

Course Bulletin

100105	Bioterrorism: Risks and Defense Strategies		
Subject:	Catalog Nbr:		
CMPH	0010		

100488	Social and Behavioral Science		
Subject:	Catalog Nbr:		
CMPH	0118		
2021 FALL	Primary	Anthony Schlaff	anthony.schlaff@tufts.edu
2022 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>			

100508	Introduction to Health Services		
Subject:	Catalog Nbr:		
CMPH	0122		
<p>An overview of the theory, organization, policies, politics, and practices that have shaped personal health care services in the United States. Students learn about the forces that influence the substance and process of health care delivery and financing. They also are challenged to think about ways in which various stakeholders, including health professionals (clinical and administrative), commercial interests, governmental officials, and the public have come to interact in the evolution of health care delivery systems.</p>			

100568	Epidemiology		
Subject:	Catalog Nbr:		
CMPH	0130		
<p>Concepts and tools necessary to understand biomedical experiments and epidemiologic investigations. Statistical and epidemiological techniques are used to analyze public health and biomedical data for decision making. Students learn to identify potential problems in public health and biomedical studies and how they can be minimized or avoided. Major epidemiological study designs are delineated.</p>			

100606	Biostatistics		
Subject:	Catalog Nbr:		
CMPH	0132		
<p>Biostatistical procedures used in the majority of biomedical investigations. Emphasizes the use of each procedure, how and when to apply it, and how to interpret the results. Each lecture is followed by a computer laboratory session that requires students to use appropriate methods when analyzing a specific data set. Students progress from a reading knowledge of biostatistics to the beginnings of conversant facility.</p>			

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100648	Applications of Communications Theory			
Subject:	Catalog Nbr:			
CEMR	0614			
<p>Health communication is primarily concerned with the role of theory, research, and practice in health promotion, education, and delivery. Students will investigate provider-patient interaction, social support networks, health information systems, medical ethics, mass media, health policy, and health promotion and disease prevention. Students will learn about the integral nature of communication in health including: the role communication plays in shaping individuals' social and cultural expectations and beliefs about health, how such information may influence people to think differently about health and affect behavioral change, and how communication vehicles may be used to redefine and change public policy about health and health behavior. Students can expect to learn through assigned readings, cases and projects, exams, and class interaction.</p>				

100683	Healthcare Organization: Budgeting & Management			
Subject:	Catalog Nbr:			
CMPH	0136			
2022 SPRG	Primary	Justin St. Phillips	Justin.St__Phillips@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			
2022 FALL	Primary	Ylisabeth Bradshaw	libby.bradshaw@tufts.edu	
2022 FALL	Primary	Meera Gatlin	Meera.Gatlin@tufts.edu	
2022 SPRG	Primary	Anthony Schlaff	anthony.schlaff@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			
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Subject:	Catalog Nbr:			
CMPH	0170			
2022 FALL	Primary	Meera Gatlin		Meera.Gatlin@tufts.edu
2022 SPRG	Primary	Felicia Nutter		Felicia.Nutter@tufts.edu

100913	Environmental & Occupational Health			
Subject:	Catalog Nbr:			
CMPH	0203			
2021 FALL	Primary	Jenny Carwile		Jenny.Carwile@tufts.edu
2022 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>				

100920	Media Strategies for the Health Professional			
Subject:	Catalog Nbr:			
CEMR	0651			
<p>Students develop an understanding of the strategic use of the media by health communicators in message development and communication strategy execution. Students also explore the ethical concerns of health care professionals who utilize the media. Students learn how to develop effective health communication campaigns that bring about behavioral change among target audiences and influence health policy issues at the local, state, national, and international level. In addition, students learn how to develop evaluation techniques for health communication strategies.</p>				

100939	Social Marketing			
Subject:	Catalog Nbr:			
CEMR	0652			
<p>This course focuses on changing the voluntary behaviors of a society (e.g., smoking cessation, diet and exercise habits). Students learn how to apply marketing techniques and concepts to social contexts like preventive health, education, and politics. As part of the course requirements, students must complete a marketing audit of a not-for-profit organization involved in social marketing. In addition, cases and exercises allow students to develop their skills and knowledge in this area.</p>				

100952	Law And Public Health			
Subject:	Catalog Nbr:			
CMPH	0204			
2022 FALL	Primary	Marcia Boumil		marcia.boumil@tufts.edu

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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.

100992	Legal Basis Of Public Health Veterinary Medicine			
Subject: CMPH	Catalog Nbr: 0207			
	2022 FALL	Primary	Catherine Brown	Catherine.Brown@tufts.edu
	2022 SPRG	Primary	Michael McGuill	Michael.McGuill@tufts.edu
	2022 SPRG	Primary	Meera Gatlin	Meera.Gatlin@tufts.edu
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.				

101029	Public Health Field Experience			
Subject: CMPH	Catalog Nbr: 0208			
	2022 FALL	Primary	Richard Glickman-Simon	richard.glickman-simon@tufts.edu
	2022 FALL	Primary	Meera Gatlin	Meera.Gatlin@tufts.edu
	2022 FALL	Primary	Michael Siegel	Mike.Siegel@tufts.edu
	2022 SPRG	Primary	Anthony Schlaff	anthony.schlaff@tufts.edu
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 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: CMPH	Catalog Nbr: 0251			
	2022 FALL	Primary	Ylisabeth Bradshaw	libby.bradshaw@tufts.edu
	2022 FALL	Primary	Meera Gatlin	Meera.Gatlin@tufts.edu
	2022 SPRG	Primary	Anthony Schlaff	anthony.schlaff@tufts.edu
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				

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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.

101123	Applied Learning Experience: Planning Seminar			
Subject:	Catalog Nbr:			
CMPH	0253			
2022 FALL	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			
2021 SUMR	Primary	Olaf Dammann		Olaf.Dammann@tufts.edu
2022 SUMR	Primary	Alice Tang		alice.tang@tufts.edu
2022 SUMR	Primary	Susan Koch-Weser		Susan.Koch_Weser@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>				

101235	Obesity Science & Policy			
Subject:	Catalog Nbr:			
CMPH	0303			
<p>This course will introduce students to the “obesity epidemic”, the epidemiology of obesity, current ideas on causes and consequences of obesity, and measurement methodologies. We will emphasize pediatric issues and disparities research. Using local and national examples, we will assess obesity prevention and intervention strategies that range from individual- to environmental- to policy-level approaches. The course will review the role of physical activity and nutrition in obesity development and prevention. Students will practice writing grants and design a research study or an intervention plan that addresses an aspect of healthy weight promotion. The course is intended to provide students with practical information and skills for working in community-based public health or clinical settings.</p>				

101254	Health Informatics: Using Technology to Transform Healthcare			
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Subject: Catalog Nbr:
CMPH 0304

Health Informatics examines the use of technology to collect, manage, exchange, and analyze clinical information. This relatively new discipline gained greater prominence when the American Recovery and Reinvestment Act designated more than \$19 billion dollars towards bolstering the health information technology infrastructure across the country. In this course we will explore why a strong information technology infrastructure is critical for delivering safer cost-effective care and how it can greatly enhance public health monitoring and reporting. Students will gain an appreciation for some of the latest technologies that are changing the way healthcare is delivered, measured, researched, and taught. The course will also examine the major obstacles to implementing some these technologies and the regulatory/legal parameters currently in place.

101271**Adolescent Health**

Subject: Catalog Nbr:
CMPH 0305

2022 SPRG

Primary

Laura Grubb

Laura.Grubb@tufts.edu

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.

101345**Global Health**

Subject: Catalog Nbr:
CMPH 0312

101367**Health Equity and the Social Determinants of Health**

Subject: Catalog Nbr:
CMPH 0313

Racial/ethnic health disparities have been well documented, and the contributions of socio-environmental factors to health outcomes are well understood. Poverty, education, and elements of the built environment are associated with health behaviors and the dramatic increase in chronic diseases. These social determinants of health are preventable, as are the conditions they can contribute to. Efforts to reduce disparities should encourage physicians to integrate the social determinants into their practice and consider them in their delivery of care. This requires cultural competency and a contextualized understanding of health and illness, and an ecological approach to the practice of medicine that can look beyond the body to provide more effective care and treatment. This is an advanced seminar-style elective course that builds on the first year course Scientific Foundations of Social and Behavioral Medicine, and thus assumes basic knowledge of health disparities and matters of race/ethnicity and class in the US. Course content is focused on racial/ethnic health

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disparities, the social determinants of health, and the development of cultural competency skills and values. Topics covered will include allostatic load, social stratification, and the relationship between institutions and their policies, and the programs and services they provide. The course will also provide skill development in cultural competence, the interpersonal aspects of care, and strategies for working with diverse population groups, with a focus on the new immigrant communities. The course will challenge students to integrate course content with what they have experienced in their clerkships and to develop strategies to integrate the social determinants into clinical practice.

101404	Clinical Epidemiology
Subject: CMPH	Catalog Nbr: 0321
This course is designed to offer an overview of clinical epidemiology concepts at the introductory level. Clinical decision making requires background knowledge in three important areas of epidemiology: risk estimation, diagnosis, and intervention. The course will cover these topics based on textbook readings, current literature examples, clinical vignettes, and group discussion.	

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:	Catalog Nbr:

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CRBU	0303
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101567	Elements of Data Analysis & Visualization
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Subject:	Catalog Nbr:
CMPH	0343

101577	Behavioral Economics
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Subject:	Catalog Nbr:
CRBU	0323

101588	Survey Methods
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Subject:	Catalog Nbr:
CMPH	0345

101639	Biostatistics
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Subject:	Catalog Nbr:
CRBU	0703

101642	Integration Of Public Health
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Subject:	Catalog Nbr:
CMPH	0351

2022 FALL	Primary	Ylisabeth Bradshaw	libby.bradshaw@tufts.edu
2022 FALL	Primary	Meera Gatlin	Meera.Gatlin@tufts.edu
2022 SPRG	Primary	Anthony Schlaff	anthony.schlaff@tufts.edu

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.

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101684	Applied Learning Experience: Orientation & Planning			
Subject:	Catalog Nbr:			
CMPH	0353			
2022 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>				

101721	Ethics and Law in Public Health and Medicine			
Subject:	Catalog Nbr:			
CMPH	0354			
<p>This course will begin with a brief overview of the history and tradition of bioethics and four major ethical theories - as background for applying an ethical framework to contemporary legal and policy issues in public health and clinical medicine. This year's content issues include: resource allocation and access to services pursuant to the Affordable Care Act, organ donation and end of life issues, conflicts of interest within clinical medicine and the pharmaceutical/medical device industry, physician and institutional handling of medical errors, special issues concerning mental health, and the finance of health care. The course does not overlap with CMPH 204 or CMPH 333.</p>				

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

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

101760	Participatory and Community-Based Approaches to Epidemiological Research			
Subject:	Catalog Nbr:			
CMPH	0358			
2021 FALL	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</p>				

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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.

101797	Financial Reporting And
Subject: CRBU	Catalog Nbr: 0711

101804	Legal, Ethical, and Policy Issues in Maternal and Child Health
Subject: CMPH	Catalog Nbr: 0362
<p>This course will address some of the legal, ethical and policy issues relating to maternal and child health. Specific topics will include: women's reproductive health, child and sexual abuse, domestic violence, youth violence, illegal immigration and sexual harassment. Introductory material will include the Americans with Disabilities Act and the Family Medical Leave Act. (The subject matter of this class does not overlap with ETHICS IN MEDICINE AND PUBLIC HEALTH, the elective taught by Prof. Boumil on alternate years).</p>	

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

101858	Case Studies In Health & Human Rights
Subject: CMPH	Catalog Nbr: 0377
<p>The course is based in an activist posture, which asserts that a theoretical understanding of the literature and analytic strategies of a human rights based approach to public health will inform leaning and practice throughout the life of a public health physician. The course introduces the theories, analyses, models, and methods used in human rights based practice as employed by health providers and policy makers. The eight sessions are interactive, using a variety of readings, outside speakers, student projects, and interactive discussions, workshops to allow students to develop skills needed to help shape further engagement with Human Rights throughout the medical school and medical training. It is an activist process informed by analytic material. It will build on the described experience of students, particularly those engaged with Physicians for Human Rights to create a broader environment in which the lens of Human Rights will be available to scrutinize public health and medical work.</p>	

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101913	Clinical Epidemiology of Cardiovascular Disease		
	Subject:	Catalog Nbr:	
	CMPH	0392	
<p>The primary objective is to give students a basic understanding of the clinical epidemiology of cardiovascular disease, and the primary and secondary risk factors for its occurrence. This course will briefly review the major observational and intervention studies in the field of cardiovascular epidemiology and cover various research designs and the analytical methods, their strengths and weaknesses, and common applications. A secondary objective is to help students critically review scientific literature, interpret epidemiologic research appropriately, and to place the findings into proper context with regard to public health implications.</p>			

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

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

102230	The Shape Of Hc Delivery		
	Subject:	Catalog Nbr:	
	CRBU	0755	

102308	Integration Of Public Health		
	Subject:	Catalog Nbr:	
	CMPH	0451	
	2022 FALL	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>			

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102328	Applied Learning Experience			
Subject:	Catalog Nbr:			
CMPH	0453			
2022 SPRG	Primary	Anthony Schlaff		anthony.schlaff@tufts.edu
2022 SUMR	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			
Subject:	Catalog Nbr:			
CRBU	0820			

102532	Directed Study			
Subject:	Catalog Nbr:			
CMPH	0499			

102569	Epidemiology of Zoonotic Infections			
Subject:	Catalog Nbr:			
CMPH	0655			
<p>This course seeks to provide health professionals with the basis for evaluating risks and formulating prevention and intervention strategies for outbreaks or endemic transmission of zoonotic infections. Each</p>				

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session is structured with a vertical component comprising general principles, and a horizontal component comprising a case study of a specific agent that illustrates the general principles.

