Mike.Siegel@tufts.edu

#### Course Bulletin

100488Social and Behavioral ScienceSubject:Catalog Nbr:CMPH0118

Primary

2023 FALL

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.

Michael Siegel

100683 Healthcare Organization: Budgeting and Management

Subject: Catalog Nbr:
CMPH 0136
2024 SPRG Primary Justin St. Phillips Justin.St\_Phillips@tufts.edu

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.

100736	Integration	n of Public Hea	alth	
Subject	: Catalo	g Nbr:		
СМРН	0151			
2	024 SPRG	Primary	Ylisabeth Bradshaw	libby.bradshaw@tufts.edu
2	024 SPRG	Primary	Meera Gatlin	Meera.Gatlin@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.

100795	Glo	bal Popula	tion Health		
	Subject:	Catalog Nk	or:		
	CMPH	0170			
	2024 SI	PRG	Primary	Felicia Nutter	Felicia.Nutter@tufts.edu
	2024 SI	PRG	Primary	Meera Gatlin	Meera.Gatlin@tufts.edu

100913	1	Environme	vironmental and Occupational Health			
	Subject:	Catalo	g Nbr:			
	CMPH	0203				
	2023	3 FALL	Primary	Barry Levy	barry.levy@tufts.edu	

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.

100952	1	aw and P	ublic Health		
	Subject:	Catalo	g Nbr:		
	CMPH	0204			
	2024	1 SPRG	Primary	Marcia Boumil	marcia.boumil@tufts.edu
This cou	urse describes the	legal basi	s for public hea	alth. Basic principles of ma	Ipractice, informed consent,

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 Hea	Ith Veterinary Medicine	
Subject:	Catalog	g Nbr:		
СМРН	0207			
20	24 SPRG	Primary	Catherine Brown	Catherine.Brown@tufts.edu
20	24 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 I	lealth Field Expe	rience	
	Subject: Cat	alog Nbr:		
	CMPH 020	8		
	2022 FALL	Primary	Richard Glickman-Simon	richard.glickman-simon@tuft s.edu
	2022 FALL	Primary	Michael Siegel	Mike.Siegel@tufts.edu
	2023 SUMF	Primary	Meera Gatlin	Meera.Gatlin@tufts.edu
	2024 SPRG	Primary	Patrick Vivier	Patrick.Vivier@tufts.edu
For the	eir core field experience, s	tudents complet	e a field placement (minimum of	f 200 hours) in a public,

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	n of Public Hea	alth	
Subject:	Catalo	g Nbr:		
СМРН	0251			
20	24 SPRG	Primary	Ylisabeth Bradshaw	libby.bradshaw@tufts.edu
20	)24 SPRG	Primary	Meera Gatlin	Meera.Gatlin@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.

101123	<i>A</i>	Applied Le	arning Experie	ence: Planning Seminar	
	Subject:	Catalog	g Nbr:		
	CMPH	0253			
	2024	SPRG	Primary	Ylisabeth Bradshaw	libby.bradshaw@tufts.edu

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.

101178	Research N	1ethods		
	Subject: Catalog	Nbr:		
	CMPH 0288			
	2022 SUMR	Primary	Susan Koch-Weser	Susan.Koch_Weser@tufts.edu
	2023 FALL	Primary	Alice Tang	alice.tang@tufts.edu

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.

101271	Adolescent Health

Subject: Catalog Nbr: CMPH 0305

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

101455		Organizational Behavior
	Subject:	Catalog Nbr:
	CRBR	0253

101476	Ops Mgmt In Service Orgs	
Subj	ect: Catalog Nbr:	
CRB	0258	

101519		Social Policy Analysis	
	Subject:	Catalog Nbr:	
	CRBR	5326	

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

101558		Intermediate Microecon
	Subject:	Catalog Nbr:
	CRBU	0303

101577		Behavioral Economics
	Subject:	Catalog Nbr:
	CRBU	0323

	Biostatistics		
Subject:	Catalog Nbr:		
CRBU	0703		

101642	Integr	ration of Public Hea	lth	
	Subject: Ca	atalog Nbr:		
	CMPH 03	351		
	2024 SPR	G Primary	Ylisabeth Bradshaw	libby.bradshaw@tufts.edu
	2024 SPR	G Primary	Meera Gatlin	Meera.Gatlin@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.

101684		Applied Learning Experience: Orientation and Planning				
	Subject:	Catalog	Nbr:			
	CMPH	0353				
	202	4 SPRG	Primary	Ylisabeth Bradshaw	libby.bradshaw@tufts.edu	

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.

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:	Catalo	g Nbr:		
	CMPH	0358			
	2023	3 SPRG	Primary	Jeffrey Mariner	Jeffrey.Mariner@tufts.edu

This course is designed to be a practical introduction to epidemiological and service delivery methodologies that stress participation and community ownership. The course will combine a minimal amount of introductory lecture with in-class participatory learning exercises and discussion. The course will first look at the underlying concepts of participation and community-based development. Thereafter, the sessions will focus on specific methods and students will be asked to complete a group project using these skills. The group projects will consist of participatory assessments conducted within the University community on a health related theme. The course will close with sessions on community-based health care and the policy and institutional frameworks required for sustainable community-based programs. At the end of the course, students should be adequately prepared to conduct a mentored summer research project in participatory epidemiology.

