

Course Bulletin

100488	Social and Behavioral Science			
Subject:	Catalog Nbr:			
CMPH	0118			
2023 FALL	Primary	Michael Siegel		Mike.Siegel@tufts.edu
<p>This course explores the interconnections between society, behavior, and health. Students learn to conceptualize a health problem from a population perspective that emphasizes the social determinants of health. Through case studies, students examine different determinants of health, strategies for improving the health of communities and individuals in those communities, and strategies to affect individual and group behavioral change.</p>				

100683	Healthcare Organization: Budgeting and Management			
Subject:	Catalog Nbr:			
CMPH	0136			
2023 SPRG	Primary	Justin St. Phillips		Justin.St__Phillips@tufts.edu
2024 SPRG	Primary	Karen Errichetti		Karen.Errichetti@tufts.edu
<p>This course focuses on cost accounting and budgeting in health services, nonprofit financial statement preparation, and the formulation of strategic business plans within the context of economic health policy. Students learn managerial theory and practice pertaining to organizational behavior, information systems, personnel, resource allocation, consensus building and prioritization of goals, conflict resolution, and negotiation strategies.</p>				

100736	Integration of Public Health			
Subject:	Catalog Nbr:			
CMPH	0151			
2024 SPRG	Primary	Ylisabeth Bradshaw		libby.bradshaw@tufts.edu
2024 SPRG	Primary	Meera Gatlin		Meera.Gatlin@tufts.edu
<p>This course is designed to help MD/MPH and DVM/MPH students integrate their clinical, scientific, and public health education both conceptually and in regards to future career planning and development. The course provides continuity throughout the course of medical or veterinary school, allowing each student to develop a mentoring relationship with at least two faculty members. The course is designed in part to ameliorate the potential perceptions of discontinuity created by the spreading out of an 18 month curriculum over 4 years. The course is designed to help prepare a student for the Applied Learning Experience (ALE) and to increase the likelihood that the ALE will be of sufficient scope, depth and quality to allow for a final paper suitable for publication.</p>				

100795	Global Population Health			
Subject:	Catalog Nbr:			
CMPH	0170			
2024 SPRG	Primary	Felicia Nutter		Felicia.Nutter@tufts.edu
2024 SPRG	Primary	Meera Gatlin		Meera.Gatlin@tufts.edu

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100913	Environmental and Occupational Health			
Subject:	Catalog Nbr:			
CMPH	0203			
2023 FALL	Primary	Barry Levy		barry.levy@tufts.edu
<p>This course discusses major occupational and environmental health issues and methods of prevention and control. Using health histories, students identify and obtain relevant information on occupational and environmental health issues, describe relevant laws and regulations as well as roles of governmental and non-governmental agencies. Students develop the skills necessary to be effective risk communicators when explaining occupational and environmental health risks to the public.</p>				

100952	Law and Public Health			
Subject:	Catalog Nbr:			
CMPH	0204			
2024 SPRG	Primary	Marcia Boumil		marcia.boumil@tufts.edu
<p>This course describes the legal basis for public health. Basic principles of malpractice, informed consent, defenses to legal liability, and health care regulation at the state and federal level are discussed. Students present and analyze the ethical and legal obligations of physicians and veterinarians on issues such as allocation of scarce resources, termination of treatment, intervention on behalf of minor children, people with disabilities, and the elderly.</p>				

100992	Legal Basis of Public Health Veterinary Medicine			
Subject:	Catalog Nbr:			
CMPH	0207			
2024 SPRG	Primary	Catherine Brown		Catherine.Brown@tufts.edu
2024 SPRG	Primary	Meera Gatlin		Meera.Gatlin@tufts.edu
<p>This course describes the legal basis for public health. Basic principles of public health and health care regulation at the state and federal level are reviewed. The course materials are available on line by the CDC and are supplemented by program faculty.</p>				

101029	Public Health Field Experience			
Subject:	Catalog Nbr:			
CMPH	0208			
2023 SUMR	Primary	Meera Gatlin		Meera.Gatlin@tufts.edu
2023 SUMR	Primary	Patrick Vivier		Patrick.Vivier@tufts.edu
<p>For their core field experience, students complete a field placement (minimum of 200 hours) in a public, private, or volunteer public health practice organization during the summer following the first year of study. Students may choose from a prepared list of local, national, and international placements or arrange an alternative placement. Each student works with a public health practitioner/mentor on a project which is beneficial to the host agency. The summer field experience is designed to provide students with an</p>				

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opportunity to integrate their knowledge and develop their skills in a practitioner's environment. Students present their project to faculty and students upon completion of their eight-week experience.

101105	Integration of Public Health			
Subject:	Catalog Nbr:			
CMPH	0251			
2024 SPRG	Primary	Ylisabeth Bradshaw	libby.bradshaw@tufts.edu	
2024 SPRG	Primary	Meera Gatlin	Meera.Gatlin@tufts.edu	
<p>This course is designed to help MD/MPH and DVM/MPH students integrate their clinical, scientific, and public health education both conceptually and in regards to future career planning and development. The course provides continuity throughout the course of medical or veterinary school, allowing each student to develop a mentoring relationship with at least two faculty members. The course is designed in part to ameliorate the potential perceptions of discontinuity created by the spreading out of an 18 month curriculum over 4 years. The course is designed to help prepare a student for the Applied Learning Experience (ALE) and to increase the likelihood that the ALE will be of sufficient scope, depth and quality to allow for a final paper suitable for publication.</p>				

101123	Applied Learning Experience: Planning Seminar			
Subject:	Catalog Nbr:			
CMPH	0253			
2024 SPRG	Primary	Ylisabeth Bradshaw	libby.bradshaw@tufts.edu	
<p>This capstone experience provides students with an opportunity to integrate and apply their knowledge and skills to addressing a genuine public health problem. Students develop a proposed service or research project in collaboration with an organization engaged in public health practice. Faculty assist students in identifying, negotiating, and crafting a suitable project. Students develop a formal plan for project implementation. After obtaining formal approval for their project plan (including Institutional Review Board review if necessary), student spend a minimum of 160 hours in the field, implementing their project, written as if for publication, and give a formal presentation to the faculty and their peers.</p>				

101178	Research Methods			
Subject:	Catalog Nbr:			
CMPH	0288			
2023 FALL	Primary	Alice Tang	alice.tang@tufts.edu	
<p>This course introduces students to both qualitative and quantitative research methods. Emphasis is placed on identifying which methods are most appropriate for answering a specific research method, and on preparing students for doing independent work in their Applied Learning Experience.</p>				

101271	Adolescent Health			
Subject:	Catalog Nbr:			
CMPH	0305			

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Adolescent health, risk behaviors, prevention, and intervention programs will be examined in relation to adolescent physical, psychosocial, and cognitive development. Topics will include theories of behavioral change, access to health care, guidelines for preventive services, outcomes research, health policy, and alternatives sites for care. Risk behaviors, including injury, violence, suicide, substance use, and sexuality, will be explored. Focus will be domestic, with examples of federal, state, and community-based adolescent health initiatives.

101455	Organizational Behavior
Subject: CRBR	Catalog Nbr: 0253

101476	Ops Mgmt In Service Orgs
Subject: CRBR	Catalog Nbr: 0258

101519	Social Policy Analysis
Subject: CRBR	Catalog Nbr: 5326

101537	Organic Chem Lab II
Subject: CRBU	Catalog Nbr: 0208

101558	Intermediate Microecon
Subject: CRBU	Catalog Nbr: 0303

101577	Behavioral Economics
Subject: CRBU	Catalog Nbr: 0323

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101639	Biostatistics		
Subject:	CRBU	Catalog Nbr:	0703

101642	Integration of Public Health			
Subject:	CMPH	Catalog Nbr:	0351	
	2024 SPRG	Primary	Ylisabeth Bradshaw	libby.bradshaw@tufts.edu
	2024 SPRG	Primary	Meera Gatlin	Meera.Gatlin@tufts.edu
<p>This course is designed to help MD/MPH and DVM/MPH students integrate their clinical, scientific, and public health education both conceptually and in regards to future career planning and development. The course provides continuity throughout the course of medical or veterinary school, allowing each student to develop a mentoring relationship with at least two faculty members. The course is designed in part to ameliorate the potential perceptions of discontinuity created by the spreading out of an 18 month curriculum over 4 years. The course is designed to help prepare a student for the Applied Learning Experience (ALE) and to increase the likelihood that the ALE will be of sufficient scope, depth and quality to allow for a final paper suitable for publication.</p>				

101684	Applied Learning Experience: Orientation and Planning			
Subject:	CMPH	Catalog Nbr:	0353	
	2024 SPRG	Primary	Ylisabeth Bradshaw	libby.bradshaw@tufts.edu
<p>This capstone experience provides students with an opportunity to integrate and apply their knowledge and skills to addressing a genuine public health problem. Students develop a proposed service or research project in collaboration with an organization engaged in public health practice. Faculty assist students in identifying, negotiating, and crafting a suitable project. Students develop a formal plan for project implementation. After obtaining formal approval for their project plan (including Institutional Review Board review if necessary), student spend a minimum of 160 hours in the field, implementing their project, written as if for publication, and give a formal presentation to the faculty and their peers.</p>				

101736	Health Of Lgbt Pop.		
Subject:	CRBU	Catalog Nbr:	0708

101756	Biology Of Public Health		
Subject:	CRBU	Catalog Nbr:	0709

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101760	Participatory and Community-Based Approaches to Epidemiological Research		
Subject:	CMPH	Catalog Nbr:	0358
	2023 SPRG	Primary	Jeffrey Mariner
			Jeffrey.Mariner@tufts.edu
<p>This course is designed to be a practical introduction to epidemiological and service delivery methodologies that stress participation and community ownership. The course will combine a minimal amount of introductory lecture with in-class participatory learning exercises and discussion. The course will first look at the underlying concepts of participation and community-based development. Thereafter, the sessions will focus on specific methods and students will be asked to complete a group project using these skills. The group projects will consist of participatory assessments conducted within the University community on a health related theme. The course will close with sessions on community-based health care and the policy and institutional frameworks required for sustainable community-based programs. At the end of the course, students should be adequately prepared to conduct a mentored summer research project in participatory epidemiology.</p>			

101797	Financial Reporting And		
Subject:	CRBU	Catalog Nbr:	0711

101816	Confronting Non-Communic		
Subject:	CRBU	Catalog Nbr:	0712

102113	Child Nutr Disease Prvtn		
Subject:	CRBU	Catalog Nbr:	0742

102154	Eval/intl Health Pgrms		
Subject:	CRBU	Catalog Nbr:	0745

102230	The Shape Of Hc Delivery		
Subject:	Catalog Nbr:		

Course Bulletin

CRBU	0755
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102308	Integration of Public Health			
Subject:	Catalog Nbr:			
CMPH	0451			
2024 SPRG	Primary	Meera Gatlin		Meera.Gatlin@tufts.edu
<p>This course is designed to help MD/MPH and DVM/MPH students integrate their clinical, scientific, and public health education both conceptually and in regards to future career planning and development. The course provides continuity throughout the course of medical or veterinary school, allowing each student to develop a mentoring relationship with at least two faculty members. The course is designed in part to ameliorate the potential perceptions of discontinuity created by the spreading out of an 18 month curriculum over 4 years. The course is designed to help prepare a student for the Applied Learning Experience (ALE) and to increase the likelihood that the ALE will be of sufficient scope, depth and quality to allow for a final paper suitable for publication.</p>				