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

102680	Evaluating Hc Quality
Subject:	Catalog Nbr:
CRBU	0837

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

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

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

102819	Modeling In Excel
Subject:	Catalog Nbr:
CRBU	0880

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

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

124904	Directed Study
Subject: HCOM	Catalog Nbr: 0400

124994	Epidemiology-Biostatistics: Reading Medical Lit.
Subject: HCOM	Catalog Nbr: 0502
<p>Lectures and small group exercises introduce students to the concepts and methods of epidemiology and biostatistics. The course is divided into two components. The initial component presents basic methods for measuring disease frequency and for quantifying relationships between determinants of health and medical and/or public health outcomes. Students are also provided with fundamental skills for the critical evaluation of biomedical and epidemiological literature. The second part of the course explores in detail the principles of epidemiological research design and their application to a critical evaluation of the literature.</p>	

125061	Introduction to Medicine
Subject: HCOM	Catalog Nbr: 0504
<p>This course is a survey of clinical medicine as it is practiced by physicians and other health care providers in Western countries. During the first half of the course, students are introduced to basic human physiology, pathophysiology and the fundamentals of clinical medicine including history taking, the physical examination, diagnostic testing and modern therapeutics. The second half of the course is designed to apply this information to the most prevalent diseases that plague the developed world. Issues pertaining to population medicine and public health, health promotion and disease prevention, behavioral influences on health and alternative medicine are also covered in the context of applicable disease states.</p>	

125156	Digital Health: How to Design, Develop, and Evaluate Health Websites
Subject: HCOM	Catalog Nbr: 0506
<p>The course teaches the skills to design health websites, and redesign existing ones, to provide sites that are appealing, usable, and effective at achieving their goals. You will learn how to meet the needs of your target user population through developing personas and scenarios, how to learn from and differentiate your site</p>	

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from competitors' sites through competitive analysis, and how to conduct formative and heuristic evaluations to improve site effectiveness. The course covers the different types of content, including how to create expert-generated content, how to solicit and manage user-generated content, how to select imagery, and how to select a site name, tagline, and logo. For the course project, you will design a new health website or redesign an existing one using the skills you learn in class.

125198	Technology and Design for Public Health			
	Subject:	Catalog Nbr:		
	HCOM	0508		
<p>HCOM 508 explores the role of technology and software programs used to create health communication materials. At some point in your career as a health communicator, you will likely be asked to 1) create something (promotional materials, an online video, or a website); 2) hire someone to create something; or 3) oversee someone or a group of people who will create something. As a health communication professional, familiarizing yourself with technology and design terms and concepts will help you communicate effectively with designers, developers, videographers, printers, photographers, and other creative professionals. Each creative discipline has its own language, and during this course you will gain the skills and confidence to communicate with creatives, clients, contractors, and colleagues. We will pay particular attention to balancing the design/development process with technical terminology and skills. Core software includes Adobe Photoshop and InDesign, though we will explore basic features in WordPress and advance features in Microsoft Word. During this class, we will also explore eHealth trends in creating online communication (video and web). This 7-week course will be a blended learning experience, with three classes taught in person and four taught online via WebEx. Additional lab sessions and one-on-one assistance will be made available for additional support and assistance with the computer programs used in the class.</p>				

125227	Health Literacy			
	Subject:	Catalog Nbr:		
	PH	0273		
	2022 SPRG	Primary	Sabrina Kurtz-Rossi	Sabrina.Kurtz_Rossi@tufts.edu
<p>Understanding the relationship between health and literacy is essential to the development of effective health communication. National assessments of adult literacy have raised serious concerns about the ability of nearly half the adult population in the U.S. to access and use health information and services (NALS 1992, NAAL 2003, PIAAC 2012). Low health literacy is a barrier to effective health communication, affects health care quality and contributes to health disparities. To address these issues the Institute of Medicine calls for increasing "knowledge, awareness, and responsiveness to health literacy among health service providers" (IOM 2005). The U.S. Department of Health and Human Services recommends that health service providers be trained in health literacy, plain language, and culturally and linguistically appropriate services (CLAS) and use those skills to create patient-centered best practices (DHHS, 2010).</p> <p>To raise awareness among health professionals regarding health literacy as a public health priority, the Health Communication Program at the Tufts University School of Medicine offers a skills oriented seminar in health literacy. This course explores the link between literacy, language and culture and how systems barriers impact access to health information and quality health care services. Students practice writing and speaking in plain</p>				

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language, and consider how to apply health literacy research to practice. The course provides an overview of the health literacy interventions being tried in a variety of sectors and explores opportunities for collaboration across fields.

125275	Patient-Provider Interaction			
	Subject:	Catalog Nbr:		
	PH	0270		
	2022 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>				

125295	Writing about Health and Medicine			
	Subject:	Catalog Nbr:		
	HCOM	0511		
<p>Effective health communicators can write for a variety of lay audiences and produce clear, accurate and appropriate content that works for digital health platforms and traditional print venues. This course is designed to develop basic skills for researching and writing about health and medicine-related topics for the public. We expect students to enter the course with varying writing experience. Through a series of individual and collaborative exercises, students will further develop their writing, revision, and editing skills to produce content for different social media platforms, blogs, websites, and print. By the end of the course students should be well on their way to developing a clear, fluent, and readable style using plain language principles. Assignments include writing messages for a variety of social media platforms and writing a blog post, fact sheet, research summary, and feature article. Please note that HCOM 511 is not a remedial writing course. Students whose writing is less than graduate level should enroll in a remedial writing course prior to enrollment in HCOM 511.</p>				

125367	Digital Strategies For Health Communication			
	Subject:	Catalog Nbr:		
	HCOM	0512		
<p>This one-week course covers how to develop and implement a digital strategy to drive a health organization's online presence, specifically the processes for selecting, using, managing, and evaluating the effectiveness of web, social media, and mobile technologies. Learn from Tufts faculty and distinguished guest speakers how to:</p>				

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use the web, social media, and mobile devices to communicate with and connect to patients; develop a coherent and justifiable digital strategy for health communication; select, use, manage, and evaluate the effectiveness of technologies; define your mobile presence with apps and mobile-enabled sites; employ research-based methodologies such as persona development and formative evaluation; use best practices from leading health organizations including Consumer Reports, Harvard Health Publications, Massachusetts Medical Society, and CDC. The course touches upon health communication theory, formative evaluation, and search engine optimization (SEO). Each year the course includes a case study for the week and hands-on team work during the course is used to revise the digital strategy for that organization.

125378	Writing for Public Health Professionals	
	Subject: HCOM	Catalog Nbr: 0513
<p>This course will teach the skills necessary to write documents essential to public health professionals, including a slide presentation, memorandum, and literature review. Students will develop skills to write clear, strategic, and accurate workplace documents. We expect students to enter the course with varying writing experience. Through a series of individual and collaborative exercises students will further develop their writing, revision and editing skills. Please note that HCOM 513 is not a remedial writing course. Students whose writing is less than graduate level should enroll in a remedial writing course prior to enrollment in HCOM 513.</p>		

125435	Social Media and Health	
	Subject: HCOM	Catalog Nbr: 0514
<p>Social media is revolutionizing health communication. Hospitals, health plans, public health organizations, government agencies, pharmaceuticals, and countless start-ups are on social media - Facebook, Twitter, YouTube, blogs, Pinterest, and other technologies - to reach new populations and engage healthcare consumers in new ways. Best practices have emerged for how healthcare organizations use social media technologies for health communication. The goal of this course is to provide the knowledge and skills to select and use social media appropriately for a healthcare or public health organization based on these best practices. The course will use case studies and bring in guest speakers from a variety of organizations to demonstrate how effective social media use is dependent on goals, resources, policies, and metrics.</p>		

125455	Mobile Health Design	
	Subject: HCOM	Catalog Nbr: 0515
<p>This online course examines the impact and potential of mobile devices for health. Using design methodologies, students will conceptualize and design health apps and devices that incorporate evidence-based guidelines and capitalize on the mobility, portability, and input and output capabilities of smartphones and tablets. We will consider the user experience: how healthcare consumers locate health apps and decide to download and try them; how they use health apps and devices and why they sustain or abandon use; and studies of health benefits, focusing on how they educate, connect, track, and remind. We will also examine global use of mobile devices. The course is a mixture of lecture and discussion, with guest</p>		

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lecturers bringing their expertise and perspectives, and work in teams to design health apps using the techniques covered in class. A final paper will be required as well. Course lecture and discussions will use WebEx and Google+ Hangouts.

125478	Health Literacy Leadership Institute
Subject: PH	Catalog Nbr: 0266
<p>This one-week Institute is an advanced professional development opportunity for professionals and students looking to apply health literacy principles to transform public health and healthcare delivery in the United States and across the globe. Working professionals and students interested in pursuing careers in health literacy are encouraged to attend. Students learn from faculty and guest instructors highly regarded for their pioneering work in medical education, adult literacy, and program evaluation. Peer learning and the sharing of research and best practice are central to the Institute's educational approach. Throughout the week, students work on a health literacy project of their choice resulting in a final product that is directly applicable, informed by research, and reflective of best practice.</p>	

125550	Changing Health Behaviors: Healthy People and Communities
Subject: HCOM	Catalog Nbr: 0522
<p>Students are provided with an overview of how health interventions are developed and evaluated. The course takes a social ecological approach and emphasizes the role of community engagement in health promotion. We begin with discussion of the social determinants of health and the scientific basis for understanding individual health behavior. Drawing on theory and practice students learn how program planners conduct needs assessments, set goals and objectives, develop intervention materials and messages, and evaluate outcomes. Students work in teams to develop a proposal in response to a grant solicitation</p>	

125608	Applied Learning Project/Seminar in Health Comm
Subject: HCOM	Catalog Nbr: 0525
<p>The Applied Learning Experience (ALE), itself, provides students with a culminating educational experience that will give them the opportunity to integrate and apply theory and skills they have acquired in the program to address a health communication problem in a work setting. A secondary goal is to provide students with the opportunity to produce a body of work reflective of their abilities that can be used in seeking employment upon graduation. Both a report and oral presentation are required. The ALE Seminar provides students with faculty and peer support and feedback on their applied learning projects as they develop and complete this final program requirement. The seminar also provides a structured opportunity to learn about each other's projects. Practical topics discussed include principles of program administration and management, budgeting, developing an Institutional Review Board Application, conducting a literature review, documenting methods, building a resume in health communication, conducting a site report, and oral presentation tips.</p>	

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125714	Health, Culture And Communication
Subject: HCOM	Catalog Nbr: 0536
<p>This seminar-designed course examines the role, function and conceptualization of defining health, illness, preventive health behavior, and the definition of health using “culture” at the core of the organizing framework. The intent is to prepare students who are effective, critical and analytic in their approach to conceiving, conceptualizing, developing and delivering health promotion/disease prevention communication interventions. In the United States specifically, there is a predictable and current shift in population demographics regarding formerly titled “majority” and “minority” populations, as well as an increase in diverse populations immigrating to this country. Along with that shift we anticipate preparing ourselves to address the health needs of a diversity of populations including the development and implementation of communication interventions and campaigns that are effective, collaborative, and authentically developed. Students should be prepared with knowledge to address communication strategies from a perspective that includes analysis and understanding of their own “cultures” and those of their populations of interest.</p>	

125804	Public Relations
Subject: HCOM	Catalog Nbr: 0543
<p>This course provides an overview of theory and research concerning the role of public relations in public health. It focuses on the design, implementation and evaluation of public relations efforts to influence current issues such as the national health plan, the rising cost of the uninsured and the implementation of health communication campaigns, among other topics. In addition, students will analyze social media press releases and learn the fundamentals of writing and producing press releases.</p>	

125849	Professional Communication
Subject: HCOM	Catalog Nbr: 0544
<p>The course is designed to provide students with knowledge, experience, and practical skills in public presentations. Students will learn how to organize, research, support, and deliver impromptu, informative, and persuasive presentations, as well as manage a press conference in a simulated crisis situation. Through lectures, discussions, exercises, applications, and written assignments, students will be able to increase their communication competence so that they can communicate more effectively in their field now and in the future.</p>	

125895	Adult Learning Theory for Public Health Practice
Subject: HCOM	Catalog Nbr: 0547
<p>So much of what we do in our work to improve quality of life and health outcomes involves teaching and training. Whether it’s educating a hospital executive, training community members, or teaching nutrition abroad, knowing when and how people learn best and what motivates them is critical to success. Whether you are engaged in one-on-one instruction or working with groups, adult learning theory can provide the nuts</p>	

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and bolts to support the development of approaches that both raise awareness and promote action. This course will prepare you to be an excellent educator, and provide you with a foundation for the development of effective behavior change programs through a review of adult learning theory, hands-on application of teaching strategies and techniques, and the development of measurable objectives to evaluate effectiveness.