101797		Financial Reporting And
	Subject:	Catalog Nbr:
	CRBU	0711

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

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

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

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

102308		Integration	า of Public Hea	alth	
	Subject:	Catalo	g Nbr:		
	CMPH	0451			
	202	24 SPRG	Primary	Meera Gatlin	Meera.Gatlin@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.

102328	A	pplied Le	arning Experie	ence	
	Subject:	Catalog	g Nbr:		
	CMPH	0453			
	2024	SPRG	Primary	Ylisabeth Bradshaw	libby.bradshaw@tufts.edu

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.

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

102449	Urban Environmental Hlth
Subjec	: Catalog Nbr:
CRBU	0807

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

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

102680		Evaluating Hc Quality
	Subject:	Catalog Nbr:
	CRBU	0837

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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		

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

125227 Health Literacy					
	Subject:	Catalo	g Nbr:		
	PH	0273			
	202	3 SPRG	Primary	Sabrina Kurtz-Rossi	Sabrina.Kurtz_Rossi@tufts.ed

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

125275		Patient-Pro	ovider Interac	tion	
	Subject:	Catalog	g Nbr:		
	PH	0270			
	2023	3 SUMR	Primary	Ylisabeth Bradshaw	libby.bradshaw@tufts.edu

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.

125478	Health Literacy Leadership Institute
Subject:	Catalog Nbr:
PH	0266

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.

128127	Principles of Epidemiology						
	Subject:	Catalog	g Nbr:				
	PH	0201					
	20	22 FALL	Primary	Naisi Zhao	Naisi.Zhao@tufts.edu		
	20	22 SUMR	Primary	Kipruto Kirwa	Kipruto.Kirwa@tufts.edu		
	20	23 FALL	Primary	David Tybor	DJ.Tybor@tufts.edu		
	20	23 SPRG	Primary	Jonathon Gass	Jonathon.Gass@tufts.edu		
	20	23 SUMR	Primary	Shayesteh Jahanfar	Shayesteh.Jahanfar@tufts.edu		

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.

128209		Occupational and Environmental Health					
	Subject:	Catalo	g Nbr:				
	PH	0204					
	202	3 FALL	Primary	Beth Rosenberg	beth.rosenberg@tufts.edu		

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.

128254	F	Principles o	of Biostatistics	1	
	Subject:	Catalog	Nbr:		
	PH	0205			
	2022	2 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 SUMR	Primary	Shayesteh Jahanfar	Shayesteh.Jahanfar@tufts.edu
2023 FALL	Primary	David Tybor	DJ.Tybor@tufts.edu
2023 SPRG	Primary	Owais Gilani	Owais.Gilani@tufts.edu

This course provides an introduction to the basic principles and applications of statistics as they are applied to problems in clinical and public health settings. Topics include the description and presentation of data, random variables and distributions, descriptive statistics, introduction to probability, estimation, elements of hypothesis testing, and one- and two-sample tests, ANOVA (including repeated-measures), non-parametric tests, and an introduction to linear and logistic regression. Lectures, problem sets, and computer output are used to develop these and additional concepts. Graduate standing.

128297		Intermediate Biostatistics				
	Subject:	Catalog	g Nbr:			
	PH	0206				
	20	23 SPRG	Primary	Shayesteh Jahanfar	Shayesteh.Jahanfar@tufts.edu	
	20	24 SPRG	Primary	Kenneth Chui	Kenneth.Chui@tufts.edu	

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.

128420		Law In Public Health			
	Subject:	Catalo	g Nbr:		
	PH	0210			
	202	24 SPRG	Primary	Marcia Boumil	marcia.boumil@tufts.edu

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.

128500	Health And Law Ethics
Subject:	Catalog Nbr:
PH	0214

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.

128536	Public Health & Healthcare: Politics, Policies and Programs			
Subject:	Catalog Nbr:			
PH	0215			

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 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 Car	Health Care Organization: Budgeting and Management					
Subj	ect: Catalog	g Nbr:					
PH	0216						
	2022 FALL	Primary	Justin St. Phillips	Justin.StPhillips@tufts.edu			
	2023 SUMR	Primary	Jennifer Bateman	Jennifer.Bateman@tufts.edu			
	2024 SPRG	Primary	Karen Errichetti	Karen.Errichetti@tufts.edu			

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.

128597	1	Negotiation and Conflict Resolution					
	Subject:	Catalo	g Nbr:				
	PH	0217					
	2024	1 SPRG	Primary	Marcia Boumil	marcia.boumil@tufts.edu		

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.

128674	Cardiovascular Epidemiology
Subject:	Catalog Nbr:
PH	0220

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.

128693	Methods of Public Health Inquiry
Subject:	Catalog Nbr:
PH	0221

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.