102328	Applied Learning Experience			
Subject:	Catalog Nbr:			
CMPH	0453			
2024 SPRG	Primary	Ylisabeth Bradshaw		libby.bradshaw@tufts.edu
<p>This capstone experience provides students with an opportunity to integrate and apply their knowledge and skills to addressing a genuine public health problem. Students develop a proposed service or research project in collaboration with an organization engaged in public health practice. Faculty assist students in identifying, negotiating, and crafting a suitable project. Students develop a formal plan for project implementation. After obtaining formal approval for their project plan (including Institutional Review Board review if necessary), student spend a minimum of 160 hours in the field, implementing their project, written as if for publication, and give a formal presentation to the faculty and their peers.</p>				

102371	Maternal & Child Health			
Subject:	Catalog Nbr:			
CRBU	0785			

102449	Urban Environmental Hlth			
Subject:	Catalog Nbr:			
CRBU	0807			

102529	Mathemat. Modeling In Ph			
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Subject:	Catalog Nbr:
CRBU	0820

102574	Categorical Data Analy.
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Subject:	Catalog Nbr:
CRBU	0821

102680	Evaluating Hc Quality
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Subject:	Catalog Nbr:
CRBU	0837

102701	Hlth Law, Bioethics
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Subject:	Catalog Nbr:
CRBU	0840

102741	Aplied Stat Modeling &
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Subject:	Catalog Nbr:
CRBU	0845

102760	Lgl Strat To Reduce Risk
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Subject:	Catalog Nbr:
CRBU	0850

102819	Modeling In Excel
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Subject:	Catalog Nbr:
CRBU	0880

102861	Quant Meth & Mod For Ph
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Subject:	Catalog Nbr:
CRBU	0890

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102880	Us Food Policy & Culture
Subject: CRBU	Catalog Nbr: 0891

125227	Health Literacy
Subject: PH	Catalog Nbr: 0273
2023 SPRG	Primary
Sabrina Kurtz-Rossi	Sabrina.Kurtz_Rossi@tufts.edu
<p>Health literacy is the ability to read, understand and act on health information and is dependent on the skills of individuals and the complexity of health information, organization and systems. Over the past 20 years interventions to improve health literacy have evolved with input from an international community of researchers and practitioners. Increasing the focus is on systems change and the attributes of a health literate organization, and critical health literacy skills through dialogue and praxis to challenge misinformation and affect transformational change. In this course students will review health literacy frameworks and measures; explore the link between health literacy, language, and culture; identify attributes of a health literate, culturally and linguistically responsive organization; and apply health literacy research to practice. As a skills-oriented course, students will practice writing in plain language, avoiding jargon in speaking and teaching, and produce a final product on a topic of your choice using field testing and an iterative approach.</p>	

125275	Patient-Provider Interaction
Subject: PH	Catalog Nbr: 0270
2023 SUMR	Primary
Ylisabeth Bradshaw	libby.bradshaw@tufts.edu
<p>This course provides an overview of patient-provider interactions, surveying the field from initial conceptual communication models to the current development of participatory decision-making, examining the significant public health and policy implications. Various providers and their inter-relationships are included, and recent health care financing and regulatory influences explored. Differences in provider and patient goals are analyzed; methods for analyzing patient-provider interactions, and measuring patient satisfaction and quality are reviewed. Health disparities, and the effects of age, gender, ethnicity, race, and class on interaction are examined; policy challenges are debated. Different types of encounters are explored - health promotion and risk communication, issues around dying and death, acute pain and trauma, and chronic pain and other disabilities. The public health significance and adverse effects of patient-provider interactions (decreased patient adherence, poor health outcomes, medical errors, and increased malpractice) are detailed and policy alternatives framed. Types of communication excellence are highlighted, and progressive improvements in interaction quality and effectiveness are examined.</p>	

128127	Principles of Epidemiology
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Subject:	Catalog Nbr:			
PH	0201			
	2023 FALL	Primary	David Tybor	DJ.Tybor@tufts.edu
	2023 SPRG	Primary	Jonathon Gass	Jonathon.Gass@tufts.edu
	2023 SUMR	Primary	Shayesteh Jahanfar	Shayesteh.Jahanfar@tufts.edu
	2024 SPRG	Primary	Naisi Zhao	Naisi.Zhao@tufts.edu
<p>This course provides an introduction to the epidemiological perspective on health and disease. The course emphasizes the principles and methods used to describe and evaluate the patterns of illness in communities and in population subgroups. Methods and research designs used in the investigation of the etiology of infectious and noninfectious disease are presented. Lectures and laboratory examples illustrate a wide range of contemporary health problems.</p>				

128209	Occupational and Environmental Health			
Subject:	Catalog Nbr:			
PH	0204			
	2023 FALL	Primary	Beth Rosenberg	beth.rosenberg@tufts.edu
<p>This course examines current topics in the area of occupational and environmental health, with particular emphasis on the types of materials that produce human health effects. Both clinical and epidemiological data are used to assess the public health importance of environmental pollutants and to evaluate the effectiveness of control strategies.</p>				

128254	Principles of Biostatistics			
Subject:	Catalog Nbr:			
PH	0205			
	2023 SPRG	Primary	Owais Gilani	Owais.Gilani@tufts.edu
	2024 SPRG	Primary	David Tybor	DJ.Tybor@tufts.edu
<p>This course provides an introduction to the basic principles and applications of statistics as they are applied to problems in clinical and public health settings. Topics include the description and presentation of data, random variables and distributions, descriptive statistics, introduction to probability, estimation, elements of hypothesis testing, and one- and two-sample tests, ANOVA (including repeated-measures), non-parametric tests, and an introduction to linear and logistic regression. Lectures, problem sets, and computer output are used to develop these and additional concepts.</p>				

128297	Intermediate Biostatistics			
Subject:	Catalog Nbr:			
PH	0206			
	2024 SPRG	Primary	Kenneth Chui	Kenneth.Chui@tufts.edu
	2024 SPRG	Primary	Shayesteh Jahanfar	Shayesteh.Jahanfar@tufts.edu
<p>A variety of topics related to modeling continuous, binary, and survival time outcomes in terms of multiple risk factors are explored. Topics covered include the analysis of variance and covariance, linear regression, multiple linear regression, nonlinear regression, logistic regression, non parametric regression, and regression</p>				

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for survival times, including proportional hazard models. Emphasis is on the practical aspects of model construction, model checking, and model prediction. Applications and computer methods are stressed.

128420	Law in Public Health			
Subject:	Catalog Nbr:			
PH	0210			
2023 FALL	Primary	Marcia Boumil		marcia.boumil@tufts.edu
<p>This course explores the complex and evolving legal environment surrounding the public health and health care delivery systems. Issues include those related to tobacco-related injuries and Medicaid litigation, personal injury liability for toxic substance exposure, end-of-life decision making, medical malpractice, and insurance company regulation and liability. In analysis of these topics, the interrelationship of the levels and branches of government will be noted. Also, the course incorporates basic descriptions of financing mechanisms and providers in the US health care system.</p>				

128574	Health Care Organization: Budgeting and Management			
Subject:	Catalog Nbr:			
PH	0216			
2023 FALL	Primary	Karen Errichetti		Karen.Errichetti@tufts.edu
2024 SPRG	Primary	Jennifer Bateman		Jennifer.Bateman@tufts.edu
<p>This course focuses on cost accounting and budgeting in health services, nonprofit financial statement preparation, and the formulation of strategic business plans within the context of economic health policy. Students learn managerial theory and practice pertaining to organizational behavior, information systems, personnel, resource allocation, consensus building and prioritization of goals, conflict resolution, and negotiation strategies.</p>				

128597	Negotiation and Conflict Resolution			
Subject:	Catalog Nbr:			
PH	0217			
2024 SPRG	Primary	Marcia Boumil		marcia.boumil@tufts.edu
<p>This course is designed to provide students with the theory and core skills required for successful negotiation and other forms of conflict resolution. Students will learn about strategies for negotiation and be required to practice their skills in simulation exercises. The goal of the course is to provide a systematic framework for mastering the fundamentals of negotiation strategy for effective conflict resolution, including: (1) understanding the role of various relationships in determining negotiation strategy; (2) recognizing when negotiation is not being undertaken in good faith; (3) learning effective strategies for reaching agreements upon favorable terms; and (4) identifying strengths and weaknesses in each student's personal negotiating style.</p>				

128726	Survey Research Methods			
Subject:	Catalog Nbr:			

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PH	0222				
	2023 SPRG	Primary	Anna Grossman	Anna.Grossman@tufts.edu	
	2024 SPRG	Primary	Susan Koch-Weser	Susan.Koch_Weser@tufts.edu	
<p>This course uses real world examples to introduce students to basic survey methodology and data management. Students have the opportunity to practice the fundamentals of good survey design and how to enter, code and clean the data one collects. Topics include formulating research questions, sampling, sample size determination, linking instruments to conceptual frameworks, principles of item construction and scale development, modes of survey administration, and qualitative methods. During the laboratory component of the course, students learn how to develop and maintain a documentation system, create data entry screens, verify the accuracy of data entry, clean data, merge and subset data files, derive new variables, conduct descriptive analyses and summarize results.</p>					

128781	Infectious Disease Epidemiology				
	Subject:	Catalog Nbr:			
	PH	0224			
	2023 SPRG	Primary	Jeffrey Griffiths	jeffrey.griffiths@tufts.edu	
<p>This course is designed to introduce you to key concepts in infectious disease epidemiology, including the methodological issues associated with control, surveillance, and research of infectious diseases. While a detailed presentation of the epidemiology of every infectious disease is well beyond the scope of this course, we will consider the epidemiology of several important diseases over the course of the semester.</p>					

128846	Cancer Epidemiology and Prevention				
	Subject:	Catalog Nbr:			
	PH	0226			
	2023 SUMR	Primary	Dominique Michaud	Dominique.Michaud@tufts.edu	
<p>This course is aimed at providing students with an introduction to cancer epidemiology and cancer prevention. The topics in this course will review known and suspected cancer risk factors; discuss descriptive data on cancer rates; address methodological issues and limitations in assessing causality; discuss potential opportunities for primary and secondary cancer prevention. Students will be expected to present a selected topic on a current topic in cancer, providing opportunities to discuss cutting-edge research areas in the field.</p>					

129044	Pharmacoepidemiology, Bioethics, and Regulatory Policy				
	Subject:	Catalog Nbr:			
	PH	0239			
	2023 SPRG	Primary	Paul Beninger	Paul.Beninger@tufts.edu	
<p>This course will give a broad overview of bioethics and regulatory policy in the field of pharmacoepidemiology. It will focus on various issues, including but not limited to the importance of bioethics in shaping statutes, policies and procedures for the development of medical products, the major organizations that play a role in drug development, the fundamentals of clinical pharmacology, and the role of regulatory processes in all aspects of pharmacoepidemiology.</p>					

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129224	Global health: Determinants, Delivery, and Diseases			
Subject: PH	Catalog Nbr: 0247			
2024 SPRG	Primary	Ramnath Subbaraman	Ramnath.Subbaraman@tufts.edu	
<p>This course examines current and emerging health issues in developing and industrialized countries. Students learn to define the nature, determinants, and impact of selected health problems in selected countries and describe the pattern of morbidity and mortality at country level and by geographic region. Students are introduced to data sources and health service delivery. Considerations at the local, national, and regional levels, including sources of funding, the role of culture in health and disease, and the global impact of health, are explored.</p>				

129257	Introduction to Global Health and Development			
Subject: PH	Catalog Nbr: 0248			
2023 FALL	Primary	Saloni Dev	Saloni.Dev@tufts.edu	
<p>This semester long course addresses global health disparities. Students will compare various healthcare systems with the help of lectures, discussions and country studies. The objective of the course is to identify the root causes of health disparities among and within nations related to primary healthcare, gender, ethnicity and microhabitat issues. The course reviews important healthcare milestones and challenges and addresses emerging trends that have impacts on global health. Demographic trends will be used as a tool to quantify those disparities and progresses. Health governance will be addressed extensively linking healthcare to the roles of international organizations, non-governmental organizations (those for profit and not for profit) and governments.</p>				