128127	Principles of Epidemiology			
Subject: PH	Catalog Nbr: 0201			
	2021 SUMR	Primary	Janet Forrester	janet.forrester@tufts.edu
	2022 FALL	Primary	Naisi Zhao	Naisi.Zhao@tufts.edu
	2022 FALL	Primary	Shayesteh Jahanfar	Shayesteh.Jahanfar@tufts.edu
	2022 SUMR	Primary	Kipruto Kirwa	Kipruto.Kirwa@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: PH	Catalog Nbr: 0204			
	2022 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: PH	Catalog Nbr: 0205			
	2021 SUMR	Primary	Mark Woodin	mark.woodin@tufts.edu
	2022 FALL	Primary	Rachel Silver	Rachel.Silver@tufts.edu
	2022 FALL	Primary	Misha Eliasziw	Misha.Eliasziw@tufts.edu
	2022 FALL	Primary	Katherine Rancano	Katherine.Rancano@tufts.edu
	2022 SPRG	Primary	Alice Tang	alice.tang@tufts.edu
	2022 SPRG	Primary	Kenneth Chui	Kenneth.Chui@tufts.edu
	2022 SUMR	Primary	Shayesteh Jahanfar	Shayesteh.Jahanfar@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</p>				

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used to develop these and additional concepts. Graduate standing.

128297	Intermediate Biostatistics			
Subject:	Catalog Nbr:			
PH	0206			
2022 FALL	Primary	Kenneth Chui	Kenneth.Chui@tufts.edu	
2022 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 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. Graduate standing.</p>				

128420	Law In Public Health			
Subject:	Catalog Nbr:			
PH	0210			
<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>				

128500	Health And Law Ethics			
Subject:	Catalog Nbr:			
PH	0214			
<p>Introduces students to the legal issues that health care professionals confront in managing a health care organization. Begins with patient care (liability) issues and thereafter provides an overview of other health care delivery issues such as the legal structure of corporations, healthcare finance and managed care, intellectual property and healthcare entitlement programs such as Medicare and Medicaid. Students become familiar with the basic legal principles governing how health care institutions are operated and how legal doctrines are formulated. The course also familiarizes students with the emerging ethical issues in healthcare management.</p>				

128536	Public Health & Healthcare: Politics, Policies and Programs			
Subject:	Catalog Nbr:			
PH	0215			
<p>An overview of the theory, organization, policies, politics, and practices that have shaped public health and health care services in the United States. Students learn about the forces that influence the substance and</p>				

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process of public health and health care delivery. They also are challenged to think about ways in which various stakeholders, including health professionals (clinical and administrative), commercial interests, governmental officials, and the public have come to interact in the evolution of public health and health care delivery systems. The issues of access, cost, quality and health disparities are used to frame aspects of theory, policy, and practice as well as to help evidence some of the opportunities and challenges in the integration of public health and health care services. Finally, students are exposed to some quantitative and qualitative tools and methods used by practitioners in public health planning and in fostering community involvement.

128574	Health Care Organization: Budgeting and Management			
Subject: PH	Catalog Nbr: 0216			
	2021 FALL	Primary	Mark Haas	Mark.Haas@tufts.edu
	2022 FALL	Primary	Justin St. Phillips	Justin.St_Phillips@tufts.edu
	2022 FALL	Primary	Jennifer Bateman	Jennifer.Bateman@tufts.edu
	2022 SPRG	Primary	Ann Peralta	Ann.Peralta@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: PH	Catalog Nbr: 0217			
	2021 FALL	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>				

128674	Cardiovascular Epidemiology			
Subject: PH	Catalog Nbr: 0220			
<p>This course reviews the epidemiology of cardiovascular disease, including the major cardiovascular diseases, related conditions, emerging risk factors, and current controversies. The principal methods used, and their limitations, will also be discussed. Both historically important and current research will be presented. Grades are based on participation in class discussions, brief written paper critiques, and an in-class presentation.</p>				

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128693	Methods of Public Health Inquiry			
Subject: PH	Catalog Nbr: 0221			
<p>This course will provide students with an introduction to the general principles and basic techniques appropriate for the investigation of public health issues. Topics covered include the research process, formulating research questions and hypotheses, developing a research and evaluation plan, variables, measurement, validity, data collection, qualitative research, survey, evaluation, mixed methods, community-based approaches for research and evaluation, and ethics. This course will serve as a foundation for building your research toolbox, providing insight into how your chosen research question guides your choice of method. Strategies for engaging communities, research and evaluation with diverse populations, and translational research and dissemination approaches will also be explored. Conceptual understanding is a primary goal of this course. In addition, students will learn key concepts to clearly define, articulate, and implement a research project in a variety of public health contexts.</p>				

128726	Survey Research Methods			
Subject: PH	Catalog Nbr: 0222			
2021 FALL	Primary	Reece Lyerly	Reece.Lyerly@tufts.edu	
2022 FALL	Primary	Anna Grossman	Anna.Grossman@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: PH	Catalog Nbr: 0224			
2021 FALL	Primary	Alice Tang	alice.tang@tufts.edu	
<p>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.</p>				

128804	Qualitative Tools for Public Health Research and Programs			
Subject: PH	Catalog Nbr: 0225			

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2022 SPRG	Primary	Saloni Dev	Saloni.Dev@tufts.edu
2022 SUMR	Primary	Karen Errichetti	Karen.Errichetti@tufts.edu
<p>The course is aimed at integrating specific qualitative research methods, including the use of interviews, focus groups, and content analysis, as well as the analysis of the resulting data. Students are required to work on several small weekly assignments that allow them to practice specific methods and foster development of qualitative research skills. They are also required to present examples of qualitative research in class, illustrating both research design and data analysis. By the end of the semester, students will understand how to form research questions appropriate for qualitative methods, integrate qualitative and quantitative methods, and use the tools of qualitative data collection and analysis.</p>			

128846	Cancer Epidemiology and Prevention		
Subject:	Catalog Nbr:		
PH	0226		
2022 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>			

128957	Public Health Economics		
Subject:	Catalog Nbr:		
PH	0234		
<p>Economics is the study of how societal forces influence decisions about the use of resources. Public and private decisions about expenditures effect the production and distribution of all goods and services. Students will learn about the flow of resources, including allocation of resources by government entities. The course will examine issues of how supply and demand drive the availability of resources. How can individuals and organizations influence the flow of resources in public health and health generally? The impact of health issues on economics in the broader sense will be discussed. Economic analysis will be applied to the study of policy and research issues in public health.</p>			

128978	Advanced Public Health Economics		
Subject:	Catalog Nbr:		
PH	0235		
<p>This course will build upon the material covered in MPH 234, namely the basics of health economics. This course is ideal for people who will be taking MPH 234 first, or who have - at the college level - previously taken Health Economics, or have extensive coursework in general economics where you know a fair amount of microeconomics (markets, supply/demand, elasticities, marginal analysis).</p>			

129044	Pharmacoepidemiology, Bioethics and Reg Policy		
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Subject: Catalog Nbr:
PH 0239

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 pharmacoepi. Prerequisite: Completion of Core Epi course or instructor consent.

129099	Biology of Water and Health
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Subject: Catalog Nbr:
PH 0241

Emphasis is placed on participants understanding the biology of water and health. Participant will demonstrate knowledge of the central role of water in health, including adequate hydration. Detailed coverage of selected prototypic or model disease which include Schistosomiasis, Cryptosporidiosis, cholera, and others. Participant will become familiar with widespread chemical agents and their interactions with pathogens. Participants will demonstrate a familiarity with the appropriate methods of assessing the occurrence of water borne disease. Participants will become knowledge about the principal methods of controlling the propagation of water-born disease. Participants will become knowledgeable social and institutional factors influencing sanitation and water treatment decision and the subsequent impacts on a variety of health indices.

129159	Research Methods in Global Hlth
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Subject: Catalog Nbr:
PH 0244

The globalization of health information is growing exponentially, although with different degrees of interpretability and usefulness. It is imperative for advancing the global health research agenda to gather, interpret and apply high-quality global health research data in a timely manner. The course on Research Methods in Global Health is focused on providing students with knowledge, critical appraisal skills, and data management and analysis techniques that will let them function successfully as global health researchers.

129224	Global health: Determinants, Delivery, and Diseases
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Subject: Catalog Nbr:
PH 0247

2022 SPRG Primary Ramnath Subbaraman Ramnath.Subbaraman@tufts.edu

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.

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129257	Introduction to Global Health and Development			
Subject: PH	Catalog Nbr: 0248			
	2022 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 & Child Health Policy in the US			
Subject: PH	Catalog Nbr: 0260			
	2021 FALL	Primary	Katherine Flaherty	Katherine.Flaherty@tufts.edu
	2022 FALL	Primary	Therese Fitzgerald	Therese.Fitzgerald@tufts.edu
<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>				

129350	Maternal & Child Health: A Global Perspective			
Subject: PH	Catalog Nbr: 0261			
<p>Maternal and Child Health: Global Perspective, introduces students to the principles and practices of public health as it relates to women of childbearing age and children from infancy through adolescence. It provides an introduction to current major health issues and examines service deliveries designed to meet the health needs of women and children globally. During the course, special attention is given to the impact of nutrition, poverty, racial inequities on the health of families, and strengths that individuals and communities bring to the creation of health solutions. Emphasis is placed on shared learning through case studies, group discussions, and presentations.</p>				

129371	Introduction To SAS			
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Subject:	Catalog Nbr:			
PH	0265			
2021 SUMR	Primary	David Tybor		DJ.Tybor@tufts.edu
2022 FALL	Primary	Rachel Silver		Rachel.Silver@tufts.edu

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.

129523	Evaluation Of Health Programs			
Subject:	Catalog Nbr:			
PH	0285			
2021 FALL	Primary	Karen Errichetti		Karen.Errichetti@tufts.edu
2021 SUMR	Primary	Silas Pearman		Silas.Pearman@tufts.edu
2022 FALL	Primary	Patricia Dao-tran		trish@resonancedata.org
2022 SPRG	Primary	Ranjani Paradise		Ranjani.Paradise@tufts.edu
2022 SPRG	Primary	Saloni Dev		Saloni.Dev@tufts.edu
2022 SUMR	Primary	Travis Moore		Travis.Moore@tufts.edu
2022 SUMR	Primary	Colby Zongol		Colby.Zongol@tufts.edu

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.

129660	ALE: Planning Seminar			
Subject:	Catalog Nbr:			
PH	0301			
2021 FALL	Primary	Beth Rosenberg		beth.rosenberg@tufts.edu
2021 FALL	Primary	Karen Errichetti		Karen.Errichetti@tufts.edu
2022 FALL	Primary	Marcia Boumil		marcia.boumil@tufts.edu
2022 FALL	Primary	Lisa Arsenault		Lisa.Arsenault@tufts.edu
2022 FALL	Primary	Laura McNulty		Laura.McNulty@tufts.edu
2022 FALL	Primary	Emily Piltch		Emily.Piltch@tufts.edu
2022 SPRG	Primary	Linda Hudson		Linda.Hudson@tufts.edu
2022 SPRG	Primary	Jacob van den Berg		jacob.vandenberg@tufts.edu
2022 SUMR	Primary	Daniel Hatfield		Daniel.Hatfield@tufts.edu
2022 SUMR	Primary	Jennifer Pustz		Jennifer.Pustz@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.

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Students develop a formal plan for project implementation.

129682	ALE: Implementation Seminar			
Subject:	Catalog Nbr:			
PH	0302			
2022 FALL	Primary	Daniel Hatfield	Daniel.Hatfield@tufts.edu	
2022 FALL	Primary	Virginia Chomitz	Virginia.Chomitz@tufts.edu	
2022 FALL	Primary	Jennifer Pustz	Jennifer.Pustz@tufts.edu	
2022 SPRG	Primary	Marcia Boumil	marcia.boumil@tufts.edu	
2022 SPRG	Primary	Beth Rosenberg	beth.rosenberg@tufts.edu	
2022 SPRG	Primary	Karen Errichetti	Karen.Errichetti@tufts.edu	
2022 SUMR	Primary	Linda Hudson	Linda.Hudson@tufts.edu	
2022 SUMR	Primary	Jacob van den Berg	jacob.vandenberg@tufts.edu	
<p>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>				

129700	JD/MPH ALE Planning Seminar			
Subject:	Catalog Nbr:			
PH	0303			
<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>				

129720	Global Health ALE Planning			
Subject:	Catalog Nbr:			
PH	0304			
<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>				

129759	Global Health ALE Field Work			
Subject:	Catalog Nbr:			
PH	0305			
<p></p>				

129778	Global Health ALE Implementation			
Subject:	Catalog Nbr:			
PH	0306			

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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.