128726	S	Survey Research Methods					
	Subject:	Catalo	g Nbr:				
	PH	0222					
	2023	SPRG	Primary	Anna Grossman	Anna.Grossman@tufts.edu		
	2024	SPRG	Primary	Susan Koch-Weser	Susan.Koch_Weser@tufts.edu		

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.

128781	I	Infectious Disease Epidemiology				
	Subject:	Catalog	Nbr:			
	PH	0224				
	2024	SPRG	Primary	Jeffrey Griffiths	jeffrey.griffiths@tufts.edu	

This course is designed to introduce you to key concepts in infectious disease epidemiology, including the methodological issues associated with control, surveillance, and research of infectious diseases. While a detailed presentation of the epidemiology of every infectious disease is well beyond the scope of this course, we will consider the epidemiology of several important diseases over the course of the semester.

128804		Qualitative Tools for Public Health Research and Programs					
	Subject:	Catalog	Nbr:				
	PH	0225					
	202	2 SUMR	Primary	Karen Errichetti	Karen.Errichetti@tufts.edu		

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.

128846		Cancer Epidemiology and Prevention						
	Subject:	Catalog	Nbr:					
	PH	0226						
	202	3 SUMR	Primary	Dominique Michaud	Dominique.Michaud@tufts.ed u			

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.

128957	Public Health Economics
Subject:	Catalog Nbr:
PH	0234

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.

128978	Advanced Public Health Economics
Subje	t: Catalog Nbr:

PH 0235

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).

129044 Pharmacoepidemiology, Bioethics and Reg Policy

Subject: Catalog Nbr: PH 0239

2023 SPRG Primary Paul Beninger Paul.Beninger@tufts.edu

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

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 HIth

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
Subject: Catalog Nbr:

PH 0247 2024 SPRG

Primary Ramnath Subbaraman

Ramnath.Subbaraman@tufts.e du

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.

129257 Introduction to Global Health and Development

Subject: Catalog Nbr: PH 0248

2023 FALL Primary Saloni Dev

Saloni.Dev@tufts.edu

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.

129329 Maternal & Child Health Policy in the US

Subject: Catalog Nbr: PH 0260

2022 FALL Primary Therese Fitzgerald

Therese.Fitzgerald@tufts.edu

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.

129350	Maternal & Child Health: A Global Perspective			
Subject:	Catalog Nbr:			
PH	0261			
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.

129371	Introduction	n To SAS		
	Subject: Catalog	g Nbr:		
	PH 0265			
	2022 FALL	Primary	Rachel Silver	Rachel.Silver@tufts.edu
	2024 SPRG	Primary	David Tybor	DJ.Tybor@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	g Nbr:			
	PH	0285				
	202	22 FALL	Primary	Colby Zongol	Colby.Zongol@tufts.edu	
	202	22 SUMR	Primary	Travis Moore	Travis.Moore@tufts.edu	
	202	23 FALL	Primary	Vanessa Nicholson-Robinson	Vanessa.Nicholson@tufts.edu	
	202	23 SPRG	Primary	Carolyn Fisher	Carolyn.Fisher@tufts.edu	
	202	23 SPRG	Primary	Karen Errichetti	Karen.Errichetti@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: Plann	ing Seminar		
	Subject: Catalo	g Nbr:		
	PH 0301			
	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 SUMR	Primary	Daniel Hatfield	Daniel.Hatfield@tufts.edu

2022 SUMR	Primary	Jennifer Pustz	Jennifer.Pustz@tufts.edu
2023 FALL	Primary	Virginia Chomitz	Virginia.Chomitz@tufts.edu
2023 SPRG	Primary	Linda Hudson	Linda.Hudson@tufts.edu
2023 SPRG	Primary	Jacob van den Berg	jacob.vandenberg@tufts.edu
2023 SUMR	Primary	Ylisabeth Bradshaw	libby.bradshaw@tufts.edu

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.

129682	ALE: Impler	mentation Sen	ninar	
Subject	: Catalog	Nbr:		
PH	0302			
2	022 FALL	Primary	Daniel Hatfield	Daniel.Hatfield@tufts.edu
2	022 FALL	Primary	Jennifer Pustz	Jennifer.Pustz@tufts.edu
2	023 FALL	Primary	Ylisabeth Bradshaw	libby.bradshaw@tufts.edu
2	023 SPRG	Primary	Lisa Arsenault	Lisa.Arsenault@tufts.edu
2	023 SPRG	Primary	Laura McNulty	Laura.McNulty@tufts.edu
2	023 SPRG	Primary	Charlotte Powley	Charlotte.Powley@tufts.edu
2	023 SUMR	Primary	Marcia Boumil	marcia.boumil@tufts.edu
2	023 SUMR	Primary	Linda Hudson	Linda.Hudson@tufts.edu
2	023 SUMR	Primary	Jacob van den Berg	jacob.vandenberg@tufts.edu
2	024 SPRG	Primary	Virginia Chomitz	Virginia.Chomitz@tufts.edu

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.