129329	Maternal and Child Health Policy in the U.S.			
Subject: PH	Catalog Nbr: 0260			
<p>This course will explore the components of maternal and child health in the context of historical, legislative and social policies and background. Perinatal, early childhood, child and adolescent health will be presented from an ecological and life course perspective. Topics such as injury and violence, nutrition, immunization, children with special health care needs and health disparities that cross-cut the developmental stages will be focused on in more depth. The aim of this course is to provide an introduction to maternal and child health programs, policies and issues and how a public health approach can enable states and communities to plan and implement comprehensive integrated systems that reduce the risks and enhance the protective factors leading to positive outcomes for children, adolescent and families. How current factors and changes in family structure, social systems and economic stability may impact and shape current and future maternal and child policies and services will be discussed.</p>				

129371	Introduction to SAS			
Subject:	Catalog Nbr:			

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PH	0265			
	2024 SPRG	Primary	David Tybor	DJ.Tybor@tufts.edu
<p>This intensive course will introduce students to the concepts and syntax necessary for basic data management and analysis using the SAS System for Windows. Emphasis will be placed upon learning methods for data manipulation and gaining the necessary skills to prepare data for statistical analysis. SAS procedures for descriptive statistics will be covered, and methods for data visualization will be introduced. Weekly homework assignments and in-class exercises will allow students to gain practical experience solving SAS programming problems.</p>				

129523	Evaluation of Health Programs			
	Subject:	Catalog Nbr:		
	PH	0285		
	2023 FALL	Primary	Vanessa Nicholson-Robinson	Vanessa.Nicholson@tufts.edu
	2023 SPRG	Primary	Carolyn Fisher	Carolyn.Fisher@tufts.edu
	2023 SPRG	Primary	Karen Errichetti	Karen.Errichetti@tufts.edu
<p>This is an introductory course in Public Health Program Evaluation. Students will become familiar with how small-scale evaluations are designed and carried out in the context of public health practice. We will review the tools and data collection methods evaluators use to plan evaluations and collect appropriate data. Both qualitative and quantitative approaches will be addressed. Students will practice data collection skills and apply content and conceptual knowledge learned in the course to the development of an evaluation plan for an existing program.</p>				

129660	Applied Learning Experience: Planning Seminar			
	Subject:	Catalog Nbr:		
	PH	0301		
	2023 FALL	Primary	Virginia Chomitz	Virginia.Chomitz@tufts.edu
	2023 SPRG	Primary	Linda Hudson	Linda.Hudson@tufts.edu
	2023 SPRG	Primary	Jacob van den Berg	jacob.vandenberg@tufts.edu
	2023 SUMR	Primary	Ylisabeth Bradshaw	libby.bradshaw@tufts.edu
<p>In the planning semester, students develop a proposed project in collaboration with an organization engaged in public health practice. Faculty assist students in identifying, negotiating, and crafting a suitable project. Students develop a formal plan for project implementation.</p>				

129682	Applied Learning Experience: Implementation Seminar			
	Subject:	Catalog Nbr:		
	PH	0302		
	2023 FALL	Primary	Ylisabeth Bradshaw	libby.bradshaw@tufts.edu
	2023 SPRG	Primary	Lisa Arsenault	Lisa.Arsenault@tufts.edu
	2023 SPRG	Primary	Laura McNulty	Laura.McNulty@tufts.edu
	2023 SPRG	Primary	Charlotte Powley	Charlotte.Powley@tufts.edu
	2023 SUMR	Primary	Marcia Boumil	marcia.boumil@tufts.edu
	2023 SUMR	Primary	Linda Hudson	Linda.Hudson@tufts.edu

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2023 SUMR	Primary	Jacob van den Berg	jacob.vandenberg@tufts.edu
2024 SPRG	Primary	Virginia Chomitz	Virginia.Chomitz@tufts.edu
After obtaining formal approval for their project plan (including Institutional Review Board review if necessary), students spend a minimum of 160 hours in the field, implementing their project, written as if for publication, and give a formal presentation to the faculty and their peers.			

129720	Global Health Applied Learning Experience: Planning Seminar		
Subject:	Catalog Nbr:		
PH	0304		
2023 SPRG	Primary	Alice Tang	alice.tang@tufts.edu
In the planning semester students develop a proposed project in collaboration with an organization engaged in public health practice. Faculty assist students in identifying, negotiating, and crafting a suitable project. Students develop a formal plan for project implementation.			

129759	Global Health Applied Learning Experience: Field Work		
Subject:	Catalog Nbr:		
PH	0305		
2023 SUMR	Primary	Alice Tang	alice.tang@tufts.edu

129778	Global Health Applied Learning Experience: Implementation Seminar		
Subject:	Catalog Nbr:		
PH	0306		
2023 SUMR	Primary	Alice Tang	alice.tang@tufts.edu
After returning from their field work abroad, students complete a tutorial sequence with their instructor, give a formal presentation to the faculty and their peers, and submit a final paper for their ALE work.			

129868	Directed Study		
Subject:	Catalog Nbr:		
PH	0400		
2023 FALL	Primary	Aviva Must	aviva.must@tufts.edu
2023 FALL	Primary	Nina Ashford	Nina.Ashford@tufts.edu
2023 SUMR	Primary	Kenneth Chui	Kenneth.Chui@tufts.edu
2023 SUMR	Primary	Virginia Chomitz	Virginia.Chomitz@tufts.edu
2023 SUMR	Primary	Signe Flieger	Signe.Flieger@tufts.edu
2023 SUMR	Primary	Karen Errichetti	Karen.Errichetti@tufts.edu
2023 SUMR	Primary	Silas Pearman	Silas.Pearman@tufts.edu
2024 SPRG	Primary	Alice Tang	alice.tang@tufts.edu
2024 SPRG	Primary	Kimberly Dong Breen	kimberly.dong@tufts.edu
Directed Study - Half Semester			

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138644	Transfer Credit		
	Subject:	Catalog Nbr:	
	TRAN	9999	

138747	Health Svc Delivery		
	Subject:	Catalog Nbr:	
	CBUN	0713	
BU Cross-Reg: HM710			

138748	HR Management		
	Subject:	Catalog Nbr:	
	CBUN	0736	
BU Cross Reg: PM736			

138749	Dev & The Environment		
	Subject:	Catalog Nbr:	
	CBUN	0806	
BU Cross -Reg EH806			

138750	Snort, Swallow, Smoke: Drugs and Behavior		
	Subject:	Catalog Nbr:	
	PH	0227	
	2023 SPRG	Primary	Margie Skeer
			Margie.Skeer@tufts.edu
<p>Problems related to substance use are pervasive in our society on many levels. This course takes an ecological approach to understanding substance use and substance use disorders. Through the context of course lectures and discussions, guest speakers, documentaries, and experiential learning trips, students will engage with myriad aspects of substance-related behavior, spanning epidemiology, neurobiology, prevention, addiction, harm reduction, treatment, and recovery.</p>			

138751	Health Services QI Methods		
	Subject:	Catalog Nbr:	
	PH	0231	
	2024 SPRG	Primary	Denise Daudelin
			Denise.Daudelin@tufts.edu
<p>This course aims to provide a broad overview of current trends, core concepts, and methods in quality improvement (QI) and demonstrate their application to healthcare and public health. The course focuses on application, and includes didactic instruction, group discussions, and individual and group projects.</p>			

Course Bulletin

Approximately 3 hours of preparatory work (e.g. reading and worksheets, on-line learning modules) prior to each session should be anticipated. The course will be employing a “flipped classroom”, team-based learning approach (see Michaelson et al, Team-based Learning, 2002) for additional information on this approach). The first seven sessions will focus on concept-and skill-building; the second five sessions will examine QI trends and broad applications within healthcare and public health.

138846	Data Analysis for Mngmt		
	Subject:	Catalog Nbr:	
	CBUN	0717	
BU XREG: GSMQM717			

138847	Prev. Intimate Partner		
	Subject:	Catalog Nbr:	
	CBUN	0724	
Prev. Intimate Partner Violence			

138848	Negotiations		
	Subject:	Catalog Nbr:	
	CBUN	0854	

138850	Health Care Reform and More: Current Topics in American Health Care Policy			
	Subject:	Catalog Nbr:		
	CMPH	0357		
	2023 SPRG	Primary	Jon Kingsdale	Jon.Kingsdale@tufts.edu
	2024 SPRG	Primary	Nina Ashford	Nina.Ashford@tufts.edu
<p>The American health care system accounts for a large and growing part of the nation's economy, directly affects the public welfare, and is often a source of great political controversy. Thus, it is a central focus of public policy makers at the federal and state levels. This course will provide students with an overview of current topics in health care policy, including the Affordable Care Act and the recently passed Massachusetts cost containment law. Subjects for detailed study will include aspects of these laws and other topics including: comparative effectiveness analysis, measuring and improving health care quality, innovations in health care delivery and payment, and policy efforts to promote prevention and public health. Throughout the course, students will hear from Massachusetts health care leaders, participate in active discussion and debate during class, and write a series of brief policy memos.</p>				

138862	Essentials of Pubic Health Law		
	Subject:	Catalog Nbr:	

Course Bulletin

CBUN	0719
BU COURSE LW719	

138863	VACCINE DEVELOPMENT
Subject:	Catalog Nbr:
CBUN	0800
BU COURSE IH800	

139292	Evaluation of Managers
Subject:	Catalog Nbr:
CBRN	2478
Evaluation of Managers	

139526	Introduction to R Software
Subject:	Catalog Nbr:
CBUN	BS720
Introduction to R Software	

139556	Introduction to Health Policy
Subject:	Catalog Nbr:
CBUN	0702
Introduction to Health Policy	

139903	Transboundary and Emerging Diseases of Animals & Initial Accreditation Training (TEDA/IAT)		
Subject:	Catalog Nbr:		
CMPH	0360		
2024 SPRG	Primary	Meera Gatlin	Meera.Gatlin@tufts.edu
Transboundary and Emerging Diseases of Animals & Initial Accreditation Training (TEDA/IAT)			

140135	Intro to Statistical Computing
Subject:	Catalog Nbr:
CBUN	BS723

140136	Advanced Epidemiology
Subject:	Catalog Nbr:

Course Bulletin

CBUN	EP854
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140257	Organizational Theory and Behavior
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Subject:	Catalog Nbr:
CBRN	HS526A

140272	GIS for Public Health
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Subject:	Catalog Nbr:
PH	0262

2024 SPRG	Primary	Laura Corlin	Laura.Corlin@tufts.edu
2024 SPRG	Primary	Thomas Stopka	Thomas.Stopka@tufts.edu

In public health, place matters. Place is a close reflection of the social and economic deprivation and environmental exposures that can result in significant health disparities that are manifest in health outcomes, including morbidity and mortality. While uses of geographic information systems (GIS) and spatial epidemiology have increased steeply and steadily within the public health sciences during the past two decades, they are rapidly evolving. In health disparities, nutrition, disease prevention, and health services research, this is particularly evident. More than an estimated 80% of health issues have a spatial component; however, only a small fraction of research studies include a focus on the geography of health and spatial associations of putative exposures, access to care, and health outcomes. This course will provide students with the basic skills needed to obtain, analyze, and decipher spatial data in a GIS, using a variety of examples from public health, nutrition, urban development, and the US Census Bureau.