129796	Applied Learning Exp.
Subject: PH	Catalog Nbr: 0310
Combined ALE Planning and Implementation for CMC students.	

129868	Directed Study		
Subject: PH	Catalog Nbr: 0400		
2021 SUMR	Primary	Beth Rosenberg	beth.rosenberg@tufts.edu
2021 SUMR	Primary	Amy Lischko	Amy.Lischko@tufts.edu
2021 SUMR	Primary	Fernando Ona	Fernando.Ona@tufts.edu
2022 SPRG	Primary	Virginia Chomitz	Virginia.Chomitz@tufts.edu
2022 SUMR	Primary	Kenneth Chui	Kenneth.Chui@tufts.edu
2022 SUMR	Primary	Signe Flieger	Signe.Flieger@tufts.edu
2022 SUMR	Primary	Karen Errichetti	Karen.Errichetti@tufts.edu
Directed Study - Half Semester			

130140	Race, Culture, and Ethnicity
Subject: PH	Catalog Nbr: 0542
<p>This course examines the ideological, institutional, social, and professional dimensions of culture (including class, gender and sexual orientation as facets of group and personal identity), race and ethnicity, and their effects on health status, research, planning and service delivery. The course will also explore the role of history, power, and the economy as they relate to societal inequality among diverse cultural groups, and their influence on the current policies, institutional arrangements, service delivery models, and professional practices in health services. Cultural competency will be discussed, and more appropriate methods of practice will be analyzed.</p>	

130283	Neuroanatomy, Neurochemistry and Pharmacology of Pain
Subject: PREP	Catalog Nbr: 0230
<p>This course presents theory and research on the anatomical structures and physiological processes involved in the transmission and modulation of pain. Peripheral mechanisms, central mechanisms of nociceptive transmission, and the involvement of higher centers (thalamic nuclei and cortical areas) involved in pain are differentiated. In addition, the course presents information on the brain stem regions involved in modulation of nociceptive transmission, their interconnections, their spinal projections, and the effects of electrical or chemical stimulation. Opioid analgesia is distinguished from nonopioid forms of analgesia. In addition, the</p>	

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course presents the pharmacology of pain transmission and its modulation focusing on peripheral mechanisms; synaptic transmission in the dorsal horn; central sensitization; and the role of neurotransmitters in pain.

130321	Pharmacoeconomics
Subject: PREP	Catalog Nbr: 0231
<p>This class consists of a mix of lectures and discussions, split evenly between the methodology of pharmacoeconomics and the practical application of this discipline. The course is conducted as a series of lectures and seminars, and students are expected to contribute to the discussion in class. This course is taught at an introductory level, and prior knowledge of economics is not required. Students are introduced to key concepts in health economics, such as health care as an economic commodity, competition in the pharmaceutical and medical device industry, drug pricing and economic evaluations. The course also covers key areas of study design and data collection, both prospective and retrospective. Students learn to design and evaluate outcomes studies and assess the impact that these studies have on health care delivery.</p>	

130363	Sociocultural and Ethical Aspects of Pain
Subject: PREP	Catalog Nbr: 0232
<p>Pain is a ubiquitous experience transcending space and time. The ways in which individuals experience pain, express pain, respond to pain and treatments prescribed for pain varies across these dimensions. In addition, public and institutional policies designed, proposed and implemented to relieve pain vary by time and geography. Pain is an individual as well as a group phenomenon. There is an uneven distribution of pain, and its associated chronic diseases in the US, and access to appropriate pain care appears to be is inequitably distributed in the US as well. This course will present theory and research concerning factors (cultural, social, psychological, political, ethical and economic) related to pain assessment, pain treatment, receptivity to treatment and treatment outcomes. It will provide an overview of the epidemiology of pain as well as the clinical, societal and institutional policies to alleviate it. The importance of the patient/clinician relationship and the many factors that influence it will be emphasized throughout the course.</p>	

130411	End of Life and Palliative Care Issues
Subject: PREP	Catalog Nbr: 0233
<p>Palliative care has emerged as a significant and legitimate interdisciplinary care model under strong medical leadership with a growing research and outcomes-based foundation. Palliative care and hospice services are generally underutilized and undervalued by healthcare professionals and the public, requiring a new approach to integration. This course provides a broad overview of palliative medicine practices, potential for integration into traditional medicine, with detailed attention to skills development in pain, symptom management, and communication as well as illumination of ethical, legal, public policy, and regulatory issues.</p>	

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130453	Introduction to Clinical Pain Problems
Subject: PREP	Catalog Nbr: 0234
<p>This course will introduce the general principles of biomedical evaluation and management of common clinical pain problems. It will present ways to evaluate the biomedical characteristics of the pain experience (temporal pattern, severity, location, quality, intensity and exacerbating and relieving factors). Students will become familiar with common standardized instruments to assess pain and pain-related outcomes. Students will learn to recognize the mechanisms of pain present in common clinical pain syndromes, to understand the rationale for current-day assessment and treatment of these problems by multiple healthcare disciplines, and to evaluate the impact of concurrent medical disease upon pain symptoms. Throughout the course, emphasis will be placed upon viewing superficially diverse pain syndromes as part of a fundamentally unified group of processes.</p>	

130487	Public Policy, Legislative and Forensic Issues
Subject: PREP	Catalog Nbr: 0235
<p>This course explores medico-legal issues affecting the way pain is managed. Individual practice issues that expose professionals to litigation, workplace policies and standards, and regulatory issues are covered. Emphasis is placed on what individuals can do to advocate for better pain control in local, regional, national and international arenas.</p>	

130534	Principles of Change & Education Applied to Pain Mgmt
Subject: PREP	Catalog Nbr: 0236
<p>Despite numerous efforts to improve pain management over the last 30 years, many clinical and institutional practices remain unchanged. Multiple barriers have been identified such as low patient expectations, clinicians' lack of pain management knowledge, opioid-phobia at the patient, clinician, and systems levels, failure to make pain management an institutional priority, and outdated or inappropriate health policies. The purpose of this course is to address this pervasive resistance to change by training students to become outspoken "pain management champions" in a variety of clinical and organizational settings. Students learn about the principles of needs assessment, change, leadership, and education at all levels of health care delivery, enabling them to develop workable strategies to comprehensively improve the management of pain.</p>	

130617	Eval & Treatment of Pain: Psychological Approaches
Subject: PREP	Catalog Nbr: 0238
<p>This course is intended to illustrate the role of psychology in the assessment and treatment of pain. Topics covered include the biopsychosocial model of pain, co-morbid psychiatric conditions often accompanying pain, identification of patients would benefit from psychosocial evaluation, standard psychological testing utilized in chronic pain, motivation and stages of change in treatment planning, opioids and addiction in chronic pain, and multiple psychological treatment strategies.</p>	

Course Bulletin

130720	Complementary Medicine
Subject: PREP	Catalog Nbr: 0240
<p>Contemporary medicine finds itself in a curious situation. Even with an unending succession of spectacular biomedical achievements, one after the next, the American public's interest and enthusiasm for medical alternatives remains high. This course takes a critical look at complementary and alternative medicine (CAM) from various perspectives: historical, philosophical, scientific, and clinical. We will also examine its effects on the health of the public. Our main objectives will be to (1) explore CAM in the context of an allopathic medical system under increasing economic and social pressure, (2) evaluate the clinical effectiveness of some of the most popular CAM therapies and explore plausible mechanisms to explain their alleged health effects, (3) consider how the use of CAM and its widespread adoption could affect the health of individuals and populations, and (4) observe how actual healers practice their trade. The management of chronic pain will be the main focus of the course.</p>	

130753	Medical Acupuncture
Subject: PREP	Catalog Nbr: 0241
<p>As acupuncture has grown in popularity in the West, biomedical researchers have been eager to understand how the precise placement of needles superficially in the skin could produce measurable clinical effects. An impressive accumulation of research already demonstrates acupuncture's ability to predictably stimulate neuroendocrine responses in humans, even in the absence of a clear correlation between acupuncture points and major neurovascular pathways. The most convincing findings to date have been in the area of pain physiology. This course will explore in detail the current scientific inquiry devoted to uncovering a western-oriented explanation for the analgesic effects of acupuncture, and the clinical applications of this provocative work.</p>	

130852	Clinical Perspectives in Pain Management
Subject: PREP	Catalog Nbr: 0243
<p>The purpose of this course is to introduce students to pain medicine as it's practiced at the point of care. It combines in-class discussion and patient interviews with visits to area pain care facilities. At those visits, students accompany pain practitioners from various disciplines as they see patients suffering from a variety of painful conditions. During intervening classroom sessions, students present the most interesting cases they encountered the previous week for discussion with faculty and fellow students. Live patient interviews supplement these student presentations. During the final classroom session, students present an in-depth, evidence-based case study on one of the patients they encountered during their clinical sessions.</p>	

130980	Capstone Project Planning
Subject:	Catalog Nbr:

Course Bulletin

PREP 0251

All students in the PREP program are required to complete a two-semester Capstone Project prior to graduation. The purpose of the Capstone Project is to offer students the opportunity to integrate and apply the knowledge and skills they have learned in the classroom to comprehensively address a clinical, public health and/or social problem pertaining to pain. The Project occurs over two adjacent semesters during the final year of the program.

131016	Capstone Project Implementation
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Subject:	Catalog Nbr:
PREP	0252

All students in the PREP program are required to complete a two-semester Capstone Project prior to graduation. The purpose of the Capstone Project is to offer students the opportunity to integrate and apply the knowledge and skills they have learned in the classroom to comprehensively address a clinical, public health and/or social problem pertaining to pain. The Project occurs over two adjacent semesters during the final year of the program.

131048	Directed Study
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Subject:	Catalog Nbr:
PREP	0400

138644	Transfer Credit
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Subject:	Catalog Nbr:
TRAN	9999

138747	Health Svc Delivery
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Subject:	Catalog Nbr:
CBUN	0713

BU Cross-Reg: HM710

138748	HR Management
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Subject:	Catalog Nbr:
CBUN	0736

BU Cross Reg: PM736

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

138750	Snort, Swallow, Smoke; Drugs and Behavior		
Subject:	Catalog Nbr:		
PH	0227		
2022 SPRG	Primary	Margie Skeer	Margie.Skeer@tufts.edu
<p>Problems related to substance use, misuse, and dependence are pervasive in our society on many levels. This course takes an ecological approach to understanding substance use and substance-related and problems. Students will be introduced to myriad aspects of substance use behavior, spanning epidemiology, neurobiology, addiction, prevention, treatment, and harm reduction. The course will culminate in the development of a substance-related intervention for a “client” organization.</p>			

138751	Health Services QI Methods		
Subject:	Catalog Nbr:		
PH	0231		
2022 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. 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 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.</p>			

138752	Info Tech in Health Care		
Subject:	Catalog Nbr:		
PH	0264		
<p>Health Informatics examines the use of technology to collect, manage, exchange, and analyze clinical information. This relatively new discipline gained greater prominence when the American Recovery and Reinvestment Act designated more than \$19 billion dollars towards bolstering the health information technology infrastructure across the country. In this course we will explore why a strong information technology infrastructure is critical for delivering safer cost-effective care and how it can greatly enhance public health monitoring and reporting. Students will gain an appreciation for some of the latest technologies that are changing the way healthcare is delivered, measured, researched, and taught. The course will also examine the major obstacles to implementing some these technologies and the regulatory/legal parameters currently in place.</p>			

138753	Leadership for Public Health		
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Course Bulletin

Subject: Catalog Nbr:
PH 0704

Public health is about social change, which requires leadership. Opportunities to take a leadership role are implicit in almost all public health issues and on a daily basis. Central questions we will explore in the course include: How can public health issues be better addressed? What are the many forms of leadership and which are critical for public health practice? What are the knowledge, skills and attitudes needed by future public health practitioners to take on a leadership role? How do leadership roles differ in various settings linked to the social ecological model: organizations, community, and society? How is public health changing, and how will future challenges be different from those we face now?

The purpose of this course is to increase the capacity of public health students to take on future leadership roles in practice settings. The upper tiers of the socio-ecological model – organizational, community, policy - will be emphasized as the framework for leadership development. Other faculty who have held a variety of leadership roles will participate in some of the seminars to share their philosophy and style of leadership.