129700	J	D/MPH ALE Planning Seminar
	Subject:	Catalog Nbr:
	PH	0303

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.

129720	G	Global Health ALE Planning				
	Subject:	Catalog Nbr:				
	PH 2023	0304 SPRG Primary	Alice Tang	alice.tang@tufts.edu		

In the planning semester students develop a proposed project in collaboration with an organization engaged in public health practice. Faculty assist students in identifying, negotiating, and crafting a suitable project. Students develop a formal plan for project implementation.

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

129778	Global Health ALE Implementation					
Subject:	Catalog	Catalog Nbr:				
PH	0306					
20	23 SUMR	Primary	Alice Tang	alice.tang@tufts.edu		
After returning from their field work abroad, students complete a tutorial sequence with their instructor, give						
a formal presentation t	to the faculty	and their pee	ers and submit a fina	l paper for their ALE work.		

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

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

138644		Transfer Credit
	Subject:	Catalog Nbr:
	TRAN	9999

138747	Health Svc Delivery

Subject: Catalog Nbr:
CBUN 0713
BU Cross-Reg: HM710

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

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

138750	S	Snort, Swallow, Smoke; Drugs and Behavior			
	Subject:	Catalog	g Nbr:		
	PH	0227			
	2024	SPRG	Primary	Margie Skeer	Margie.Skeer@tufts.edu

Problems related to substance use are pervasive in our society on many levels. This course takes an ecological approach to understanding substance use and substance use disorders. Through the context of course lectures and discussions, guest speakers, documentaries, and experiential learning trips, students will engage with myriad aspects of substance-related behavior, spanning epidemiology, neurobiology, prevention, addiction, harm reduction, treatment, and recovery.

138751	Health Services QI Methods			
Subject:	Catalog	Nbr:		
PH	0231			
202	24 SPRG	Primary	Denise Daudelin	Denise.Daudelin@tufts.edu

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.

138752	Info Tech in Health Care
Subject:	Catalog Nbr:

PH 0264

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.

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

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

138848		Negotiations
	Subject:	Catalog Nbr:
	CBUN	0854

138850		Health Care Reform and More: Current Topics in American Health Care Policy			
	Subject:	Catalo	g Nbr:		
	CMPH	0357			
	2024	4 SPRG	Primary	Jon Kingsdale	Jon.Kingsdale@tufts.edu

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.

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

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

139049	ŀ	Health Care Services: Financial & Clinical Data Management and Analysis-	
		Introductory	
	Subject:	Catalog Nbr:	
	PH	0236	

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.

139242 Integration of Public Health			
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
Subject:	Catalog Nbr:
CBRN	2478
Evaluation of Managers	

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

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

139843 A		Advanced Public Health Policy	
	Subject:	Catalog Nbr:	
	PH	0228	

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.

139903		Transbour (TEDA/IAT	•	rging Diseases of Animals &	Initial Accreditation Training
	Subject: CMPH	Catalo 0360	g Nbr:		
	202	2 FALL	Primary	Amanda Martinot	Amanda.Martinot@tufts.edu
	202	4 SPRG	Primary	Meera Gatlin	Meera.Gatlin@tufts.edu
Transboun	dary and Eme	rging Disea	ases of Animals	& Initial Accreditation Train	ing (TEDA/IAT)

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

140136	Advanced Epidemiology	
Subject:	Catalog Nbr:	

CBUN	EP854		

140230	Community-Based Participatory Research Methods
Subject	Catalog Nbr:
PH	0258

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.

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.

140257		Organizational Theory and Behavior
Su	ubject:	Catalog Nbr:
CE	BRN	HS526A

140272	GIS for Pub	olic Health		
Subje	t: Catalog	g Nbr:		
PH	0262			
	2024 SPRG	Primary	Laura Corlin	Laura.Corlin@tufts.edu
	2024 SPRG	Primary	Thomas Stopka	Thomas.Stopka@tufts.edu

In public health, "place" matters 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 Cenus Bureau.

140358		Needs Assessment	
	Subject:	Catalog Nbr:	
	CBUN	0851	

140388		Social Epidemiology
	Subject:	Catalog Nbr:
	CBUN	EP775

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

140390		Perinatal Health Services
	Subject:	Catalog Nbr:
	CBUN	MC845

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

140482		Intermediate Statistical Computing
	Subject:	Catalog Nbr:
	CBUN	BS805

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

140494	1	Applied Statistics and Clinical Trials
	Subject:	Catalog Nbr:
	CBUN	BS851

140574	Mental Health: Law, Science, & Public Health Policy			
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 Thes	is			
	Subject:	Catalo	g Nbr:			
	PH	0801				
	20	24 SPRG	Primary	Virginia Chomitz	Virginia.Chomitz@tufts.edu	
All doctoral students must register for PH 0801 every semester to remain in active and full time status (full time equivalent.) Grading is Satisfactory/Unsatisfactory.						