140358	Needs Assessment
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Subject:	Catalog Nbr:
CBUN	0851

140388	Social Epidemiology
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Subject:	Catalog Nbr:
CBUN	EP775

140389	Maternal & Child Health Policy Making
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Subject:	Catalog Nbr:
CBUN	MC763

Course Bulletin

140390	Perinatal Health Services	
	Subject: CBUN	Catalog Nbr: MC845

140435	Quantitative Methods for Program Evaluation	
	Subject: CBUN	Catalog Nbr: SB822

140482	Intermediate Statistical Computing	
	Subject: CBUN	Catalog Nbr: BS805

140489	Introduction to Geographic Information Systems	
	Subject: CBRN	Catalog Nbr: HS297F

140494	Applied Statistics and Clinical Trials	
	Subject: CBUN	Catalog Nbr: BS851

140739	Doctor of Public Health Thesis	
	Subject: PH	Catalog Nbr: 0801
	2024 SPRG	Primary Virginia Chomitz Virginia.Chomitz@tufts.edu
All doctoral students must register for PH 0801 every semester to remain in active and full time status.		

140889	Statistical Genetics I	
	Subject: CBUN	Catalog Nbr: BS858

Course Bulletin

140890	Integration of Public Health - Physician Assistant/Master of Public Health				
	Subject:	Catalog Nbr:			
	PH	0229			
	2023 FALL	Primary	Fernando Ona	Fernando.Ona@tufts.edu	
	2024 SPRG	Primary	Mercedes Colangelo	Mercedes.Colangelo@tufts.edu	
	2024 SPRG	Primary	Karen Errichetti	Karen.Errichetti@tufts.edu	
<p>The Master of Public Health (MPH) degree supports PA students' clinical understanding of the individual with a population-based perspective. The Tufts PA/MPH dual degree requires an integration course for students to engage with a dual awareness regarding health issues and a breadth of knowledge and understanding that prepares them to fill unique and often influential roles in the health care system. Integration of Public Health facilitates the learning of how students' public health work connects with their clinical studies. Therefore, PA/MPH students participate in the integration course over their three years at Tufts University. Students join the integration cohort in their first semester of their MPH year and complete the course in the final semester of their clinical year. The course also supports a close mentoring structure between course directors and PA/MPH students.</p>					

140927	Outbreak Investigation				
	Subject:	Catalog Nbr:			
	CBUN	EP800			

140941	The Epidemiology of HIV/AIDS in the Developed and Developing World				
	Subject:	Catalog Nbr:			
	CBUN	EP764			

141116	The Patient Perspective on Healthcare Costs: Financial Barriers and Risk Factors				
	Subject:	Catalog Nbr:			
	CMPH	0365			
<p>With passage of the Affordable Care Act, millions of Americans have gained access to health insurance coverage. Several years into full implementation of the insurance expansion provisions, more attention is now focused on the adequacy of coverage. This course will provide students with background on the out-of-pocket healthcare costs paid by patients and explore the consequences when these costs are unaffordable. Information will be presented from the patient perspective. Health policy, insurance coverage and public programs, and care delivery will be analyzed and assessed for effectiveness at addressing unaffordable healthcare costs.</p>					

141136	Environmental Health Science, Policy and Law				
	Subject:	Catalog Nbr:			
	CBUN	EH805			

Course Bulletin

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141205	Social Factors
Subject: CBUN	Catalog Nbr: SB740

141317	Social Marketing
Subject: PH	Catalog Nbr: 0268
2023 SPRG	Primary Lynda Bardfield Lynda.Bardfield@tufts.edu
2024 SPRG	Primary Michael Siegel Mike.Siegel@tufts.edu
<p>Students will develop an understanding of social marketing and how this approach can be used to influence behavior and social change. The course provides practice in positioning complex public health issues, identifying and analyzing audiences, creating targeted communication, identifying appropriate communication channels, translating research into creative concepts, and evaluating social marketing interventions. Students will apply these skills in designing a social marketing plan that addresses a public health topic. As part of this course, students will gain an understanding of the benefits of moving beyond promotion to designing marketing-based interventions aimed at facilitating behavior change.</p>	

141372	Intermediate Epidemiology
Subject: PH	Catalog Nbr: 0251
2023 FALL	Primary Dominique Michaud Dominique.Michaud@tufts.edu
2023 SPRG	Primary Kipruto Kirwa Kipruto.Kirwa@tufts.edu
<p>This course in intermediate epidemiologic methods reinforces the concepts and methods taught in PH 201, with in-depth instruction in issues of study design, assessing threats to study validity including confounding and selection bias, and analyzing data with standard regression models. The course emphasizes hands-on learning and includes a combination of discussions of methodologic papers, and a required laboratory component where students will learn to apply the concepts learned in class to real-world problems.</p>	

141454	Physiologic Principles for Public Health
Subject: CBUN	Catalog Nbr: EH710

141476	Principles of Epidemiology and Inferential Statistics I
Subject: CMPH	Catalog Nbr: 0131

Course Bulletin

2023 FALL

Primary

Kenneth Chui

Kenneth.Chui@tufts.edu

141477	Principles of Epidemiology and Inferential Statistics II			
Subject:	Catalog Nbr:			
CMPH	0133			
2023 SPRG	Primary	David Tybor		DJ.Tybor@tufts.edu
2024 SPRG	Primary	Kenneth Chui		Kenneth.Chui@tufts.edu
<p>This course introduces the fundamentals of biostatistics with mindful integration of epidemiologic concepts. Using peer reviewed publications as a starting point, you will learn these concepts by deconstructing the results and exploring the underlying concepts, mechanisms, and techniques. And then, to further strengthen our understanding, together we will practice by replicating the analyses using the statistical software, Stata, and real-world data sets. Through a blend of theory and practical application, you will develop the essential skills needed to critically analyze health-related data, understand the design, interpretation, and reporting of epidemiological studies, and make evidence-based decisions in public health research.</p>				

141596	Social Justice & the Health of Populations: Racism and other systems of oppression in America			
Subject:	Catalog Nbr:			
CBUN	MC775			

141650	Infectious Disease Epidemiology			
Subject:	Catalog Nbr:			
CBUN	EP755			

141653	Social and Behavioural Sciences for Public Health			
Subject:	Catalog Nbr:			
CBUN	SB721			

141664	Advanced Topics in Qualitative Research			
Subject:	Catalog Nbr:			
CBRN	HS411B			

141748	Field Course: Introduction to a Health Care Governmental Agency			
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Course Bulletin

Subject:	Catalog Nbr:			
PH	0287			
	2023 SPRG	Primary	Megan Wulff	Megan.Wulff@tufts.edu
<p>This half-credit 'field course' combines lectures and discussions led by Professor Hattis and staff of the Massachusetts Health Policy Commission (HPC) with on-site participation in HPC board and committee meetings. The course will cover recent Massachusetts health reform, the formation and structure of the HPC, and the HPC's primary responsibilities, including measuring statewide cost trends, monitoring the changing health care market, and supporting clinical transformation and payment reform. Students will be given the opportunity to formulate a policy position related to one of the HPC's key responsibilities, and present their proposal to the class and HPC staff.</p>				

142317	Field Course: Introduction to Building Health Neighborhoods and Communities			
Subject:	Catalog Nbr:			
PH	0289			
<p>This field course combines in-class discussions and hands-on activities with guest speakers and off-site visits at various community institutions in Chinatown to understand place-based public health. This course takes a strengths-based and asset-based approach to thinking about public health in Chinatown and highlights how residents and leaders think about health priorities and community wellness. Through field visits, discussion with leaders in the community, and attendance at community meetings, students will gain a deeper understanding of place-based public health strategies across the life course in an immigrant community and the role that community agencies play in health promotion. The course provides a theoretical basis for place-based public health, context-setting on the history of Boston Chinatown, an overview of current strategies used by community agencies to promote health, and an overview of three of the major populations in Boston Chinatown: children, the elderly and workers. This course also asks students to critical reflect on the role and responsibility that universities, like Tufts, have with their host communities. During class, students will learn and practice a variety of skills used in community-based settings, such as meeting facilitation, community engagement strategies, cultural humility, and asset mapping. Students will work in teams on a project with a community agency in Chinatown. Students are expected to demonstrate active engagement in class and in the field and with community partners.</p>				

142690	Health Economics and Financial Management for Public Health			
Subject:	Catalog Nbr:			
CBUN	0857			

143039	Directed Study			
Subject:	Catalog Nbr:			
PH	0401			
	2024 SPRG	Primary	Alice Tang	alice.tang@tufts.edu
	2024 SPRG	Primary	Dominique Michaud	Dominique.Michaud@tufts.edu
Directed Study - Full Semester				

Course Bulletin

143042	Directed Study			
Subject:	Catalog Nbr:			
CMPH	0401			
2023 FALL	Primary	Claire Fellman	Claire.Fellman@tufts.edu	
2023 SPRG	Primary	Patrick Vivier	Patrick.Vivier@tufts.edu	
Directed Study				

143048	Global Health: Concepts, Conditions, and Careers			
Subject:	Catalog Nbr:			
CMPH	0313			
2023 SPRG	Primary	Ramnath Subbaraman	Ramnath.Subbaraman@tufts.edu	
<p>This global health survey course aims to provide medical students interested in public health with knowledge of key concepts, health conditions, and career possibilities. Key concepts that we will explore include global burden of disease metrics, the evolution of global health policy, global health ethics, and health and human rights. Key health conditions we will cover include HIV, TB, maternal and child health, chronic diseases (including global mental health), and WASH (water, sanitation, and hygiene)-related diseases. We will highlight critical barriers that contribute to global morbidity and mortality for each of these diseases while also using these conditions as windows into more general challenges in global health delivery. Finally, throughout the course, we will discuss various ways that global public health can be incorporated into students' future careers as physicians or public health specialists, especially by touching on the career pathways and life stories of guest speakers.</p>				

143049	Maternal and Child Health: Policies and Programs Using a Life-Course Perspective			
Subject:	Catalog Nbr:			
CMPH	0364			
2024 SPRG	Primary	Ndidiamaka Amutah-Onukagha	Ndidiamaka.Amutah-Onukagha@tufts.edu	
<p>This course will review the key policy and programs for various life course stages. Specific topics will include: infancy, early childhood, school-age children, adolescents, women of reproductive age, families, and children with special needs. An introduction to the key issues facing clinicians, policy-makers and advocates for each of the topics will be presented. In addition, an overview and brief history of the maternal and child health system supported by Title V of the Social Security Act (1935) will be provided.</p>				

143077	Statistical Genetics II			
Subject:	Catalog Nbr:			
CBUN	BS860			

Course Bulletin

143168	Law and Health Care			
Subject: PH	Catalog Nbr: 0230			
2023 SPRG	Primary	Marcia Boumil	marcia.boumil@tufts.edu	
<p>This course explores health law from the perspective of those involved as healthcare clinicians, administrators and management. It surveys the broad landscape of the law as it pertains to the business of healthcare from the provider/patient relationship and informed consent of the clinician to administrative decision making such as contracts, corporations, fraud and abuse, licensure and tort reform – for those involved in the health services industry. It offers an overview of the ways in which laws influence the organization and operations of the public and private healthcare systems.</p>				

143169	Public Health Law and Ethics			
Subject: PH	Catalog Nbr: 0232			
<p>This course explores public health policy and ethical issues pertaining to federal, state and local law and regulation. It is intended to introduce public health students to legal analysis and some of the legal and ethical issues they might encounter as public health practitioners. It applies an ethical framework to issues in public health law and ethics from issues in patient decision making to population policy such as regulation of tobacco, vaccinations, safety measures and reporting of public health threats and emergencies. It offers an overview of the ways in which laws serve as a backdrop for ethical analysis of complex decision making to benefit the health of the public.</p>				