138798

Controlled Substances and their Alternatives for Pain: Inter-Professional Context and Controversies

Subject: Catalog Nbr:
PREP 0245

This course surveys the major categories of controlled substances, focusing on the current evidence for use of controlled substances to treat chronic non-cancer pain and the challenging controversies faced in their use by clinicians, regulators, and the public. Risk factors associated with the initiation or maintenance of opioid therapy will be examined, and decision-making strategies that consider non-opioid pharmacologic and non-pharmacologic strategies for the management of pain will be assessed. The course will analyze how to apply evidence-based strategies for managing the complex patient, including forming practical treatment plans and termination of opioid therapy. Interprofessional efforts to integrate care across disciplines will be described; limitations of risk-stratification screening and other sources for essential information for clinical decision-making will be reviewed. Approaches suitable for patients with chronic non-cancer pain with cancer-related pain will be distinguished.

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

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138848	Negotiations		
Subject:	Catalog Nbr:		
CBUN	0854		

138849	Applied Epidemiology		
Subject:	Catalog Nbr:		
CMPH	0355		

138850	Health Care Reform and More: Current Topics in American Health Care Policy			
Subject:	Catalog Nbr:			
CMPH	0357			
2022 SPRG	Primary	Robert Seifert		Robert.Seifert@tufts.edu
2022 SPRG	Primary	Jon Kingsdale		Jon.Kingsdale@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>				

138851	Mental Health in a Public Health Context			
Subject:	Catalog Nbr:			
CMPH	0359			
<p>The primary objective of this course is to give students an understanding of mental health in a public health context. This course will briefly examine the evolution of the mental health system from one that separates the treatment of mental illness from healthcare and addictions to one that integrates overall care. The course will discuss the importance of both preventative and recovery-based interventions across the age spectrum, and how a population-based approach to mental health improves the lives of individuals and reduces the disease burden to society. Students will learn about government's role in funding and regulating mental health programs, and why mental health systems manage not only treatment and services, but also attempt to address other significant social problems often experienced by those with mental illness. Students will be able to apply course content to their future practice at the direct service, program administration, and policy making levels.</p>				

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138862	Essentials of Pubic Health Law
Subject: CBUN	Catalog Nbr: 0719
BU COURSE LW719	

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

139049	Health Care Services: Financial & Clinical Data Management and Analysis-Introductory
Subject: PH	Catalog Nbr: 0236
<p>Understanding health claims data is vital in supporting clinical and financial decision making for a broad spectrum of organizations including insurance companies, healthcare providers, and employers. Risk-sharing contracts between insurers and providers and changes to provider reimbursement are all part of a larger effort to control healthcare costs without sacrificing quality. The key to accomplishing this is distilling actionable and accurate information from the massive amount of data that both government and private insurers create with every encounter between patient and provider. This course focuses on basic data elements that exist in a health insurance claims, and how that information can be used for purposes of population management, quality improvement, financial reimbursement and modeling, and ultimately bending the upward trending cost curve that is looming over the entire healthcare system. This course is ideal for any student interested in a career in managed care or healthcare administration. This course will teach students about the concepts and students are expected to complete analyses using Excel. Students may choose to enroll in this course alone or couple it with PH0237 for more advanced applications.</p>	

139089	Interprofessional Team Management of Pain
Subject: PREP	Catalog Nbr: 0244
<p>Today's health care is increasingly delivered by groups of health care providers with diverse professional training, roles and identities. Lack of coordination and communication between health professionals frequently leads to suboptimal or adverse patient outcomes and lower patient satisfaction, carries risk management challenges, and provokes provider dissatisfaction and burnout. This course provides tools to analyze and if needed repair group dynamics within interprofessional teams such as the medical home. Attendees will acquire knowledge and skills for achieving real-world outcomes crucial to patient-centered care, with an emphasis upon pain and its treatment.</p>	

139240	DrPH Seminar
Subject:	Catalog Nbr:

Course Bulletin

PH 0705

This course is the first of four courses that together comprise the doctoral seminar series (PH 705-708). The doctoral seminar is designed to provide an opportunity for the doctoral students to discuss topics of relevance to public health practice in greater depth than is normally covered in graduate-level courses taught to both masters and doctoral students.

139242	Integration of Public Health
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Subject:	Catalog Nbr:
PH	0213

This course is designed to help DMD/MPH students integrate their clinical, scientific, and public health education both conceptually and in regards to future career planning and development.

139292	Evaluation of Managers
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Subject:	Catalog Nbr:
CBRN	2478

Evaluation of Managers

139446	Advocacy for Public Health
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Subject:	Catalog Nbr:
PH	0709

139462	DrPH Seminar
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Subject:	Catalog Nbr:
PH	0706

This course is the first of four courses that together comprise the doctoral seminar series (PH 705-708). The doctoral seminar is designed to provide an opportunity for the doctoral students to discuss topics of relevance to public health practice in greater depth than is normally covered in graduate-level courses taught to both masters and doctoral students.

139464	Mindfulness and its Application to the Experience of Pain
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Subject:	Catalog Nbr:
PREP	0246

Mindfulness and its application to the experience of pain, chronic illness and health behavior has seen an increase in interest and research yet it remains underutilized and often undervalued by healthcare clinicians, public health professionals and the general public.

During this course, students will be introduced to the concept of mindfulness and explore its historical development from its early roots in Eastern meditative practice through significant Western cultural trends to

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its current focus in evidence-based research in medical centers, universities and health behavior change initiatives. From the individual to the society, mindfulness is now playing a larger role in the understanding of complex bio-psychosocial phenomena.

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			

139661	Animal Health Services & Public Health		
	Subject:	Catalog Nbr:	
	CMPH	0330	

139843	Advanced Public Health Policy		
	Subject:	Catalog Nbr:	
	PH	0228	
<p>Through in-depth case studies and discussion students will learn about the theory, organization, policies, politics, and practices that have shaped public health and health care services in the United States. Students taking this class will be expected to have a firm understanding of the U.S. public health and health care system including an understanding of Medicare, Medicaid, private health insurance, and the Affordable Care Act. Students will be challenged to think about ways in which various stakeholders, including health professionals (clinical and administrative), commercial interests, governmental officials, and the public have come to interact in the evolution of specific public health programs and health care delivery systems. The issues of access, cost, quality and health disparities are used to frame the cases that will be discussed. Guest speakers will provide additional context to the issues being discussed.</p>			

139860	Analysis of Clustered Data		
	Subject:	Catalog Nbr:	
	PH	0701	
	2021 SUMR	Primary	Misha Eliasziw
			Misha.Eliasziw@tufts.edu
<p>The one-half-credit course provides an accessible yet in-depth introduction to analyzing clustered data that arise in multilevel, repeated measures, longitudinal, and group-randomized study designs. Using real data sets from published studies in the health sciences, the instructor will take the students on a journey, starting</p>			

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from exploratory analyses, through theoretical underpinnings, and finishing with sophisticated statistical models. All concepts will be illustrated using SAS and Stata statistical software. The course will not only emphasize selecting an appropriate analytical approach but also a sound interpretation of the results in both technical and non-technical language. Students are required to obtain a final a grade of "B+" or above in PH 0206 - Intermediate Biostatistics to enroll in this course.

139861	DrPh Seminar
Subject: PH	Catalog Nbr: 0707
<p>This course is the third of four courses that together comprise the doctoral seminar series (PH 705-708). The doctoral seminar will provide an opportunity for the doctoral students to discuss topics of relevance to public health practice in depth. The topics have been chosen by the faculty based on their professional experience and reflect the competencies expected of a professional holding a doctorate in public health. The learning objectives, which are listed for each topic, are matched to the DrPH competencies. The emphasis will be on mastering the concepts followed by application of concepts to the practice of public health.</p>	

139871	Journal Club
Subject: PH	Catalog Nbr: 0720

139872	Journal Club
Subject: PH	Catalog Nbr: 0721

139873	Journal Club
Subject: PH	Catalog Nbr: 0722

139874	Journal Club
Subject: PH	Catalog Nbr: 0723

139903	EEDA & Initial Accredited Training
Subject:	Catalog Nbr:

Course Bulletin

CMPH	0360			
2022 FALL	Primary	Amanda Martinot	Amanda.Martinot@tufts.edu	
Emerging and Exotic Diseases of Animals and Initial Accreditation Training (IAT)				

140062	Persuasion in Health Communication			
	Subject:	Catalog Nbr:		
	CEMR	0653		
<p>The question of how people exercise influence using communication has challenged those working in the field for decades. There are plethora of persuasive messages that can be used in an attempt to change a person's attitude or behavior. This course will provide insight regarding when messages work, at what time, with what audience.</p> <p>The goal of this course is to familiarize students with the process of persuasion and social influence in the context of health. We will cover classic and contemporary theory and research related to social influence at the conceptual, theoretical, and applied levels. Students will gain a firm understanding of how people influence the beliefs, attitudes, and behaviors of others.</p>				

140063	Risk Communication in Public Health Practice			
	Subject:	Catalog Nbr:		
	CEMR	0654		
<p>Whether responding to an unexpected crisis that is at the forefront of the news cycle or trying to draw attention to a rarely talked about health issue, public health practitioners need to simply and effectively communicate about health risk and potential impact. This class covers the psychology of risk, risk assessment, crisis communication, risk reduction and mitigation, and community mobilization. Crisis communication strategies used by the Department of Homeland Security and the Centers for Disease Control will be reviewed. Care communication strategies will be presented within the framework of the Harm Reduction Model. In addition to a risk communication plan, students will gain practical experience developing media talking points and practicing public speaking during simulated media interviews. The final exam includes staffing a Twitter exam during a mock public health crisis.</p>				

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

140136	Advanced Epidemiology			
	Subject:	Catalog Nbr:		
	CBUN	EP854		

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140230	Community-Based Participatory Research Methods			
	Subject:	Catalog Nbr:		
	PH	0258		
<p>This course consists of both classroom activities and conducting an actual research project in collaboration with a community partner. Students will learn about theory and practice of CBPR and will work in small groups for their research projects. The research will include meeting with community partners, contributing to design of the study, field work collecting data, managing and analyzing data, writing up a final report and presenting findings to the community. Students will keep a diary and engage in self-reflection about their efforts and discuss/debrief in class.</p> <p>In recent years a strong interest has developed about community-collaborative research and in particular in forming partnerships with the communities affected by public health studies. More and more, these studies also engage the community in a participatory fashion in the actual research. This course will explore the various methods that are used in such studies, the benefits and challenges to this approach and the possibility that new ethical considerations arise in such circumstances. The course involves student participation in the Community Assessment of Freeway Exposure and Health study, an NIH-funded community-based participatory research project.</p>				

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

140272	GIS for Public Health			
	Subject:	Catalog Nbr:		
	PH	0262		
	2022 SPRG	Primary	Thomas Stopka	Thomas.Stopka@tufts.edu
<p>In public health, "place" matters as it 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 still in their infancy. 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 GIS, using a variety of examples from public health, nutrition, urban development, and the US Census Bureau.</p>				

140274	DrPH Seminar			
	Subject:	Catalog Nbr:		

Course Bulletin

PH 0708

This course is the fourth of four courses that together comprise the doctoral seminar series (PH 0705 - 0708). The doctoral seminar will provide an opportunity for the doctoral students to discuss topics of relevance to public health practice in depth. The topics have been chosen by the faculty based on their professional experience and reflect the competencies expected of a professional holding a doctorate in public health. The learning objectives, which are listed for each topic, are matched to the DrPH competencies. The emphasis will be on mastering the concepts followed by application of concepts to the practice of public health.

140358	Needs Assessment
Subject: CBUN	Catalog Nbr: 0851

140359	Monitoring & Evaluating Public Health Programs
Subject: PH	Catalog Nbr: 0702
<p>Students will learn state-of-the-art monitoring and evaluation (M&E) tools, models, and approaches for designing robust systems for assessing public health interventions and policies. The focus of this course is on the design of systems that facilitate data-informed decision-making by program stakeholders including implementers and policy makers for public health programs. Doctoral students will learn how to: 1) apply theory-driven approaches for designing and implementing M&E systems to monitor performance and measure effectiveness of public health programs; 2) use implementation research and delivery science to address barriers for delivering evidence-based public health interventions in complex settings; and 3) develop sound evaluation designs that are responsive to evaluation questions to assess performance, measure outcomes, and document health impact. Student evaluation will be based on practical assignments throughout the academic semester (70%) and on overall class participation (30%).</p>	

140388	Social Epidemiology
Subject: CBUN	Catalog Nbr: EP775

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

140390	Perinatal Health Services
Subject:	Catalog Nbr:

Course Bulletin

CBUN	MC845
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140435	Quantitative Methods for Program Evaluation
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Subject:	Catalog Nbr:
CBUN	SB822

140482	Intermediate Statistical Computing
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Subject:	Catalog Nbr:
CBUN	BS805

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

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

140574	Mental Health: Law, Science, & Public Health Policy
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Subject:	Catalog Nbr:
PH	0238

Mental health comprises a substantial portion of the public health budget. Scientific concepts that underlie our ideas of these illnesses have evolved rapidly in the last quarter century. Public resources and insurance benefits for mental health treatment are scarce. This course considers mental health policy and practice in the United States including the organization, finance and delivery of mental health services. It addresses special populations such as homeless, substance abusing and prison populations. It emphasizes the legal and policy issues pertaining to the rights of mental patients including competency and commitment, privacy and confidentiality, disability and entitlement. This course adopts a public health approach to understanding the current state of mental health services. It should be of interest to students of public health, psychology, community health and others who are interested in the laws, policy and practice pertaining to the organization, finance and delivery of mental/behavioral health care services.