140889		Statistical Genetics I	
	Subject:	Catalog Nbr:	
	CBUN	BS858	

140890	Integration of Public Health- Physician Assistant						
	Subject:	Catalo	g Nbr:				
	PH	0229					
	202	4 SPRG	Primary	Fernando Ona	Fernando.Ona@tufts.edu		
	202	4 SPRG	Primary	Mercedes Colangelo	Mercedes.Colangelo@tufts.ed		
			<u> </u>	3	u		
Integra	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

141116		The Patient Perspective on Healthcare Costs: Financial Barriers and Risk Factors			
	Subject:	Catalog Nbr:			
	CMPH	0365			

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.

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

141205		Social Factors	
	Subject:	Catalog Nbr:	
	CBUN	SB740	

141316 Communication Theory: From Principles to Practice'					ce'
	Subject:	Catalog	Nbr:		
	PH	0267			
	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 Mar	Social Marketing				
	Subject: Catalog PH 0268	g Nbr:				
	2023 SPRG 2024 SPRG	Primary Primary	Lynda Bardfield Michael Siegel	Lynda.Bardfield@tufts.edu Mike.Siegel@tufts.edu		

Students will develop an understanding of social marketing and how this approach can be used to influence behavior and social change. The course provides practice in positioning complex public health issues, identifying and analyzing audiences, creating targeted communication, identifying appropriate communication channels, translating research into creative concepts, and evaluating social marketing interventions. Students will apply these skills in designing a social marketing plan that addresses a public health topic. As part of this course, students will gain an understanding of the benefits of moving beyond promotion to designing marketing-based interventions aimed at facilitating behavior change.

141372		Intermediate Epidemiology					
	Subject:	Catalo	g Nbr:				
	PH	0251					
	20	23 SPRG	Primary	Kipruto Kirwa	Kipruto.Kirwa@tufts.edu		
	20	24 SPRG	Primary	Dominique Michaud	Dominique.Michaud@tufts.ed		
			•	·	u		

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.

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

141476	1	Principles	of Epidemiolo	gy and Inferential Statis	tics I
	Subject:	Catalo	g Nbr:		
	CMPH	0131			
	2022	FALL	Primary	David Tybor	DJ.Tybor@tufts.edu



141477	Ŀ	Principles of Epidemiology and Inferential Statistics II			
	Subject:	Catalo	g Nbr:		
	CMPH	0133			
	2024	I SPRG	Primary	David Tybor	DJ.Tybor@tufts.edu

141556	Health, Human Security and Emerging Pathogens
Subject:	Catalog Nbr:
PH	0286

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.

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

141650		Infectious Disease Epidemiology
	Subject:	Catalog Nbr:
	CBUN	EP755

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

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

141748	F	Field Course: Introduction to a Health Care Governmental Agency			
	Subject:	Catalo	g Nbr:		
	PH	0287			
	2023	SPRG	Primary	Megan Wulff	Megan.Wulff@tufts.edu

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.

141818	Public Health and the Built Environment
Subject:	Catalog Nbr:
PH	0288

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.

142210	Medical Journalism: Mass Media and Public Health Messaging		
Subject:	Catalog Nbr:		
PH	0271		

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

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:	Catalog Nbr:
PH	0237

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.

142317	1	Field Course: Introduction to Building Health Neighborhoods and Communities			
	Subject:	Catalo	g Nbr:		
	PH	0289			
	2022	2 FALL	Primary	Linda Hudson	Linda.Hudson@tufts.edu

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

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

143039	Directed St	udy		
Subject:	Catalog	g Nbr:		
PH	0401			
20	22 SUMR	Primary	Beth Rosenberg	beth.rosenberg@tufts.edu
20	22 SUMR	Primary	Kimberly Dong Breen	kimberly.dong@tufts.edu
20	22 SUMR	Primary	Susan Koch-Weser	Susan.Koch_Weser@tufts.edu
20	22 SUMR	Primary	Linda Hudson	Linda.Hudson@tufts.edu
20	22 SUMR	Primary	Virginia Chomitz	Virginia.Chomitz@tufts.edu
20	22 SUMR	Primary	Ramnath Subbaraman	Ramnath.Subbaraman@tufts.e du
20	22 SUMR	Primary	Michael Siegel	Mike.Siegel@tufts.edu
20	22 SUMR	Primary	Saloni Dev	Saloni.Dev@tufts.edu
20	23 SPRG	Primary	Dominique Michaud	Dominique.Michaud@tufts.ed
20	23 SUMR	Primary	Alice Tang	alice.tang@tufts.edu
Directed Study - Full Se	emester			

143042	Directed 9	Study		
Subje	t: Catalo	og Nbr:		
CMPH	0401			
	2023 FALL	Primary	Claire Fellman	Claire.Fellman@tufts.edu
	2024 SPRG	Primary	Patrick Vivier	Patrick.Vivier@tufts.edu
Directed Study				

143048	(	Global Health: Concepts, Conditions, and Careers				
	Subject:	Catalog	g Nbr:			
	CMPH	0313				
	2024	SPRG	Primary	Ramnath Subbaraman	Ramnath.Subbaraman@tufts.e	

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.

143049	Maternal and Child Health: Policies and Programs Using a Life-Course Perspective
Subject:	Catalog Nbr:
СМРН	0364

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.