143185	Policy Analysis			
Subject: PH	Catalog Nbr: 0249			
2023 SPRG	Primary	Signe Flieger	Signe.Flieger@tufts.edu	
2024 SPRG	Primary	Wenhui Feng	Wenhui.Feng@tufts.edu	
<p>Policymaking happens at the local, state, federal, and even global level. Public health and health care policies impact our lives in a myriad of ways. Historically, government policies have redistributed or concentrated resources, alleviated or exacerbated disparities, and prevented or facilitated discrimination. In some cases, these impacts are known in advance; in other cases, detrimental impacts of policy are unintended consequences. Often—if not always—policy decisions are the result of political compromise, embedded with political bias and ideologies, and known to imperfectly address the stated policy problem. The job of policy analysts is to bring data, evidence, and an analytical lens to the discussion of policy problems and policy solutions.</p> <p>This class will introduce students to the field of policy analysis and the basic concepts and methods for conducting policy analysis in the fields of public health and health care. We will identify public health, health care, social service, political, think tank, and governmental organizations where policy analysis is conducted, and discuss the different and complementary roles of policy analysts across different contexts and sectors. We will draw on examples from a variety of public health and health care policy areas to learn about different analysis techniques. We will debate the value of evidence in influencing policymaking, and discuss the impact of values and bias in policy analysis and decision-making.</p>				

Course Bulletin

Students will be introduced to several quantitative and qualitative analysis techniques that can be embedded in policy analyses across an array of contexts. Moreover, students will be exposed to an array of tools, databases, and approaches that are useful for policy analysts. Throughout this course, students will complete real-world policy analyst tasks, ranging from rapid responses to a supervisor's request for analysis on a policy issue to in-depth research on a policy issue. By the end of this class, students should be able to envision the different roles of a policy analyst across an array of public health and health care organizations, and start to build their policy analysis toolkit for public health practice.

143417	What is cancer and why should we care?
Subject: BIED	Catalog Nbr: 0352
<p>Why should your students care about cancer? This course shows how we are all personally impacted by cancer. Throughout several lessons we will see how major questions in the cancer field have shifted over time, and how our current understanding impacts our ability to treat cancer successfully. We will begin to introduce the idea of DNA damage and see how substances that are potentially damaging can be tested. This course introduces important terms in cancer biology, medicine and epidemiology, including concepts of causation and correlation, risk and exposure.</p> <p>This course is intended for high school science instructors as part of the Teaching the Great Diseases program.</p>	

143418	What does it mean to be a "normal" cell?
Subject: BIED	Catalog Nbr: 0356
<p>In order to learn how cancer cells act abnormally, we must first learn how a normal cell functions. In this course, we will explore the organization of cells in tissues and organs, and how cells "talk" to one another and are a part of a community. Throughout its lifetime a normal cell divides, performs its functions, communicates with other cells, and dies. We will see how each of these steps is regulated.</p> <p>This course is intended for high school science instructors as part of the Teaching the Great Diseases program.</p>	

143419	Is our genome unchanging?
Subject: BIED	Catalog Nbr: 0361
<p>It was once thought that the genome that we inherit remains constant, and that evolution of the genome is a slow process. However, scientists have been learning more and more about how our genome responds to and is changed by our environment, sometimes rapidly. In this course we will see how these genomic changes may prevent or promote cancer.</p> <p>This course is intended for high school science instructors as part of the Teaching the Great Diseases program.</p>	

143420	What can go wrong in cancer cells?
Subject:	Catalog Nbr:

Course Bulletin

BIED 0366

How does a cell become cancerous? Is it a slow process, or a quick switch? This course covers how mutations in our DNA are key in the development of cancer. DNA mutations may be the turning point when it comes to cancer development, but what causes DNA to mutate? What genes are critical to the development of cancer when mutated? How do inflammation and aging predispose cells to DNA damage? How do tumors evolve and adapt to their environments? All these questions are covered in this course.

This course is intended for high school science instructors as part of the Teaching the Great Diseases program.

143421

How does cancer make us sick?

Subject: Catalog Nbr:
BIED 0371

Cancer is caused by unregulated growth of our own cells. What makes these proliferating cells more harmful than their normal counterparts? How are tumors characterized and why is this important for treatment? We learn how cancer cells exit their primary organ and through the process of metastasis find a secondary organ. We will take a look at the critical role that our immune system plays in fighting cancers, and how the rare percentage of cancers that evade the immune system find ways to do that. In this course we zoom out from looking at cancer as a disease of abnormal cells, to looking at how it causes system-wide disease in a human body.

This course is intended for high school science instructors as part of the Teaching the Great Diseases program.

143422

How do we treat cancer?

Subject: Catalog Nbr:
BIED 0377

This course focuses on how cancer is diagnosed and treated, emphasizing the problems that arise when treating cancers as an organ-based, rather than cell-based disease. We will discuss the current diagnostic techniques and treatments and their strengths and limitations, and look forward to how breakthroughs in DNA sequencing technology can provide us with new information to design more specific cancer drugs for better treatments in the future. After seeing the more conventional ways to treat cancer, we will take a critical look at alternative cancer therapies, and spend some time discussing how, and why, cancer occupies such a prominent place in our society and how our understanding of cancer shapes public policy for the future.

This course is intended for high school science instructors as part of the Teaching the Great Diseases program.

143467

Cases in Public Health Management

Subject: Catalog Nbr:
CBUN PH858

143533

Sexual & Reproductive Health in Disaster Settings

Subject: Catalog Nbr:

Course Bulletin

CBUN	GH766
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143534	Analysis of Emerging Infections Using One Health Approach
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Subject:	Catalog Nbr:
CBUN	PH825

143615	Food Policy and Food Systems
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Subject:	Catalog Nbr:
CBUN	ML720

Food Policy and Food Systems

143670	Infectious Disease Epidemiology
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Subject:	Catalog Nbr:
CMPH	0311

2024 SPRG	Primary	Jeffrey Griffiths	jeffrey.griffiths@tufts.edu
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This course focuses on the epidemiological aspects of infectious diseases, concentrating on the epidemiology of bacterial and viral infections. Emphasis is placed on concepts of transmission and prevention. In addition, epidemiological problems are presented to explore how epidemiology is used to understand "new" diseases such as Legionella, AIDS, and Lyme disease.

143671	Global Health as Human Development and Human Experience: Case Studies
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Subject:	Catalog Nbr:
CMPH	0315

2024 SPRG	Primary	Ramnath Subbaraman	Ramnath.Subbaraman@tufts.edu
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Global health is most commonly studied in classrooms, and implemented in practice, under paradigms of public health or clinical medicine. In this course, we will take a broader view of global health through careful reading of works by anthropologists, economists, and social epidemiologists. We will situate global health within larger questions of development and social change, while simultaneously reading intimate ethnographic and journalistic accounts that provide perspective on how health shapes the human experience, especially for marginalized populations globally.

We will first explore how global health fits into larger discourses on poverty and development. The course will then focus on case studies drawn from a variety of academic disciplines. We will discuss ethnographic research on undocumented immigrants and injection drug users in the U.S., urban slum residents in India, doctors and pharmacists in Tajikistan, and medical students in Malawi to understand how health and healthcare are experienced and how social exclusion shapes the production of health in different contexts. We will also discuss the work of economists exploring issues such as the causes and consequences of inadequate sanitation and open defecation in India and of rising "deaths of despair" in the U.S. This course

Course Bulletin

will complement the survey course that will be taught in alternate years for the MD/MPH program called "Global Health: Concepts, Conditions, and Careers".

143672	Minority Women's Health
Subject: CMPH	Catalog Nbr: 0334
<p>Minority Women's Health is a graduate level public health course that will enable students to strengthen and apply theory and skills gained in medicine and public health courses towards the process of critically evaluating minority women's health research and issues. The content of the course has been designed to address the social determinants of health and well-being of minority women. The course contextually addresses minority women's health in the United States while exploring the contribution of race, ethnicity, gender, and socioeconomic status to minority women's health outcomes.</p>	

143796	Introduction to the Nervous System
Subject: BIED	Catalog Nbr: 0301
<p>Right now complex patterns of photons of light are leaving this computer screen and hitting a thin piece of tissue at the back of your eye. Not only are you detecting those complex light patterns, but you are also interpreting their meaning. Based on that meaning, you will soon decide to move your hand to guide the computer cursor to click on the "enroll" button. How is all this possible? How does your body detect external stimuli, derive meaning from them, and let you make decisions and interact with the world? This course will begin to unravel this mystery. Here you will learn the fundamentals of the human nervous system and basics of how the nervous system responds to external stimuli.</p> <p>This course is intended for high school science instructors as part of the Teaching the Great Diseases program.</p> <p>Pre-requisites:</p> <p>Basic fundamentals of animal biology (cell theory, evolution, genetics) recommended.</p>	

143797	Using Neural Signaling to Understand Pain
Subject: BIED	Catalog Nbr: 0316
<p>This course investigates how neurons are able to communicate with each other, through both chemical and electrical signals. the course will focus on two main components of neuronal signaling: the action potential (electrical signals) and synaptic transmission (chemical signals). Neuronal signaling enables neurons to send signals from one part of the nervous system to another and ultimately controls all of our behaviors. This course uses the experience of pain (something we can all relate to) as the framework to investigate how action potentials and synaptic transmission works.</p> <p>This course is intended for high school science instructors as part of the Teaching the Great Diseases program.</p>	

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Pre-requisites: This course can be taken alone, or in conjunction with the mini-course: 'Cells of the Nervous System', which describes the structure and function of our neurons. Students should have a basic understanding of the structure and function of neurons and organization of the nervous system before taking this course. A background in basic biology concepts (such as cell theory, molecular biology, diffusion, and electrostatic potential) is strongly recommended.

143798	The Neurobiology of Addiction
Subject: BIED	Catalog Nbr: 0326
<p>In this course you'll get an evidenced-based look at the parts of the brain responsible for addiction, the changes in the brain that occur during addiction, the risk factors for addiction, and an overview of how different drugs effect the brain. We'll also explore the neurobiology and evidence for behavioral addictions such as food addiction and gambling addiction, and take a look at how addiction can be treated.</p> <p>This course is intended for high school science instructors as part of the Teaching the Great Diseases program.</p> <p>Pre-requisites: This course integrates several concepts explored in earlier courses. it can be taken on its own, but we recommend students have working knowledge of these concepts:</p> <ul style="list-style-type: none"> -Basic structure of the brain (covered in 'Introduction to the nervous system') -Neuron structure and function (covered in 'Cells of the nervous system') -Neural signaling, especially synaptic transmission (covered in 'Using neural signaling to understand pain') -Neural circuits (covered in 'The neurobiology of sleep') -How rodents are used as models in neuroscience research (covered in 'How do we study the brain?'). 	

143867	What's in your food?
Subject: BIED	Catalog Nbr: 0252
<p>In this course, we will take a look at the industrialized food system and learn about the steps in the journey food takes from the farm to your plate. Along the way, we will explore ways in which our food is altered—with additives, through genetic engineering, by antibiotics or by contamination—and the potential impacts of these alterations on personal and public health. Finally, we will learn about regulatory steps taken—and steps we can take at home—to keep our food safe.</p> <p>This course is intended for high school science instructors as part of the Teaching the Great Diseases program.</p> <p>Pre-requisites: There are no prerequisites for this course. This course aligns with Metabolic Disease Unit 1 (Lessons 1.1-1.3) of the Great Diseases high school curriculum.</p>	

143868	How does your body digest food?
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Course Bulletin

Subject: Catalog Nbr:
BIED 0257

In this course, we will explore the components of our diet that provide energy and form the structural building blocks of our cells and tissues—macro and micro nutrients. We will discover how these nutrients are broken down as they pass through the digestive system. We will investigate the relative nutritive value of various foods and learn why all calories are not created equal. Finally, we will discuss what happens when the digestive process goes awry leading to common digestive disorders.