140739	DrPH Thesis
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Course Bulletin

Subject:	Catalog Nbr:			
PH	0801			
2022 FALL	Primary	Virginia Chomitz	Virginia.Chomitz@tufts.edu	
2022 SPRG	Primary	Janet Forrester	janet.forrester@tufts.edu	
All doctoral students must register for PH 0801 every semester to remain in active and full time status (full time equivalent.) Grading is Satisfactory/Unsatisfactory.				

140746	DrPH Practicum			
Subject:	Catalog Nbr:			
PH	0711			
2021 SUMR	Primary	Janet Forrester	janet.forrester@tufts.edu	

140889	Statistical Genetics I			
Subject:	Catalog Nbr:			
CBUN	BS858			

140890	Integration of Public Health- Physician Assistant			
Subject:	Catalog Nbr:			
PH	0229			
2022 FALL	Primary	Fernando Ona	Fernando.Ona@tufts.edu	
2022 FALL	Primary	Mercedes Colangelo	Mercedes.Colangelo@tufts.edu	
Integration of Public Health- Physician Assistant				

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			

140996	Gender and One Health			
Subject:	Catalog Nbr:			

Course Bulletin

CMPH 0363

The current Ebola outbreak in West Africa has public health specialists scrambling to find solutions to an epidemic that has been difficult to manage because of social and cultural issues. The spread of the infection is intertwined with peoples cultural beliefs, an area most medical practitioners and public health workers are least trained to handle. In the mix but completely overlooked and sidelined thus far by the public health specialists, policy makers, aid agencies and the multiple teams working to contain the epidemic are the gender issues that play a major role in the transmission and containment of infectious diseases and public health outcomes. Understanding gender, as well as culture and beliefs is a key public health competency. The gender differential (biological, social, economic) poses unique health risks for men and women during their life cycle. The diverse roles played by men and women create different exposure mechanisms to domestic animals, wildlife and the environment. Gender roles, the distribution of labor, and access and control over resources play an important part in the biosecurity, control, prevention and response to infectious diseases and emerging pandemics. Therefore gender differences need to be addressed to better understand the risks, to help develop effective control and response strategies and to achieve a better impact. This short course will allow participants to develop critical analysis skills as they explore how gender, the realm of emerging pandemics threat (EPT) and One Health intersect and how policies can be developed and/or implemented to address diseases in a gender sensitive way. Participants will be challenged to consider the implications and benefits of an engendered One Health approach in preventing and responding to emerging pandemic threats.

141115	Methods and Statistical Modeling in Chronic Disease Epidemiology
Subject: CMPH	Catalog Nbr: 0361
<p>This course in epidemiologic methods reinforces the concepts and methods taught in CMPH130 and CMPH288, 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>	

141116	The Patient Perspective on Healthcare Costs: Financial Barriers and Risk Factors
Subject: CMPH	Catalog Nbr: 0365
2022 SPRG	Primary Mark Rukavina
<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>	
Mark.Rukavina@tufts.edu	

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

141137	Doctoral Candidacy Preparation
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Subject:	Catalog Nbr:
PH	0800

2021 FALL	Primary	Janet Forrester	janet.forrester@tufts.edu
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Students should register for this course while preparing for the DrPH Qualifying Examination in order to remain in active status. Full time equivalent.

141205	Social Factors
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Subject:	Catalog Nbr:
CBUN	SB740

141316	Communication Theory: From Principles to Practice'
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Subject:	Catalog Nbr:
PH	0267

2021 FALL	Primary	Elena Nuciforo	Elena.Nuciforo@tufts.edu
2021 FALL	Primary	Michael Siegel	Mike.Siegel@tufts.edu
2022 FALL	Primary	Colby Zongol	Colby.Zongol@tufts.edu

Health communication is primarily concerned with the role of theory, research, and practice in health promotion, education, and delivery. Students will investigate the theory on the social construction of illness, the role of language in creating beliefs about health, theory on narrative and storytelling, theory on how the media set agendas about health coverage, and a variety of psychosocial and communication-based theories. Through the study of the various theoretical approaches, students will learn about the integral nature of communication in health including: the role communication plays in shaping individuals' social and cultural expectations and beliefs about health, how such information may influence people to think differently about health and affect behavioral change, and how communication vehicles may be used to redefine and change public policy about health and health behavior. Students can expect to learn how to apply theoretical constructs through assigned readings, cases and projects, and class interaction.

141317	Social Marketing
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Subject:	Catalog Nbr:
PH	0268

2022 SPRG	Primary	Lynda Bardfield	Lynda.Bardfield@tufts.edu
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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

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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.

141372	Intermediate Epidemiology			
Subject: PH	Catalog Nbr: 0251			
2022 FALL	Primary	Dominique Michaud	Dominique.Michaud@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>				

141373	Organizational Management and Theory			
Subject: PH	Catalog Nbr: 0710			
<p>This course provides frameworks for understanding health care organizations and taking actions to improve individual, group, and system-wide effectiveness in health services organizations. The conceptual frameworks are derived from the organization behavior and management literature, and applied to health services organizations. Students will gain an appreciation of the complexities of health care organizations and develop critical thinking skills necessary to succeed in today's health care environment. This course will explore theories, research, and practical applications related to organizational structure, culture, relational perspectives, systems, leadership, learning, and change.</p>				

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

141476	Principles of Epidemiology & Inferential Statistics I			
Subject: CMPH	Catalog Nbr: 0131			
2021 FALL	Primary	Rachel Silver	Rachel.Silver@tufts.edu	
2022 FALL	Primary	David Tybor	DJ.Tybor@tufts.edu	

141477	Principles of Epidemiology & Inferential Statistics II			
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Subject:	Catalog Nbr:			
CMPH	0133			
2022 FALL	Primary	David Tybor		DJ.Tybor@tufts.edu
2022 SPRG	Primary	Janet Forrester		janet.forrester@tufts.edu

141556	Health, Human Security and Emerging Pathogens			
Subject:	Catalog Nbr:			
PH	0286			
<p>With increasing globalization of trade, travel and terrorism, public and individual human health have become topics of global concern, involving sovereign nations, international organizations and the scientific community. Threats from emerging infectious diseases outbreaks exemplify this trend. In contrast to the traditional idea of national security, the field of human security focuses on the individual, rather than state, as the nexus of analysis and takes a multidisciplinary approach through which to analyze the challenges related to community, national and global response to emerging infectious diseases epidemics. This course will start by examining human security literature and practice as it applies to infectious diseases threats. It will examine factors leading to increasing frequency of outbreaks due to novel pathogens, such as climate change and environmental degradation, and the concept of One Health. It will then look at the intersection between scientific research and related ethical issues, disease surveillance and global biosecurity issues. Further, the course will examine the historical basis for International Health Regulations and other frameworks for modern global health governance as they apply to outbreaks. Lastly, the class will utilize case studies to examine how outbreak preparedness and response have been managed during recent epidemics such as SARS, H1N1, MERS, Ebola and Zika. This course is meant to foster interdisciplinary perspectives by bringing together practitioners from international law, human development, public health and clinical care.</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			

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

141748	Field Course: Introduction to a Health Care Governmental Agency		
Subject:	Catalog Nbr:		
PH	0287		
2022 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>			

141764	Public Health Epidemiology		
Subject:	Catalog Nbr:		
PH	0712		
<p>The focus of this course is the application of epidemiologic principles to public health practice. The learning objectives, which are listed for each topic, are matched to the DrPH competencies. The emphasis will be on mastering the concepts followed by application of concepts to the practice of public health.</p>			

141806	Patient Safety and Organizational Change		
Subject:	Catalog Nbr:		
CMPH	0395		
<p>Patient safety emerged as a public health crisis with the release of the November 1999 Institute of Medicine Report, "To Err is Human." A call to action, the IOM report prompted sweeping changes in our understanding of medical errors and how clinicians, hospitals, health systems, oversight and regulatory agencies, and government deal with them. A new paradigm evolved, one that focused on systems of care and system design rather than on lapses of individual performance. This new view of patient safety requires clinicians to develop a new set of competencies around system analysis, design, and improvement. Accordingly, the course will address a variety topics such as the epidemiology of medical error; human factors engineering; incident reporting and root cause analysis; error disclosure and management of critical incidents; selection and implementation of safe practices; and approaches to building a safety culture. Classes will use a variety of didactic approaches including lecture, discussion, management case studies, guest lectures, and in-class projects.</p>			

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141818	Public Health and the Built Environment
Subject: PH	Catalog Nbr: 0288
<p>The epidemics of asthma, diabetes, and obesity have focused new attention on the role played by suburban sprawl, transportation, and other built environment features on public health. This course will explore the linkages between the built environment and public health from a policy and planning perspective. Students will develop analytical skills to evaluate modern day public health and built environment challenges, including mapping tools, health impact assessments, and healthy planning and design.</p>	

141819	FIX: Addiction and the Opioid Epidemic
Subject: CMPH	Catalog Nbr: 0393
<p>Problems related to substance use, misuse, and dependence are pervasive in our society on many levels, and the United States is currently experiencing an opioid epidemic. This course will take an ecological approach to understanding opioid and other drug use and related problems. Students will be introduced to myriad aspects of substance use behavior, spanning epidemiology, addiction, prevention, treatment, and harm reduction. Ultimately, students will develop a deeper understanding of issues related to opioid and other drug use and addiction from public health and medical perspectives, while addressing intersecting social, economic, judicial, and political factors and implications.</p>	

141828	Social Marketing
Subject: HCOM	Catalog Nbr: 0545
<p>Efforts to influence individual behavior and society permeate health communication. Social marketing offers one holistic approach towards this goal. This course is designed to provide students with an understanding of the principles and practices of social marketing. Students will be provided with an understanding of the key concepts and principles that serve as a basis for social marketing such as how to segment, reach, and influence target populations. As part of this course, we will design social marketing strategies to gain an understanding of the benefits of using commercial marketing principles to create initiatives that impact social and individual behavior change.</p>	

142210	Medical Journalism: Mass Media and Public Health Messaging
Subject: PH	Catalog Nbr: 0271
<p>This one-week course will introduce students to key principles in health and medical journalism with the aim of both fostering a better understanding of the processes that underlie the decisions made by news entities and helping participants develop strategies to utilize the broad reach of the news media to communicate important health and public health messages. Topics covered include how to develop a toolbox of journalistic storytelling skills; identify and refine compelling angles within larger public health issues; recognize what is likely to generate news coverage and develop strategies to take advantage news; and understand how news</p>	

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organizations use social media to both gather and report health information, and use this knowledge to craft social media campaigns aimed at influencing the news cycle.

142290	Advanced Health Care Services: Financial & Clinical Data Management and Analysis		
Subject: PH	Catalog Nbr: 0237		
<p>This course is a continuation of topics taught in PH 0236 Health Care Services: Financial & Clinical Data Management and Analysis. This course is a hands-on data course that will work with the concepts taught in PH0236 using the relational database MS Access and more advanced functions in Excel. This course will cover the basics of relational database structure and design, as well as data aggregation and manipulation using actual transactional claims data. This course is ideal for someone considering a career in financial/clinical/healthcare data analysis. Many organizations use Access and other relational databases to manage and analyze data. Some familiarity with relational databases and/or a willingness to jump in and learn new software is required.</p>			

142317	Field Course: Introduction to Building Health Neighborhoods and Communities		
Subject: PH	Catalog Nbr: 0289		
2022 FALL	Primary	Linda Hudson	Linda.Hudson@tufts.edu
<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 critically 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: CBUN	Catalog Nbr: 0857		

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143039	Directed Study				
Subject:	Catalog Nbr:				
PH	0401				
2021 SUMR	Primary	David Leader	David.Leader@tufts.edu		
2021 SUMR	Primary	Fernando Ona	Fernando.Ona@tufts.edu		
2022 SUMR	Primary	Beth Rosenberg	beth.rosenberg@tufts.edu		
2022 SUMR	Primary	Kimberly Dong Breen	kimberly.dong@tufts.edu		
2022 SUMR	Primary	Susan Koch-Weser	Susan.Koch_Weser@tufts.edu		
2022 SUMR	Primary	Linda Hudson	Linda.Hudson@tufts.edu		
2022 SUMR	Primary	Virginia Chomitz	Virginia.Chomitz@tufts.edu		
2022 SUMR	Primary	Ramnath Subbaraman	Ramnath.Subbaraman@tufts.edu		
2022 SUMR	Primary	Michael Siegel	Mike.Siegel@tufts.edu		
2022 SUMR	Primary	Saloni Dev	Saloni.Dev@tufts.edu		
Directed Study - Full Semester					

143040	Directed Study				
Subject:	Catalog Nbr:				
HCOM	0401				
Directed Study					

143041	Directed Study				
Subject:	Catalog Nbr:				
PREP	0401				
Directed Study - Full Semester					

143042	Directed Study				
Subject:	Catalog Nbr:				
CMPH	0401				
2021 SUMR	Primary	Marieke Rosenbaum	Marieke.Rosenbaum@tufts.edu		
2022 SPRG	Primary	Anthony Schlaff	anthony.schlaff@tufts.edu		
2022 SPRG	Primary	Megan Evans	Megan.Evans@tufts.edu		
Directed Study - Full Semester					

143047	Discrimination in Healthcare: Legal, Ethical and Public Health Policy				
Subject:	Catalog Nbr:				
CMPH	0366				
This course will address the legal, ethical and public health policy issues relating to discrimination in the workplace, with emphasis on the health care setting. Specific topics will include: discrimination on the basis of disability, handicap or pregnancy, including applicability of the Family Medical and Leave Act; sexual					

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harassment and bullying; equal pay; discrimination on the basis of age or health status (e.g., obesity); discrimination on the basis of gender, gender identity and sexual orientation; discrimination on the basis of race, ethnicity, national origin, alienage or religion; and workplace retaliation.