143077		Statistical Genetics II	
	Subject:	Catalog Nbr:	
	CBUN	BS860	

143168		Law and H	ealth Care		
	Subject:	Catalo	g Nbr:		
	PH	0230			
	202	23 SPRG	Primary	Marcia Boumil	marcia.boumil@tufts.edu

This course explores health law from the perspective of those involved as healthcare clinicians, administrators and management. It surveys the broad landscape of the law as it pertains to the business of healthcare from the provider/patient relationship and informed consent of the clinician to administrative decision making such as contracts, corporations, fraud and abuse, licensure and tort reform – for those involved in the health services industry. It offers an overview of the ways in which laws influence the organization and operations of the public and private healthcare systems.

143169	į,	Public Health Law and Ethics			
	Subject:	Catalog	Nbr:		
	PH	0232			
	2022	P FALL	Primary	Marcia Boumil	marcia.boumil@tufts.edu

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.

143185		Policy Ana	lysis		
	Subject:	Catalo	g Nbr:		
	PH	0249			
	20	023 SPRG	Primary	Signe Flieger	Signe.Flieger@tufts.edu
Policyn	naking happens	at the local,	state, federal,	and even global level. Pub	olic health and health care policies
impact	our lives in a m	vriad of way	s. 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.

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.

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.

143191	Mental Health in the U.S.: Access, Services, and Policy
Subject:	Catalog Nbr:
PH	0242

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.

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

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.

143263	PA/MPH ALE Implementation

Subject: Catalog Nbr: PH 0308

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.

143299	Field Course: Experiencing city-level public health department services and challenges		
Subject	Catalog Nbr:		
PH	0256		

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

143417	What is o	What is cancer and why should we care?					
Subje	ct: Catal	Catalog Nbr:					
BIED	0352						
	2022 SUMR	Primary	Revati Masilamani	Revati.Masilamani@tufts.edu			

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.

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

143418	1	What does it mean to be a "normal" cell?					
	Subject:	Catalog Nbr:					
	BIED	0356					
	2022	SUMR	Primary	Revati Masilamani	Revati.Masilamani@tufts.edu		
In order to learn how cancer cells act abnormally, we must first learn how a normal cell functions. In this							

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.

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

143419 Is our genome unchanging?

Subject: Catalog Nbr:

BIED 0361

2022 SUMR Primary Revati Masilamani Revati.Masilamani@tufts.edu

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.

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

143420 What can go wrong in cancer cells?

Subject: Catalog Nbr: BIED 0366

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

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

143421 How does cancer make us sick?

Subject: Catalog Nbr: BIED 0371

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

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

143422 How do we treat cancer?

Subject: Catalog Nbr: BIED 0377

2022 SUMR Primary Revati Masilamani

Revati.Masilamani@tufts.edu

This course focuses on how cancer is diagnosed and treated, emphasizing the problems that arise when treating cancers as an organ-based, rather than cell-based disease. We will discuss the current diagnostic techniques and treatments and their strengths and limitations, and look forward to how breakthroughs in

DNA sequencing technology can provide us with new information to design more specific cancer drugs for better treatments in the future. After seeing the more conventional ways to treat cancer, we will take a critical look at alternative cancer therapies, and spend some time discussing how, and why, cancer occupies such a prominent place in our society and how our understanding of cancer shapes public policy for the future.

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

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

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 S	ystems		

143669	Public Health Practice Epidemiology				
Subject	: Catalog Nbr:				
PH	0252				
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:	Catalog Nbr:				
СМРН	0311				
This course focuses on the epidemiological aspects of infectious diseases, concentrating on the epidemiology					
of hacterial and viral in	fections. 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:	Catalog Nbr:		
	CMPH	0315		

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

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

143672		Minority Women's Health		
	Subject:	Catalog Nbr:		
	CMPH	0334		

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.

143796		Introduction to the Nervous System			
	Subject:	Catalog	Nbr:		
	BIED	0301			
	2022	2 SUMR	Primary	Revati Masilamani	Revati.Masilamani@tufts.edu

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 resounds to external stimuli.

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

Pre-requisites:

Basic fundamentals of animal biology (cell theory, evolution, genetics) recommended.

143797		<b>Using Neur</b>	al Signaling to	Understand Pain	
	Subject:	Catalog	Nbr:		
	BIED	0316			
	2022	2 SUMR	Primary	Revati Masilamani	Revati.Masilamani@tufts.edu

This course investigates how neurons are able to communicate with each other, through both chemical and electrical signals. the course will focus on two main components of neuronal signaling: the action potential (electrical signals) and synaptic transmission (chemical signals). Neuronal signaling enables neurons to send signals from one part of the nervous system to another and ultimately controls all of our behaviors. This course uses the experience of pain (something we can all relate to) as the framework to investigate how action potentials and synaptic transmission works.

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 Neurobiolo			biology of Add	diction	
	Subject:	Catalo	g Nbr:		
	BIED	0326			
	202	22 SUMR	Primary	Revati Masilamani	Revati.Masilamani@tufts.edu

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.