This course is intended for high school science instructors as part of the Teaching the Great Diseases program.

Pre-requisites: There are no prerequisites for this course.

This course aligns with Metabolic Disease Unit 1 (Lessons 1.4-1.5) and Unit 2 (Lesson 2.1) of the Great Diseases high school curriculum.

143869

How do cells use nutrients to make energy?

Subject: Catalog Nbr:
BIED 0261

How do cells derive energy from the food we eat? How does the body continue to function after we have stopped eating or when we are hungry? In this course, we will explore the processes by which the nutrients from the food we eat are absorbed and utilized by the body. We will discover how and where nutrients are shuttled into and out of storage in different tissues to maintain adequate glucose levels and preserve the vital functions that keep us alive. Finally, we will look at the big picture: how our lifestyle choices affect the biochemical processes in our cells.

This course is intended for high school science instructors as part of the Teaching the Great Diseases program.

Pre-requisites: It is recommended (but not required) that students have a basic understanding of macronutrient structures.

This course aligns with Metabolic Disease Unit 2 (Lessons 2.2-2.5) of the Great Diseases high school curriculum.

143870

How do we study the brain?

Subject: Catalog Nbr:
BIED 0306

This course explores the various ways scientists have attempted to study the brain. We will cover the history of neuroscience research and explain how neuroscientists use patient case studies, animal models, and imaging techniques. This will enable us to understand how the brain works both generally and in the context of specific functions, such as how we experience learning and memory.

Pre-requisites: Having taken a college biology course is highly recommended. 'Introduction to the nervous system' is also recommended, but not required.

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This course aligns with the Neurological Disorders Unit 1: Got Brains? What do our brains need to do? and lesson 3 (“Should animals be used in scientific research?”) of Unit 5: How do our choices change our brains? of the Great Diseases high school curriculum.

143871	Cells of the nervous system and Alzheimer’s Disease
Subject: BIED	Catalog Nbr: 0312
<p>This course explores the structure and role of neurons and glia—the cells that make up our nervous system—and how the function (or dysfunction) of these cells contribute to Alzheimer’s disease. During this course, we’ll discuss how neurons and glial cells are specialized for their roles, including how neurons are able to keep themselves healthy despite their unusual shapes, and how glial cells are able to insulate our neurons to increase their signaling speeds. Importantly, we’ll also investigate what can go wrong when neurons and glial cells are compromised by injury or disease.</p> <p>Pre-requisites: Students should understand the basic fundamentals of animal biology (cell theory, genetics, molecular biology). ‘Introduction to the nervous system’ recommended but not required. This course can be taken alone, or in conjunction with the course ‘Using neural signaling to understand pain,’ which describes how neurons communicate with each other.</p> <p>This course aligns with the Neurological Disorders Unit 2: What are the building blocks of our brains? of the Great Diseases high school curriculum</p>	

143872	The Neurobiology of sleep
Subject: BIED	Catalog Nbr: 0322
<p>Neurons work together in neural circuits to control behaviors. The neural circuit that controls our sleep-wake cycles is well understood and vitally important to our daily lives. In this course, we will use the experience of sleep to explore the concept of neural circuits and expand our knowledge of neural communication.</p> <p>Pre-requisites: This course can be taken alone, or in conjunction with ‘Cells of the Nervous System’ and ‘Using neural signaling to understand pain’ which describe the cells of our system and how they communicate. ‘Introduction to the nervous system’ recommended.</p> <p>This course aligns with the Neurological Disorders Unit 4: How do our neurons work together to control behaviors? of the Great Diseases high school curriculum</p>	

143873	Why should we care about infectious diseases?
Subject: BIED	Catalog Nbr: 0201
<p>This course explores the tools microbes use to break through our barriers and the perfect combination of factors that give them the opportunity to cause diseases. We discuss how even non-living agents like viruses</p>	

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exhibit the same biological impulse to replicate and spread. You'll also learn about how human history has been molded by major epidemics and a brief introduction to the defenses our bodies have used to save us from annihilation.

This course is intended for high school science instructors as part of the Teaching the Great Diseases program.

Pre-requisites: There are no pre-requisites for this course.

This course aligns with the Infectious Disease Unit 1: Why should we care about infectious diseases? of the Great Diseases high school curriculum

143874	How do pathogens make us sick?
Subject: BIED	Catalog Nbr: 0216
<p>Not all pathogens affect us the same way. The lifecycle of the pathogen and the special tools it uses to infect the host has a great effect on how our bodies respond and the diseases they cause. In this course, we will talk about some of the more common pathogens (such as MRSA, E. coli, and Clostridium) and how they make us sick. You will learn about the evolutionary costs and benefits of various tools that help a pathogen become virulent. We'll also talk about the unique hurdles of viruses undergo to facilitate their spread, including an enzyme HIV uses that is shared by no living organism.</p> <p>This course is intended for high school science instructors as part of the Teaching the Great Diseases program.</p> <p>Pre-requisites: It is recommended that students have an understanding what an infectious disease is and what causes it (covered in BIED 201 – Why should we care about infectious diseases?)</p> <p>This course aligns with the Infectious Disease Unit 4: How do pathogens make us sick? of the Great Diseases high school curriculum</p>	

143875	How do we get better?
Subject: BIED	Catalog Nbr: 0222
<p>Given the incredible rate at which pathogens can change, how does our immune system keep up? In this course, we will look at the amazing network of tools the body deploys. You will learn about the barriers that attempt to keep pathogens from ever entering, the immediate response of the innate immune system, and the lifetime immunity granted by the adaptive immune response.</p> <p>This course is intended for high school science instructors as part of the Teaching the Great Diseases program.</p> <p>Pre-requisites: It is recommended that students have a basic understanding of cell biology (how cells use receptors to sense their environment and communicate).</p> <p>This course aligns with Infectious Disease Unit 5: How do we get better? of the Great Diseases high school</p>	

Course Bulletin

curriculum

144012	Public Health Assessment: Data, Determinants, and Systems			
Subject:	Catalog Nbr:			
PH	0202			
2023 FALL	Primary	Susan Koch-Weser	Susan.Koch_Weser@tufts.edu	
2023 SPRG	Primary	Michael Siegel	Mike.Siegel@tufts.edu	
2024 SPRG	Primary	Virginia Chomitz	Virginia.Chomitz@tufts.edu	
<p>This foundational course in the Tufts MPH program provides an overview of essential frameworks, perspectives, and domains in public health. The course will introduce students to the social ecological model, social determinants of health, public health and health care systems, global health, and health equity. Critical public health challenges will be examined within historical, social, and political contexts across an array of public health domains, such as individual health behaviors, environmental health, occupational health, and health care services and systems. Students will be exposed to practice-based tools for conducting assessments and characterizing public health problems using a systems approach, examining multiple levels of the social ecological model, including individual, organizational, community, systems, and policy.</p>				

144095	Public Health Action: Programs, Policy, and Advocacy			
Subject:	Catalog Nbr:			
PH	0203			
2023 SPRG	Primary	Linda Hudson	Linda.Hudson@tufts.edu	
2023 SUMR	Primary	Wenhui Feng	Wenhui.Feng@tufts.edu	
2024 SPRG	Primary	Virginia Chomitz	Virginia.Chomitz@tufts.edu	
<p>This course will introduce concepts, frameworks, and skills for how public health professionals intervene at multiple levels to address critical public health problems of our time, and to improve population health and health equity. This course will build on the foundational health equity content, public health frameworks, systems thinking, and evidence synthesis and assessment skills developed in PH 202: Public Health Assessment. Students will leverage their knowledge of individual behavior, social determinants of health, health care systems, occupational health, and environmental health and apply this content to new situations and contexts. Specifically, students will engage in a variety of active learning scenarios, including case discussions, role plays, simulations, and project development and implementation.</p>				

144331	Applied QI Methods			
Subject:	Catalog Nbr:			
CMPH	0209			
2024 SPRG	Primary	Paul Beninger	Paul.Beninger@tufts.edu	
2024 SPRG	Primary	Ramnath Subbaraman	Ramnath.Subbaraman@tufts.edu	
<p>In this course, students will learn essential quality improvement (QI) skills and apply those skills to a QI project. As prework, students will complete the IHI Open School Basic Certificate in Quality and Safety, which covers the foundations of improvement capability, patient safety, leadership, person- and family-centered care, and the IHI Triple Aim framework. Working with preceptors at their CAP sites, students will complete a</p>				

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Plan-Do-Study-Act cycle to improve a clinical or administrative aspect of health care delivery. The course will meet at regular intervals as a group, primarily online, to reinforce key concepts, review assigned exercises (e.g., process maps), and discuss project progress and challenges. The Course Director will hold virtual 1:1 tutorials with students for further coaching. For second year MD/MPH students.

144358	Introduction to R Software for Statistical Computing
Subject: CBUN	Catalog Nbr: 0730
Introduction to R Software for Statistical Computing	

144361	Obesity: Causes and Challenges
Subject: BIED	Catalog Nbr: 0266
<p>In this course, we will answer the question “how does obesity develop?” We will begin by examining obesity in the context of public health—how and why the rate of development of obesity has changed over the past few decades both in the United States and around the world. We will define and investigate the metabolic parameters and physiological causes of obesity. We will discover how obesity relates (and can contribute) to the development of diseases like diabetes and atherosclerosis. This course will also highlight relatively new findings that impact our current understanding of obesity: the microbiome and epigenetics.</p> <p>The Great Diseases Alignment: This course aligns with Metabolic Disease Unit 3 of the Great Diseases high school curriculum.</p> <p>Pre-requisites: It is recommended that students have a basic understanding of the biochemical pathways that harness energy from the nutrients we eat and how those pathways are controlled. This information is covered in BIED 261, “How do cells use nutrients to make energy?”</p>	

144376	Women and Health Policy: Gender, Evidence, and Politics
Subject: CBUN	Catalog Nbr: MC840

144387	Directed Study
Subject: CMPH	Catalog Nbr: 0400

144388	Analysis of Emerging Infections
Subject:	Catalog Nbr:

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CBUN	PH825
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144465	Program Planning for Public Health Interventions
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Subject:	Catalog Nbr:
PH	0254

2023 SPRG	Primary	Uchenna Ndulue	Uchenna.Ndulue@tufts.edu
2024 SPRG	Primary	Jacob van den Berg	jacob.vandenberg@tufts.edu

This course takes an ecological approach to health. The determinants of individual health can range from individual actions to broad social and environmental conditions. Although interventions can be directed at the individual (for example, helping patients adhere to a low-fat dietary regimen) or to the population as a whole (such as mandating seat belt use) an objective of public health practice is often to encourage people to adopt behaviors that will improve their health status. This course provides an overview of the scientific basis for understanding human health behavior and strategies available for trying to change it.

144466	Health Economics
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Subject:	Catalog Nbr:
PH	0255

2024 SPRG	Primary	Wenhui Feng	Wenhui.Feng@tufts.edu
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We don't get to have everything we want. That basic truism applies to people and to firms - and it applies even more so to healthcare issues. We have some resources - time, materials, talent, factories, energy, land, etc. - and we have some things we'd like - health care services, public health infrastructure, medical research, etc. People differ in what sorts of goods and services they value most, and in their wealth and health. Some organizations are better than others at transforming inputs into things we'd like. Throughout most of the world today, markets play a key role in deciding what goods and services get produced, who produces them, and who consumes them. Few issues resonate in health policy debates as deeply as the question of how well markets serve these roles. PH 255 investigates how markets serve these roles, the efficiency and social justice implications of market operations, and the primary rationales for health policy interventions.