143048	Global Health: Concepts, Conditions, and Careers			
	Subject:	Catalog Nbr:		
	CMPH	0313		
<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		
	2022 SPRG	Primary	Deborah Walker	Deborah.Walker@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		

143168	Law and Health Care			
	Subject:	Catalog Nbr:		
	PH	0230		
	2022 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</p>				

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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.

143169	Public Health Law and Ethics			
Subject: PH	Catalog Nbr: 0232			
2022 FALL	Primary	Marcia Boumil	marcia.boumil@tufts.edu	
<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			
2022 SPRG	Primary	Signe Flieger	Signe.Flieger@tufts.edu	
2022 SPRG	Primary	Jamie Morgan	Jamie.Morgan649065@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> <p>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</p>				

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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.

143191	Mental Health in the U.S.: Access, Services, and Policy
Subject: PH	Catalog Nbr: 0242
<p>This course is designed to provide a broad overview of U.S. mental health policy, the mental health service delivery system, and the role of public health in understanding and addressing population-level mental health. The course introduces current issues in mental health policy and service delivery, focusing on: access to mental health services and utilization patterns; quality of care; the economics of mental health and healthcare (supply, demand, financing, and cost-effectiveness); public health interventions and the prevention of mental disorders; and key social and environmental determinants of mental health. Throughout the course, we will consider issues of social justice and explore pervasive mental health inequalities that exist today.</p>	

143262	PA/MPH ALE Planning Seminar
Subject: PH	Catalog Nbr: 0307
<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>	

143263	PA/MPH ALE Implementation
Subject: PH	Catalog Nbr: 0308
<p>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>	

143299	Field Course: Experiencing city-level public health department services and challenges
Subject: PH	Catalog Nbr: 0256
<p>This field-based course is designed to provide students with an in-depth understanding of the workings of a progressive city-level public health department. The course classes will be primarily held at the Cambridge Public Health Department (CPHD) and other aligned city agencies, with remaining classes at the Tufts Chinatown campus. At CPHD, students will hear from staff in the epidemiology, public health nursing, health promotion, school health, and environmental health departments about their projects and their day-to-day tasks, in addition to the context and challenges of their work. Students will also attend at least one CPHD / Cambridge community meeting during the semester. Students will select a Cambridge-determined priority</p>	

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policy or practice issue to research and present to CPHD staff, as well as produce reflective assignments on their experiences.

143417	What is cancer and why should we care?			
Subject: BIED	Catalog Nbr: 0352	2022 SUMR	Primary	Revati Masilamani Revati.Masilamani@tufts.edu
<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	2022 SUMR	Primary	Revati Masilamani Revati.Masilamani@tufts.edu
<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	2022 SUMR	Primary	Revati Masilamani Revati.Masilamani@tufts.edu
<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: BIED	Catalog Nbr: 0366			
<p>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</p>				

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

143422	How do we treat cancer?			
	Subject:	Catalog Nbr:		
	BIED	0377		
	2022 SUMR	Primary	Revati Masilamani	Revati.Masilamani@tufts.edu
<p>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.</p> <p>This course is intended for high school science instructors as part of the Teaching the Great Diseases program.</p>				

143467	Cases in Public Health Management			
	Subject:	Catalog Nbr:		
	CBUN	PH858		

143516	Survey Research Methods			
	Subject:	Catalog Nbr:		
	PH	0724		
<p>This course uses real world examples to introduce students to basic survey methodology and data</p>				

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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.

143533	Sexual & Reproductive Health in Disaster Settings	
	Subject:	Catalog Nbr:
	CBUN	GH766

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

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

143667	Policy Analysis	
	Subject:	Catalog Nbr:
	PH	0749
<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</p>		

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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.

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.

143668	Intermediate Biostatistics: Regression Methods		
Subject: PH	Catalog Nbr: 0726		
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 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. Graduate standing.			

143669	Public Health Practice Epidemiology		
Subject: PH	Catalog Nbr: 0252		
2022 SPRG	Primary	Janet Forrester	janet.forrester@tufts.edu
The focus of this course will be on mastering the concepts used in epidemiology by application of the concepts to the practice of public health.			

143670	Infectious Disease Epidemiology		
Subject: CMPH	Catalog Nbr: 0311		
2022 SPRG	Primary	Jeffrey Griffiths	jeffrey.griffiths@tufts.edu
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		
Subject: CMPH	Catalog Nbr: 0315		

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2022 SPRG	Primary	Ramnath Subbaraman	Ramnath.Subbaraman@tufts.edu
<p>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.</p> <p>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 will complement the survey course that will be taught in alternate years for the MD/MPH program called “Global Health: Concepts, Conditions, and Careers.”</p>			

143672	Minority Women’s Health		
Subject: CMPH	Catalog Nbr: 0334	2022 SPRG	Primary
	Phylicia Bediako	Phylicia.Bediako@tufts.edu	
<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>			

143673	Patient Safety and Organizational Change		
Subject: CMPH	Catalog Nbr: 0336		
<p>Patient safety emerged as a public health crisis with the release of the November 1999 Institute of Medicine Report, "To Err is Human." A call to action, the IOM report prompted sweeping changes in our understanding of medical errors and how clinicians, hospitals, health systems, oversight and regulatory agencies, and government deal with them. A new paradigm evolved, one that focused on systems of care and system design rather than on lapses of individual performance. This new view of patient safety requires clinicians to develop a new set of competencies around system analysis, design, and improvement. Accordingly, the course will address a variety of topics such as the epidemiology of medical error; human factors engineering; incident reporting and root cause analysis; error disclosure and management of critical incidents; selection and implementation of safe practices; and approaches to building a safety culture. Classes will use a variety of didactic approaches including lecture, discussion, management case studies, guest lectures, and in-class</p>			

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projects.

143674	Physicians' Role in Health Care Regulation			
Subject: CMPH	Catalog Nbr: 0337			
<p>This is a 7 session course where the student will be introduced to some common areas where state government regulates medical practice or the health care provider world more generally, and the kinds of skills that physicians need to have in order to be effective participants in either the regulatory process or in their health care practices/organizations responding to health care regulation. Skills presented include reading statutes and regulations for understanding; advocacy before legislative or regulatory bodies and colleague organizing in a world of policy and politics.</p>				

143796	Introduction to the Nervous System			
Subject: BIED	Catalog Nbr: 0301			
2021 SUMR	Primary	Elizabeth Genne-Bacon	Elizabeth.Genne_Bacon@tufts.edu	
2022 SPRG	Primary	Yuan Zhao Gao	Tony.Gao@tufts.edu	
2022 SUMR	Primary	Revati Masilamani	Revati.Masilamani@tufts.edu	
<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			
2022 SPRG	Primary	Yuan Zhao Gao	Tony.Gao@tufts.edu	
2022 SUMR	Primary	Revati Masilamani	Revati.Masilamani@tufts.edu	
<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</p>				

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course uses the experience of pain (something we can all relate to) as the framework to investigate how action potentials and synaptic transmission works.

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

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			
2021 SUMR	Primary	Elizabeth Genne-Bacon	Elizabeth.Genne_Bacon@tufts.edu	
2022 SPRG	Primary	Yuan Zhao Gao	Tony.Gao@tufts.edu	
2022 SUMR	Primary	Revati Masilamani	Revati.Masilamani@tufts.edu	
<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			
2022 SUMR	Primary	Allison Mcqueen	Allison.Mcqueen@tufts.edu	
<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>				

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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 1.1-1.3) of the Great Diseases high school curriculum.

143868	How does your body digest food?			
Subject: BIED	Catalog Nbr: 0257	2022 SUMR	Primary	Allison Mcqueen Allison.Mcqueen@tufts.edu
<p>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.</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 1.4-1.5) and Unit 2 (Lesson 2.1) of the Great Diseases high school curriculum.</p>				

143869	How do cells use nutrients to make energy?			
Subject: BIED	Catalog Nbr: 0261	2022 SUMR	Primary	Allison Mcqueen Allison.Mcqueen@tufts.edu
<p>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.</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 (but not required) that students have a basic understanding of macronutrient structures.</p>				
<p>This course aligns with Metabolic Disease Unit 2 (Lessons 2.2-2.5) of the Great Diseases high school curriculum.</p>				

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143870	How do we study the brain?			
Subject: BIED	Catalog Nbr: 0306			
2021 FALL	Primary	Revati Masilamani	Revati.Masilamani@tufts.edu	
2021 FALL	Primary	Yuan Zhao Gao	Tony.Gao@tufts.edu	
2021 SUMR	Primary	Elizabeth Genne-Bacon	Elizabeth.Genne_Bacon@tufts.edu	
<p>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.</p> <p>Pre-requisites: Having taken a college biology course is highly recommended. 'Introduction to the nervous system' is also recommended, but not required.</p> <p>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.</p>				

143871	Cells of the nervous system and Alzheimer's Disease			
Subject: BIED	Catalog Nbr: 0312			
2021 SUMR	Primary	Elizabeth Genne-Bacon	Elizabeth.Genne_Bacon@tufts.edu	
2022 SPRG	Primary	Yuan Zhao Gao	Tony.Gao@tufts.edu	
2022 SUMR	Primary	Revati Masilamani	Revati.Masilamani@tufts.edu	
<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			
2021 SUMR	Primary	Revati Masilamani	Revati.Masilamani@tufts.edu	

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2021 SUMR	Primary	Elizabeth Genne-Bacon	Elizabeth.Genne_Bacon@tufts.edu
2021 SUMR	Primary	Yuan Zhao Gao	Tony.Gao@tufts.edu

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.

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.

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

143873	Why should we care about infectious diseases?
Subject: BIED	Catalog Nbr: 0201

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.

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

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.

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

Pre-requisites: It is recommended that students have an understanding what an infectious disease is and what

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causes it (covered in BIED 201 – Why should we care about infectious diseases?)

