

Course Bulletin

144488	Serving a Healthy Diet			
Subject: UC	Catalog Nbr: NUTM01	2022 SUMR	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. 				

145197	Essentials of Probability for Machine Learning			
Subject: UC	Catalog Nbr: DIS002			
<p>Machine learning is increasingly essential to a wide range of fields. While many use machine learning methods as "black boxes" that get results in mysterious ways, practitioners of machine learning can be even more effective when equipped with the tools for understanding how probability underpins the methodologies and technologies that are powering cutting-edge industries and research.</p> <p>This four-day virtual workshop is designed both for those who are beginning a foray into machine learning and want to build a solid probabilistic foundation, as well as those already applying machine learning methodology but who wish to bring probabilistic perspectives to bear on the techniques they know. This course will be ideal for professionals who are leveraging machine learning to solve business challenges, those working in data science, data analytics, and in related areas of application, such as health analytics, financial services, and for researchers in any field engaging with machine learning.</p> <p>By developing a conceptual grounding in probability, this workshop will give you the tools to better explain, appropriately apply, customize, troubleshoot, and interpret analyses that involve machine learning techniques. The workshop will unpack fundamental topics in probability, including: random variables, probability densities, expectation, variance, covariance, bias, Bayes' theorem, prior and posterior distributions, maximum likelihood regularization, entropy, and sampling. You will also explore practical applications of these concepts for the crucial machine learning tasks of regression, classification, and clustering.</p>				

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Participants should have experience with calculus and basic proficiency in Python. Prior to the start of the workshop, participants will have the opportunity to consult with the instructor about the course content and their level of preparation.

145198	Essentials of Machine Learning—Matrix Methods	
	Subject:	Catalog Nbr:
	UC	DIS001