144600	PH-Workshop
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Subject:	Catalog Nbr:
UCW	0050

144652	Logistic Regression and Survival Analysis
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Subject:	Catalog Nbr:
CBUN	BS820

Logistic Regression and Survival Analysis

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144824	Using Digital Technology to Reach Health Consumers
Subject: PH	Catalog Nbr: 0269
<p>The course reviews the digital technologies that health and public health organizations can use to reach, educate, and engage healthcare consumers; including websites, social media, apps, and devices. Students will learn how to plan, develop, and evaluate a health website, select and use social media platforms for health campaigns, design an app, and utilize digital health and voice devices. Technologies evolve, as do how people access and use them, but the strategies to select, use, and evaluate endure. Students will focus on enhancing and updating the online presence of a health or public health organization with an understanding of the needs of their target audiences.</p>	

144878	Why should we care about infectious diseases?
Subject: BIED	Catalog Nbr: 0202
<p>This course explores the tools microbes use to break through our barriers and the perfect combination of factors that give them the opportunity to cause diseases. We discuss how even non-living agents like viruses exhibit the same biological impulse to replicate and spread. You'll also learn about how human history has been molded by major epidemics and a brief introduction to the defenses our bodies have used to save us from annihilation.</p> <p>This course is intended for high school science instructors as part of the Teaching the Great Diseases program.</p> <p>Pre-requisites: There are no pre-requisites for this course.</p> <p>This course aligns with the Infectious Disease Unit 1: Why should we care about infectious diseases? of the Great Diseases high school curriculum</p>	

145055	Consulting in Health Care: Principles and Practices
Subject: PH	Catalog Nbr: 0257
<p>The goal of the consulting course is to better prepare MPH graduates for a career in public health and health policy consulting. This course is designed to examine the consulting framework and the process of identifying problems, solutioning, identifying unintended consequences, and communicating recommendations organized based on the overarching consulting role. Each session will highlight a particular skill or set of skills associated with these roles and how to leverage or translate existing MPH skills into consulting-ready skills, starting with a high-level overview consulting basics</p>	

145057	Research Methods in Public Health
Subject: CMPH	Catalog Nbr: 0289
<p>Research Methods in Public Health is designed to acquaint veterinary public health students with the process</p>	

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of conducting public health research. The major objective of the course is to understand the nuts and bolts of conducting public health inquiry and research in an applied setting relevant to human and veterinary medicine, including your MPH Applied Learning Experience, emphasizing qualitative, community-engaged, and quantitative methods and use of a geographic information system (GIS) relevant to research. We will build on the concepts learned in the introductory courses of biostatistics, epidemiology, and other related courses to address biomedical and public health issues through rigorous research and evaluation methods. The course is intended to be a survey course of some of the major issues and tasks involved with conducting public health research. Although the course will cover some theory of why we conduct research, with discussion of socially just approaches, emphasis will be placed on the practical, real-world application of these concepts.

145233	Health Care Activism, Community Health, and Patient-Centered Research			
Subject: PH	Catalog Nbr: 0282			
2023 SPRG	Primary	Thomas Concannon	Thomas.Concannon@tufts.edu	
<p>This introductory course focuses on principles and methods that can be used to support the involvement of stakeholders in research. The course will examine three approaches to stakeholder and community engagement that have addressed theory, principles, challenges, and potential benefits.</p> <p>The three approaches include patient-centered research in which researchers collaborate with the public to make research more useful, community-based health research in which researchers and communities work together to co-create research, and health care activism in which individuals come together to influence stewards of publicly-funded research.</p>				

145308	Selected Topics in Global Health: Exotic Diseases and Far Away Places			
Subject: CMPH	Catalog Nbr: 0370			
2023 SPRG	Primary	Richard Niska	Richard.Niska@tufts.edu	
<p>Students anticipating a career in preventing and treating diseases and conditions throughout the world will find this course interesting. We will begin by sharing our backgrounds and interests, to guide future discussions. We will review basic epidemiological concepts that will appear in the scientific studies presented later in the course. We will then explore several diseases and conditions that commonly challenge global public health. Topics will include malaria, polio, parasites, tuberculosis, pandemic preparedness, and general health conditions. Geographic areas will include Haiti, Iraq, Kosovo, Nigeria, and the United States. I will share my real-life experiences seeing patients and studying these diseases scientifically. Guest speakers will participate as well, on such topics as corona virus and Ebola. Students will be expected to prepare a presentation on a selected infectious disease or health condition affecting a developing area of the world, based on prior experience or current interest. I hope this course inspires you to become involved in international public health and medicine.</p>				

145422	Health Messaging in the Media			
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Course Bulletin

Subject: Catalog Nbr:

PH 0274

2023 SUMR

Primary

Daniel Childs

Daniel.Childs@tufts.edu

The news media, for decades, has played a pivotal role in providing health information that has strongly influenced the public's health choices and behaviors; it has served, in many ways, as the prism through which the general public views many important health issues. The widespread adoption of the Internet put the first cracks in the primacy of top news organizations in this regard, and the advent of social media led to a further fracturing of what we consider "health media" into a disparate collection of outlets, each with the freedom to establish their own sets of standards for accuracy and presentation.

When the COVID-19 pandemic crisis arrived in the Spring of 2020, it tested this varied landscape of media sources in a way never seen before. We have seen numerous examples of responsible communication through traditional and social media that guided Americans to make choices that protected their health, as well as the health of their families and communities. And yet, there have also been countless instances of inaccuracies and missed opportunities that have likely had a real impact on public health.

Two entities, working together, have true potential to help the public navigate through this crisis – the health media and the medical and public health community. This course is all about bridging the divide between these two groups by helping medical and public health professionals develop a better understanding of how the media works. Using the tools offered by this course, these professionals will be able to better interact with and leverage the media with the goal of getting accurate health and medical information to the public that so desperately needs it.

Employing the COVID-19 pandemic crisis as an overarching case study, this course will introduce participants to the important principles of newsworthiness, using specific examples of health news coverage to detail how major news organizations make editorial decisions. Students will then delve into concepts such as journalistic storytelling and designing a pitch – critical elements for communicating effectively with reporters, producers and editors. The course will also explore the way news organizations use social media to both gather and report health and medical information. Participants will examine some of today's most pressing health issues from the perspective of responsible medical journalism, and each student will ultimately craft and pitch their own ideas for coverage on a current and important public health issue to a news media organization, social media influencer, health blog or other approved outlet. Guest lecturers – both from media organizations and those who work with the media – will provide insights on their experiences.

145426	Writing About Health and Communicating Data			
Subject:	Catalog Nbr:			
PH	0275			
2024 SPRG	Primary	Sabrina Kurtz-Rossi	Sabrina.Kurtz_Rossi@tufts.edu	
<p>Clear communication is a critical skill to master, especially for professionals working to promote public health. It is especially important to be able to communicate data in ways people can understand and use. Whether you are communicating to policy makers, health professionals, or the public, plain language principles can help you craft messages that are clear, relevant, and actionable. This course will draw from the science communication, health literacy, and cultural competency fields of study and practice, offering evidence-based</p>				

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approaches to meet diverse health information needs. Students will develop skills to communicate clear, motivating, and accurate content for public and professional audiences. The course will include individual and small group work, writing and editing practice, oral presentation, and peer review assignments.

145717	Pharmacoepidemiology and Regulation		
Subject:	Catalog Nbr:		
CMPH	0371		
2024 SPRG	Primary	Paul Beninger	Paul.Beninger@tufts.edu
<p>This is an extraordinary time that we're living in, the COVID-19 pandemic. This course will give you the tools to help navigate the shoals: the regulatory structures that provide access to US markets for the drugs, biologics, vaccines, medical devices and test kits that diagnose, treat, and prevent diseases, including the infectious diseases, that adversely affect our population, in the context of fundamental principles of pharmacoepidemiology. We will learn what these structures are, how they came into place, how they have changed over time, and what the drivers are that have led to change.</p>			

145738	Statistical Perspectives of Clinical Trials		
Subject:	Catalog Nbr:		
CMPH	0372		
<p>Randomized clinical trials (RTC) are considered the gold standard in clinical research to identify the causal effect of an intervention. RCTs are huge operations requiring collaborations across different functions: clinical sciences, clinical operations, pharmacovigilance, regulations, data management, biostatistics, statistical programming etc. In this short course, statistical aspect of clinical trials: the statistical design of the clinical trials, sample size and power consideration, regulatory agency guidelines, and data analysis methods will be introduced. Some common statistical theories, methodologies and their applications to clinical trial designs will be presented. A quick review of some basic statistical theories and how to use the statistical programming language R (available for download https://www.r-project.org) will be given at the beginning of the course, and some real-world clinical trial designs will be introduced at the conclusion of the course.</p>			

145741	Food Protection for the Veterinary Professional		
Subject:	Catalog Nbr:		
CMPH	0329		
2024 SPRG	Primary	Meera Gatlin	Meera.Gatlin@tufts.edu
<p>The veterinary profession is the only one involved in all aspects of the food chain from 'farm to fork', as reported by the American Veterinary Medical Association (AVMA). Yet food safety and security is an arm of public health assurance many [veterinary] health practitioners are often unfamiliar with. Using a student-centered learning approach, this course walks down the food development chain to review the infrastructure and policy protecting our food supply. This course uses a flipped classroom model, with both asynchronous preparation and synchronous discussion time. Classroom sessions comprise of brief didactic instruction coupled with roundtable discussion and debate, focusing heavily on federal educational, legislative, and regulatory measures to promote food safety and security. These include the FDA Food Safety Modernization Act (FSMA) of 2017, Veterinary Feed Directives (VFDs), and HACCP (Hazard Analysis and Critical</p>			

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Control Point) protocols.

145847	Implementation Science: Bridging the Gap Between Knowledge and Practice			
Subject:	Catalog Nbr:			
PH	0276			
2023 FALL	Primary	Jacob van den Berg		jacob.vandenberg@tufts.edu
<p>This course focuses on methodology to plan for the implementation and dissemination of evidence-based public interventions and policies. Students will learn frameworks and develop tools to implement effective interventions and clinical practices, monitor success, and engage in basic quality improvement activities.</p>				

145848	U.S. Health Care			
Subject:	Catalog Nbr:			
PH	0277			
2023 FALL	Primary	Vanessa Nicholson-Robinson		Vanessa.Nicholson@tufts.edu
<p>This course serves as an overview of the context, stakeholders, and function of healthcare systems. It covers a large amount of information about how healthcare in the U.S. functions so that, by the end of the course, students can apply what they know to evaluate options and contribute to conversations about policy solutions. Since policy information is constantly changing, students will also learn how to continue updating their knowledge on these topics throughout their careers. Students interested in careers in the health care system, government, or consulting will find this course invaluable.</p>				

145849	Qualitative Methods and Data Analysis			
Subject:	Catalog Nbr:			
PH	0290			
2023 FALL	Primary	Karen Errichetti		Karen.Errichetti@tufts.edu
2024 SPRG	Primary	Saloni Dev		Saloni.Dev@tufts.edu
<p>The course is an introductory course, to begin, but not develop full mastery in, various relevant qualitative methods relevant for public health. The course emphasizes practical skills of qualitative research design, data collection (i.e., interviewing, focus group facilitation, participant observations, photovella/photovoice, etc.) and analysis. The course introduces students to: 1) paradigms of qualitative research and inquiry; 2) selected data collection, management, and analysis methods for qualitative research in public health; and, 3) standards for reporting qualitative findings.</p> <p>The course will follow a remote studio format in which students will receive guidance on how to set up and implement qualitative methods, conduct qualitative data analysis as well as peer-feedback on their own qualitative data analysis efforts. Class meetings will involve short interactive lectures, qualitative methods and data analysis exercises, and collaborative remote studio work toward an ePortfolio. Students will learn about methods for analyzing qualitative data manually but will be exposed to the nVivo software platform.</p>				