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

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:

- -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:	Catalog Nbr:		
BIED	0252		
202	22 SUMR Primary	Allison Mcqueen	No Email on file.

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.

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	How does your body digest food?			
Subjec	:: Catalog Nbr	r:			
BIED	0257				
	2022 SUMR P	rimary Allison Mcqueen	No Email on file.		

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

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

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

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

143869	ŀ	low do cells use nutrients to make energy?			
	Subject:	Catalog	g Nbr:		
	BIED	0261			
	2022	SUMR	Primary	Allison Mcqueen	No Email on file.
How do cells derive energy from the food we eat? How does the body continue to function after we have					

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

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

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

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

143870	How do we study the brain?
Subject:	Catalog Nbr:
BIED	0306

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

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

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

143871		Cells of the nervous system and Alzheimer's Disease				
	Subject:	Catalog	g Nbr:			
	BIED	0312				
	202	2 SUMR	Primary	Revati Masilamani	Revati.Masilamani@tufts.edu	

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.

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.

This course aligns with the Neurological Disorders Unit 2: What are the building blocks of our brains? of the Great Diseases high school curriculum

143872	The Neurobiology of sleep
Subject:	Catalog Nbr:
BIED	0322

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	1	Why should we care about infectious diseases?
	Subject:	Catalog Nbr:
	BIED	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:	Catalog Nbr:
BIED	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 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 w	How do we get better?			
	Subject:	Catalo	g Nbr:			
	BIED	0222				
	20	22 SUMR	Primary	Revati Masilamani	Revati.Masilamani@tufts.edu	

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.

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 a basic understanding of cell biology (how cells use receptors to sense their environment and communicate).

This course aligns with Infectious Disease Unit 5: How do we get better? of the Great Diseases high school curriculum

144012	Public Health Assessment: Data, Determinants, and Systems				
Subject:	Catalog	g Nbr:			
PH	0202				
20	022 FALL	Primary	Linda Hudson	Linda.Hudson@tufts.edu	
20	022 FALL	Primary	Signe Flieger	Signe.Flieger@tufts.edu	
20	022 SUMR	Primary	Ndidiamaka	Ndidiamaka.Amutah_Onukag	
			Amutah-Onukagha	ha@tufts.edu	
20	023 FALL	Primary	Susan Koch-Weser	Susan.Koch_Weser@tufts.edu	
20	023 SPRG	Primary	Michael Siegel	Mike.Siegel@tufts.edu	
20	024 SPRG	Primary	Virginia Chomitz	Virginia.Chomitz@tufts.edu	

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.

144013	The Nuts and Bolts of U.S. Health Care
Subject:	Catalog Nbr:
PH	0243

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.

144095	Public Health Action: Programs, Policy, and Advocacy					
	Subject:	Catalog	g Nbr:			
	PH	0203				
	202	22 FALL	Primary	Jamie Morgan	Jamie.Morgan649065@tufts.e du	
	202	22 SUMR	Primary	Michael Siegel	Mike.Siegel@tufts.edu	
	202	23 SPRG	Primary	Linda Hudson	Linda.Hudson@tufts.edu	
	202	24 SPRG	Primary	Wenhui Feng	Wenhui.Feng@tufts.edu	

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.

144331	Applied Q			
	Subject: Catalo	g Nbr:		
	CMPH 0209			
	2022 FALL	Primary	Patrick Vivier	Patrick.Vivier@tufts.edu
	2023 FALL	Primary	Paul Beninger	Paul.Beninger@tufts.edu

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.

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

144361		Obesity: Ca	uses and Cha	llenges	
	Subject:	Catalog	g Nbr:		
	BIED	0266			
	202	2 SUMR	Primary	Allison Mcqueen	No Email on file.

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.

The Great Diseases Alignment: This course aligns with Metabolic Disease Unit 3 of the Great Diseases high school curriculum.

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?"

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

144387	Directed Study
Subjec	: Catalog Nbr:
СМРН	0400

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

144465	Program Planning for Public Health Interventions				
	Subject:	Catalo	g Nbr:		
	PH	0254			
	2023	SPRG	Primary	Uchenna Ndulue	Uchenna.Ndulue@tufts.edu
	2024	SPRG	Primary	Jacob van den Berg	jacob.vandenberg@tufts.edu

144466	Health Economics				
	Subject:	Catalog	g Nbr:		
	PH	0255			
	2024	4 SPRG	Primary	Wenhui Feng	Wenhui.Feng@tufts.edu

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 ask 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.

Subject:	Catalog Nbr:	
UCW	0050	
	•	

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

144823	Global Health and Migration
Subject:	Catalog Nbr:
PH	0245

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

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	

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.