This course aligns with the Infectious Disease Unit 4: How do pathogens make us sick? of the Great Diseases high school curriculum

143875	How do we get better?			
Subject: BIED	Catalog Nbr: 0222			
2021 FALL	Primary	Peter Rogers	No Email on file.	
2022 SUMR	Primary	Revati Masilamani	Revati.Masilamani@tufts.edu	
<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 curriculum</p>				

144011	Public Health Law and Ethics			
Subject: PH	Catalog Nbr: 0732			
<p>This doctoral level course explores health law from the perspective of those involved in healthcare administration and management. It surveys the broad landscape of the law as it pertains to the public health law and regulations. Specific topics include law concerning regulation of tobacco products, opioids, medicinal and recreational marijuana use and alcohol. Reproductive and end-of-life decision making will be addressed, as will a host of public safety regulations. This course offers an overview of the many ways in which laws influence the organization and operations of public health laws and regulations.</p>				

144012	Public Health Assessment: Data, Determinants, and Systems			
Subject: PH	Catalog Nbr: 0202			
2021 FALL	Primary	Jacob van den Berg	jacob.vandenberg@tufts.edu	
2021 SUMR	Primary	Jean Lim	jean.lim@tufts.edu	
2022 FALL	Primary	Linda Hudson	Linda.Hudson@tufts.edu	
2022 FALL	Primary	Signe Flieger	Signe.Flieger@tufts.edu	
2022 SPRG	Primary	Vanessa Nicholson	Vanessa.Nicholson@tufts.edu	

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2022 SUMR	Primary	Ndidiamaka Amutah-Onukagha	Ndidiamaka.Amutah_Onukagha@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>			

144013	The Nuts and Bolts of U.S. Health Care		
Subject: PH	Catalog Nbr: 0243	2021 FALL	Primary
		Vanessa Nicholson	Vanessa.Nicholson@tufts.edu
<p>This course provides an overview of the U.S health care system. The hope is that from studying patterns and themes that have emerged in U.S. health care service delivery, and learning about the various factors that have shaped the configuration of the system, students will be in a better position to both understand the past and obtain some perspectives for anticipating changes in the future.</p>			

144095	Public Health Action: Programs, Policy, and Advocacy		
Subject: PH	Catalog Nbr: 0203	2021 FALL	Primary
		2021 SUMR	Primary
		2022 FALL	Primary
		2022 SPRG	Primary
		2022 SPRG	Primary
		2022 SUMR	Primary
		Wenhui Feng	Wenhui.Feng@tufts.edu
		Uchenna Ndulue	Uchenna.Ndulue@tufts.edu
		Jamie Morgan	Jamie.Morgan649065@tufts.edu
		Beth Rosenberg	beth.rosenberg@tufts.edu
		Linda Hudson	Linda.Hudson@tufts.edu
		Michael Siegel	Mike.Siegel@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>			

144096	Program Planning for Public Health		
Subject: PH	Catalog Nbr: 0254		

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Program Planning for Public Health

144097	Health Care Economics			
	Subject:	Catalog Nbr:		
	PH	0255		
<p>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.</p>				

144331	Applied QI Methods			
	Subject:	Catalog Nbr:		
	CMPH	0209		
	2021 FALL	Primary	Anthony Schlaff	anthony.schlaff@tufts.edu
	2021 FALL	Primary	Judith Cullinane	Judith.Cullinane@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 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.</p>				

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

144360	Qualitative Tools for Public Health Research and Programs			
	Subject:	Catalog Nbr:		
	PH	0725		
<p>The course is aimed at integrating specific qualitative research methods, including the use of interviews, focus groups, and content analysis, as well as the analysis of the resulting data. Students are required to work on</p>				

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several small weekly assignments that allow them to practice specific methods and foster development of qualitative research skills. They are also required to present examples of qualitative research in class, illustrating both research design and data analysis. By the end of the semester, students will understand how to form research questions appropriate for qualitative methods, integrate qualitative and quantitative methods, and use the tools of qualitative data collection and analysis.

144361	Obesity: Causes and Challenges		
Subject: BIED	Catalog Nbr: 0266	2022 SUMR	Primary Allison Mcqueen Allison.Mcqueen@tufts.edu
<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>			

144370	Strategic and Operational Planning		
Subject: PH	Catalog Nbr: 0727		
<p>This 1.5 credit course focuses on the theory and practice of strategic and operational planning for non-profit and public health organizations. The aim is to identify and analyze an existing organizational strategic plan that includes budgeting, resource allocation, and SWOT analysis. This course will also include community health needs assessment and health improvement plans to assist with eliminating health inequities within communities</p>			

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

144387	Directed Study		
Subject:	Catalog Nbr:		

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CMPH	0400				
	2021 SUMR	Primary	David Tybor	DJ.Tybor@tufts.edu	
	2022 SPRG	Primary	Anthony Schlaff	anthony.schlaff@tufts.edu	
	2022 SPRG	Primary	Megan Evans	Megan.Evans@tufts.edu	
	2022 SPRG	Primary	Kathleen Fairfield	Kathleen.Fairfield@tufts.edu	
Directed Study - Half Semester					

144388	Analysis of Emerging Infections				
	Subject:	Catalog Nbr:			
	CBUN	PH825			

144463	Advocacy for Public Health				
	Subject:	Catalog Nbr:			
	PH	0713			

144465	Program Planning for Public Health Interventions				
	Subject:	Catalog Nbr:			
	PH	0254			
	2022 SPRG	Primary	Uchenna Ndulue	Uchenna.Ndulue@tufts.edu	

144466	Health Economics				
	Subject:	Catalog Nbr:			
	PH	0255			
	2022 SPRG	Primary	Wenhui Feng	Wenhui.Feng@tufts.edu	
	2022 SPRG	Primary	Adrian Garcia Mosqueira	Adrian.Garcia_Mosqueira@tufts.edu	
<p>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.</p>					

144472	Qualitative Data Analysis				
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Subject: Catalog Nbr:
PH 0735

Interviews, focus groups, clinical cases and narrative texts are important sources of information that can powerfully inform public health interventions. These methods yield data about how and why populations cognitively organize and act in the spectrum of ways that they do, and the broader context in which individuals collectively make decisions. Because these methods yield robust amounts of rich, descriptive data, analysis generally follows a qualitative approach. This course will introduce students to techniques, tools, and frameworks for qualitative data analysis. The course will follow an in-person studio format in which students will receive guidance on how to conduct qualitative data analysis as well as peer-feedback on their own qualitative data analysis efforts. Class meetings will involve short lectures by the instructor, qualitative data analysis exercises, and collaborative studios. Students will learn about methods for analyzing qualitative data by hand and with the aid of software.

144600	PH-Workshop
Subject: UC	Catalog Nbr: PH01

144606	Advanced Topics in Public Health Law and Ethics
Subject: CMPH	Catalog Nbr: 0367
<p>This course address various legal and ethical issues of contemporary interest to student and not covered in CMPH 204. Students will be invited to submit requests for specific topics, and to compete the written requirement for the course (8-10 page paper) on a topic of individual interest. The specific topics likely to be covered include: (1) examination of the Americans' With Disabilities Act and the Family and Medical Leave Act (FMLA), as well as state paid leave policies; (2) "Curbside Consults" as well as concierge Medicine and Direct Care; (3) an overview of various federal regulations not covered in CMPH 204 (ERISA, COBRA, HIPAA, HITECH); (3) new developments concerning the Patient Protection and Affordable Care Act (ACA); (4) the Medical-Legal Partnership Model; (5) discrimination in healthcare (gender, race, ethnicity, pregnancy, etc.) as well as other matters of unfair treatment (e.g., sexual harassment, bullying, obesity discrimination); and (6) quality assurance, peer review and "distance medicine"/telemedicine.</p>	

144609	Clinical Prevention
Subject: CMPH	Catalog Nbr: 0317
<p>This course explores the role of clinical interventions in the prevention of disease and injury, one patient at a time. We begin by weighing the relative advantages and disadvantages of clinically-based, compared to population-based, strategies for the reduction of risk. In so doing, we examine the underlying rationale for preventing disease rather than waiting to treat it later if and when it becomes symptomatic. We then explore in detail the four types of preventive interventions used in the clinic – immunizations, chemoprophylaxis, lifestyle counseling, and screening programs – for a variety of conditions, critically appraising the available</p>	

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evidence exploring their net value. This naturally leads us to an examination of clinical guidelines designed to aid physicians in making evidence-based decisions at the point of care. Finally, we consider several controversies currently unsettling the practice of clinical prevention.

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

144688	PH-Workshop		
	Subject:	Catalog Nbr:	
	UC	PH02	

144694	Health Care Transformation Through Emerging Health Technologies		
	Subject:	Catalog Nbr:	
	CMPH	0368	
<p>The use of emerging health technologies has been a major development in healthcare. The term “Emerging Health Technologies” is often used to address a variety of technologies employed in the health setting including smartphone applications, web-based portals, patient portals, tele-medicine, remote monitoring technologies, clinical decision support (CDS), and artificial intelligence (AI)-based technologies. Vast amounts of health data, and the increasing possibilities of complex data analytics have created more opportunities than ever to improve health care. Health technology solution scan synthesize large amounts of patient-reported, clinical and other types of data to diagnose disease conditions, make predictions about health, track disease symptoms, provide personalized care, and monitor patients outside of the hospital settings. For example, Google’s DeepMind can read retinal scans with at least as much accuracy as an experienced physician, smartphone applications have been shown to reduce depression in patients with chronic depression, and web-based portals can manage a patient’s treatment and care process via EHR. The use of emerging health technologies could be another great leap in health care, but it must be handled with care and a thorough understanding of the value these technologies bring to the healthcare system and its key stakeholders</p>			

144823	Global Health and Migration		
	Subject:	Catalog Nbr:	
	PH	0245	
	2021 SUMR	Primary	Ghenwa Hakim
Ghenwa.Hakim@tufts.edu			
<p>This course will introduce students to migration trends and how migration, whether forced or chosen, disrupts life and also impacts health. Classes will introduce theories underlying migrant- health relationship, the contexts of migration, international legal frameworks for addressing issues of migrants and migration, and US framework addressing migration and healthcare services. After successful completion of the course students</p>			

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will be able to describe current trends and patterns in migration, identify key health challenges facing migrants and newcomers, evaluate health system responses to migration, and analyze the migrant experience from a SDOH perspective.

144824	Using Digital Technology to Reach Health Consumers			
Subject:	Catalog Nbr:			
PH	0269			
2022 FALL	Primary	Lisa Gualtieri		Lisa.Gualtieri@tufts.edu
<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:	Catalog Nbr:			
BIED	0202			
2021 FALL	Primary	Peter Rogers		No Email on file.
2022 SUMR	Primary	Revati Masilamani		Revati.Masilamani@tufts.edu
<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>				

144976	PA/MPH Integration of Public Health			
Subject:	Catalog Nbr:			
PH	0263			
2022 FALL	Primary	Fernando Ona		Fernando.Ona@tufts.edu
2022 FALL	Primary	Mercedes Colangelo		Mercedes.Colangelo@tufts.edu
<p>PA/MPH Integration of Public Health for students matriculating in the MPH program in Spring 2020.</p>				

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145055	Consulting in Health Care: Principles and Practices			
Subject: PH	Catalog Nbr: 0257			
2021 FALL	Primary	Christina Marsh	Christina.Marsh@tufts.edu	
<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			
2022 FALL	Primary	Kaitlin Sawatzki	Kaitlin.Sawatzki@tufts.edu	
<p>Research Methods in Public Health is designed to acquaint veterinary public health students with the process 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.</p>				

145233	Health Care Activism, Community Health, and Patient-Centered Research			
Subject: PH	Catalog Nbr: 0282			
2022 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. 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>				

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145308	Selected Topics in Global Health: Exotic Diseases and Far Away Places			
Subject: CMPH	Catalog Nbr: 0370			
2022 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			
Subject: PH	Catalog Nbr: 0274			
2021 SUMR	Primary	Daniel Childs	Daniel.Childs@tufts.edu	
<p>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.</p> <p>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.</p> <p>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.</p> <p>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</p>				

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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 & Communicating Data			
Subject: PH	Catalog Nbr: 0275			
2021 FALL	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 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.</p>				

145717	Pharmacoepidemiology and Regulation			
Subject: CMPH	Catalog Nbr: 0371			
2022 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: CMPH	Catalog Nbr: 0372			
2022 SPRG	Primary	Bin Zhang	Bin.Zhang@tufts.edu	
<p>Randomized clinical trials (RCT) 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</p>				

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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.

145741	Food Safety and Security for the Veterinary Professional			
Subject:	Catalog Nbr:			
CMPH	0329			
2022 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 Control Point) protocols.</p>				

145755	Food Safety and Security for the Veterinary Professional			
Subject:	Catalog Nbr:			
CMPH	0329			
<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) [https://www.avma.org/resources-tools/avma-policies/food-safety]. 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.</p> <p>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 Control Point) protocols. Two field trips to a local cattle farm and local abattoir will allow students to immerse themselves in the real-world applications of the above measures.</p> <p>Although this course is tailored to veterinary students and is based on the Grafton campus, it can be</p>				

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educational and engaging for all health professional students and will be open for enrollment pending availability.

145847	Implementation Science: Bridging the Gap Between Knowledge and Practice			
Subject:	Catalog Nbr:			
PH	0276			
2022 FALL	Primary	Jacob van den Berg	jacob.vandenberg@tufts.edu	
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				

145848	U.S. Health Care			
Subject:	Catalog Nbr:			
PH	0277			
2022 FALL	Primary	Robert Seifert	Robert.Seifert@tufts.edu	
2022 FALL	Primary	Vanessa Nicholson	Vanessa.Nicholson@tufts.edu	
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.				

145849	Qualitative Methods and Data Analysis			
Subject:	Catalog Nbr:			
PH	0290			
2022 FALL	Primary	Karen Errichetti	Karen.Errichetti@tufts.edu	
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.				
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.				

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145850	Analysis of Multilevel and Longitudinal Data			
Subject:	Catalog Nbr:			
PH	0291			
2022 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:	Catalog Nbr:			
PH	0278			
2022 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	DVM/MPH Biblio-PHILES (Public Health in Literature and Excerpts from Scholars)			
Subject:	Catalog Nbr:			
CMPH	0215			
2022 SUMR	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:	Catalog Nbr:			
BIED	0225			
2022 SUMR	Primary	Revati Masilamani		Revati.Masilamani@tufts.edu
<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</p>				

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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.

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: CMPH	Catalog Nbr: 0415
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.		