145850	Analysis of Multilevel and Longitudinal Data			
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Course Bulletin

Subject: PH	Catalog Nbr: 0291	2023 SUMR	Primary	Misha Eliasziw	Misha.Eliasziw@tufts.edu
<p>Multilevel and longitudinal study designs have become commonplace in public health, biomedical sciences, and medicine. Ignoring the correlative structure of the responses in the analysis leads to invalid tests and erroneous conclusions. This course presents corrective statistical methods that include, linear and generalized linear mixed models, repeated measures analysis of variance, generalized estimating equations, and hazards regression models. Each method is discussed in a practical in-depth manner by emphasizing parallels with more familiar regression models and is illustrated by analyzing data using statistical software. The course not only provides guidelines for selecting an appropriate analytical approach but also provides a sound interpretation of the results.</p>					

145872	Current Topics in Public Health				
Subject: PH	Catalog Nbr: 0278	2023 SUMR	Primary	Susan Koch-Weser	Susan.Koch_Weser@tufts.edu
<p>This survey course examines a changing set of topics in public health. MPH faculty will share aspects of their active research, advocacy, or consulting. Faculty presenters will provide readings before class, which could include peer-reviewed literature, working documents and reports, or media coverage of their topic. In class students will have the opportunity to learn more about the topic through lecture, discussions, and in-class activities such as exercises, debates, and workshopping of real-world documents.</p>					

145938	Biblio-PHILES (Public Health in Literature and Excerpts from Scholars)				
Subject: CMPH	Catalog Nbr: 0215	2023 FALL	Primary	Meera Gatlin	Meera.Gatlin@tufts.edu
<p>This is a student-led book club that aims to facilitate a thoughtful community discussion on topics and real-world scenarios pertaining to veterinary public health, One Health, and global health. We aim to assure continued excellence in veterinary public health practice using an approved list of published scholarly books (or books published by scholars) with guidance and feedback from an academic librarian.</p>					

145950	Exploring Evolution: From Darwin's Finches to Antibiotic Resistant Bacteria				
Subject: BIED	Catalog Nbr: 0225				
<p>Why are honey bees disappearing? What is causing the decrease in biodiversity in the ocean? How did a virus that originated in bats evolve to cause a human pandemic? Join us on a journey of evolution that will take us from these questions to understanding the urgent threat posed by antibiotic resistant bacteria. We will explore solutions to these problems in the context of One Health - an approach that recognizes that the health of people is closely connected to the health of animals and our shared environment. Learn about NGSS-aligned evolutionary topics - including natural selection, adaptation, inheritance of traits - presented from the framework of K-12 aligned pedagogical approaches.</p>					

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There are no pre-requisites for this mini-course. This course is designed for educators from K-12, but open to all.

145957	DVM/MPH Clinical Rotations			
Subject:	Catalog Nbr:			
CMPH	0415			
2024 SPRG	Primary	Meera Gatlin		Meera.Gatlin@tufts.edu
<p>Upon completion of two DVM core 3-week clinical rotations, VET405 Ambulatory Medicine and VET426 Tufts at Tech Community Veterinary Clinic, with demonstration and assessment of the DVM/MPH concentration competency listed below, students will be eligible for 1.5 MPH credits per rotation. Competency: Demonstrate clinical competency in health promotion, disease prevention/biosecurity, zoonoses, and food safety.</p>				

146175	Qualitative Methods in Clinical Spaces			
Subject:	Catalog Nbr:			
CMPH	0325			
2023 SPRG	Primary	Karen Errichetti		Karen.Errichetti@tufts.edu
<p>This course introduces MD-PhD students to qualitative theory and methods that can be used to support research, evaluation, and quality improvement work at the intersection of public health and clinical medicine. In addition to describing the theoretical basis for qualitative inquiry, this course helps students determine how to develop actionable qualitative research questions and select rigorous study designs to answer them in the field. Students will be exposed to a variety of qualitative data collection approaches including interviewing, focus groups, and ethnographic strategies such as photo elicitation. Special attention will be paid to implementation of qualitative methods to collect timely information for the evaluation of interventions in health care settings serving diverse communities.</p>				

146302	Data Visualization for Public Health I			
Subject:	Catalog Nbr:			
CMPH	0326			
2023 SPRG	Primary	Owais Gilani		Owais.Gilani@tufts.edu
<p>While rigorous statistical analysis is a crucial component of any quantitative scientific study, the analysis alone is of limited utility if the results cannot be effectively communicated to relevant audiences. The art of scientific storytelling is greatly enhanced by including exciting and appropriate visualizations that help us understand both the underlying data and the statistical analysis performed. However, misleading graphical displays also have the power to distort interpretation and undermine public understanding. In this course, students will be introduced to various traditional and modern forms of data visualizations and their uses and misuses. They will learn how to create these displays using the statistical software R, how to understand and correctly interpret them, and how to effectively discuss them with various audiences.</p>				

146303	Data Visualization for Public Health II			
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Course Bulletin

Subject: Catalog Nbr:
CMPH 0327

Effectively disseminating results from scientific studies is an increasingly important skill. Various tools now allow researchers to showcase their analysis or research portfolio outside of the typical peer-review journal process e.g. blogs, podcasts, and personal websites. In this course, students will build upon the R and visualization skills learnt in Data Visualization for Public Health I. They will learn methods for creating dynamic and interactive graphical displays using RShiny, and build their own website and host it on GitHub. They will also work on a project where they will apply the skills learnt in the course to complete a data analysis project, and create a website showcasing that analysis using effective graphics and a compelling narrative. This online, asynchronous class will meet once a week for 1.5 hours via Zoom, and attendance during that session is mandatory.

146452**Introduction to Systematic Review**

Subject: Catalog Nbr:
PH 0280

2023 FALL

Primary

Shayesteh Jahanfar

Shayesteh.Jahanfar@tufts.edu

The aim of this course is to introduce students to systematic review methodology to help them develop an understanding of the essential components of a review and acquire the necessary skills to create publishable manuscripts. Rigorous systematic reviews are the most reliable means of evaluating the effectiveness of clinical and public health interventions. Additionally, the principles and methods employed in these reviews are applicable to other critical areas of healthcare and public health, such as disease prevalence, qualitative evidence, and diagnostic test accuracy. The course intends to provide a comprehensive theoretical understanding of all the fundamental aspects of conducting a high-quality systematic review, primarily focused on intervention effectiveness and exposure to risk factors. Students will learn how to develop concise protocols for systematic reviews and gain insight into meta-analysis techniques through practical experience with a dataset.

146453**Intermediate Systematic Review**

Subject: Catalog Nbr:
PH 0281

2024 SPRG

Primary

Shayesteh Jahanfar

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The aim of this course is to introduce students to systematic review methodology to help them develop an understanding of the essential components of a review and acquire the necessary skills to create publishable manuscripts. Rigorous systematic reviews are the most reliable means of evaluating the effectiveness of clinical and public health interventions. Additionally, the principles and methods employed in these reviews are applicable to other critical areas of healthcare and public health, such as disease prevalence, qualitative evidence, and diagnostic test accuracy. The course intends to provide a comprehensive theoretical understanding of all the fundamental aspects of conducting a high-quality systematic review, primarily focused on intervention effectiveness and exposure to risk factors. Students will learn how to develop concise protocols for systematic reviews and gain insight into meta-analysis techniques through practical experience with a dataset.

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146454	Skills and Tools for Engaged Practice I (STEP I)			
Subject:	Catalog Nbr:			
PH	0311			
2023 FALL	Primary	Alice Tang	alice.tang@tufts.edu	
2023 FALL	Primary	Signe Flieger	Signe.Flieger@tufts.edu	
2024 SPRG	Primary	Karen Errichetti	Karen.Errichetti@tufts.edu	
<p>Skills and Tools for Engaged Practice (STEP) I is the first of a three-course sequence designed for students completing the MPH degree. This course enables students to plan their MPH training experience and future public health career, while acquiring knowledge, skills, and perspectives essential for addressing critical public health challenges. This course includes didactic sessions on foundational public health skills, such as literature reviews, citation management, and ethics. Students will work in small groups with the instructor to discuss public health interests, plan their MPH experience, and identify potential organizations for the Applied Practice Experience (APE). Additionally, students will explore topics, mentors, projects, and methods for the culminating Integrative Learning Experience (ILE).</p>				

146512	Public Health Education			
Subject:	Catalog Nbr:			
CMPH	0452			
2024 SPRG	Primary	Ylisabeth Bradshaw	libby.bradshaw@tufts.edu	
<p>This is a career development course for 4th year MD/MPH students interested in enhancing and expanding their public health educator skills to potentially become clinician/public health educators. Fourth year students participating in this course will be mentored by public health faculty to facilitate and plan sessions in the Public Health Integration Seminar that they participated in as 1st, 2nd, and 3rd year students. In addition, they will participate in course planning, skill development, student assessment, and session and course evaluation.</p>				

146517	Trauma, Trauma-Informed Care, Recovery and Resilience			
Subject:	Catalog Nbr:			
CBUN	SB832			

146519	Skills and Tools for Engaged Practice II (STEP II)			
Subject:	Catalog Nbr:			
PH	0312			
2023 FALL	Primary	Signe Flieger	Signe.Flieger@tufts.edu	
2024 SPRG	Primary	Alice Tang	alice.tang@tufts.edu	
2024 SPRG	Primary	Vanessa Nicholson-Robinson	Vanessa.Nicholson@tufts.edu	
<p>Skills and Tools for Engaged Practice (STEP) II is the second of a three-course sequence designed for students completing the MPH degree. This course enables students to progress through their MPH training experience while acquiring knowledge, skills, and perspectives essential for addressing critical public health challenges. This course includes didactic sessions on budgeting, management, leadership, and working with professionals</p>				

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from other professions and sectors. Students will work in small groups with the instructor to refine their course plan and complete their proposals for the Applied Practice Experience (APE) and the culminating Integrative Learning Experience (ILE).

146521	Skills and Tools for Engaged Practice III (STEP III)			
Subject:	Catalog Nbr:			
PH	0313			
2023 FALL	Primary	Signe Flieger	Signe.Flieger@tufts.edu	
2024 SPRG	Primary	Alice Tang	alice.tang@tufts.edu	
<p>Skills and Tools for Engaged Practice (STEP) III is the final course of a three-course sequence designed for students completing the MPH degree. In this course, students will submit and present their Applied Practice Experience (APE) deliverables, obtain support for completing their Integrative Learning Experience (ILE), and continue to develop skills for their public health career. Students will have the opportunity to participate in a variety of workshops and modules to advance their knowledge, skills, and perspectives across an array of public health topics.</p>				

146570	Global One Health: How Intersections between Humans, Animals, & the Environment Shape Public Health			
Subject:	Catalog Nbr:			
PH	0218			
2024 SPRG	Primary	Jonathon Gass	Jonathon.Gass@tufts.edu	
<p>Worldwide, increasing, and significant public health challenges result from complex and inextricable interactions between humans, animals, and the environment, necessitating a One Health systems approach to addressing these challenges. This interdisciplinary course will introduce the concept of One Health as an increasingly important approach to a holistic understanding of the interrelationships between human, animal, and environmental health. Among the topics covered are bi-directional impacts of human and animal health (with particular emphasis on zoonotic diseases), the impact of earth's changing ecology on health of populations, anthropogenic drivers of emerging and re-emerging viruses in human populations, issues of food and water security, animals as sentinels of environmental hazards, emergency preparedness, and the benefits of comparative medicine among animals and humans.</p>				