).				

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