144878	1	Why should we care about infectious diseases?				
	Subject:	Catalog	Nbr:			
	BIED	0202				
	2022	2 SUMR	Primary	Revati Masilamani	Revati.Masilamani@tufts.edu	

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

144976	PA/MPH Integration of Public Health					
	Subject:	Catalo	g Nbr:			
	PH	0263				
	202	2 FALL	Primary	Fernando Ona	Fernando.Ona@tufts.edu	
	202	2 FALL	Primary	Mercedes Colangelo	Mercedes.Colangelo@tufts.ed	
			•	•	u	
PA/MP	H Integration of F	Public Heal	th for students	matriculating in the MPH pro	gram in Spring 2020.	

145055 Consulting in Health Care: Principles and Practices
Subject: Catalog Nbr:
PH 0257

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

145057 Research Methods in Public Health

Subject: Catalog Nbr:
CMPH 0289
2022 FALL Primary Kaitlin Sawatzki No Email on file.

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.

145233	F	Health Care Activism, Community Health, and Patient-Centered Research					
	Subject:	Catalo	g Nbr:				
	PH	0282					
	2023	SPRG	Primary	Thomas Concannon	Thomas.Concannon@tufts.ed u		

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

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.

145308	Selected Topics in Global Health: Exotic Diseases and Far Away Places
Subject:	Catalog Nbr:

CMPH 0370
2024 SPRG Primary Richard Niska Richard.Niska@tufts.edu

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 willinclude Haiti, Iraq, Kosovo, Nigeria, and the United States. I will share myreal-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.

145422		Health Messaging in the Media			
	Subject:	Catalog	g Nbr:		
	PH	0274			
	202	23 SUMR	Primary	Daniel Childs	Daniel.Childs@tufts.edu

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

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

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

Employing the COVID-19 pandemic crisis as an overarching case study, this course will introduce participants to the important principles of newsworthiness, using specific examples of health news coverage to detail how major news organizations make editorial decisions. Students will then delve into concepts such as journalistic storytelling and designing a pitch – critical elements for communicating effectively with reporters, producers and editors. The course will also explore the way news organizations use social media to both gather and report health and medical information. Participants will examine some of today's most pressing health issues

from the perspective of responsible medical journalism, and each student will ultimately craft and pitch their own ideas for coverage on a current and important public health issue to a news media organization, social media influencer, health blog or other approved outlet. Guest lecturers – both from media organizations and those who work with the media – will provide insights on their experiences.

145426	6 Writing About Health & Communicating Data				
	Subject:	Catalo	g Nbr:		
	PH	0275			
	2024	SPRG	Primary	Sabrina Kurtz-Rossi	Sabrina.Kurtz_Rossi@tufts.ed

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.

145717	Pharmacoepidemiology and Regulation
Subject:	Catalog Nbr:
СМРН	0371

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.

145738		Statistical Perspectives of Clinical Trials
	Subject:	Catalog Nbr:
	CMPH	0372

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

willbegivenatthebeginningofthecourse, and some real-worldclinical trial designs will be introduced at the conclusion of the course.

Meera.Gatlin@tufts.edu

#### Course Bulletin

Subject: CMPH 0329 Food Protection for the Veterinary Professional

Catalog Nbr:
0329

2024 SPRG Primary Meera Gatlin

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.

Subject: Catalog Nbr:
PH 0276
2023 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

U.S. Health CareSubject:<br/>PHCatalog Nbr:<br/>PH02772022 FALL<br/>2024 SPRGPrimary<br/>PrimaryRobert Seifert<br/>Vanessa Nicholson-RobinsonRobert.Seifert@tufts.eduVanessa.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	Qua	Qualitative Methods and Data Analysis				
	Subject:	Catalog Nbr:				
	PH	0290				
	2023 F/	ALL Primary	Karen Errichetti	Karen.Errichetti@tufts.edu		

2024 SPRG Primary Saloni Dev Saloni.Dev@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.

# 145850 Analysis of Multilevel and Longitudinal Data Subject: Catalog Nbr:

PH 0291

2023 SUMR Primary Misha Eliasziw Misha. Eliasziw@tufts.edu

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.

145872	Current To	pics in Public	Health	
Subject	Catalog	Nbr:		
PH	0278			
2	023 SUMR	Primary	Susan Koch-Weser	Susan.Koch_Weser@tufts.edu

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.

145938		Biblio-PHILES (Public Health in Literature and Excerpts from Scholars)
	Subject:	Catalog Nbr:
	CMPH	0215

2023 FALL Primary Meera Gatlin Meera.Gatlin@tufts.edu

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.

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

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

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

145957 DVM/MPH Clinical Rotations

Subject: Catalog Nbr:

CMPH 0415

2023 FALL Primary Meera Gatlin Meera.Gatlin@tufts.edu

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.

146175 Qualitative Methods in Clinical Spaces

Subject: Catalog Nbr:

CMPH 0325

2024 SPRG Primary Karen Errichetti Karen. Errichetti@tufts.edu

This course introduces MD-PhD students to qualitative theory and methods that can be used to support research, evaluation, and quality improvement work at the intersection of public health and clinical medicine. In addition to describing the theoretical basis for qualitative inquiry, this course helps students determine how to develop actionable qualitative research questions and select rigorous study designs to answer them in the field. Students will be exposed to a variety of qualitative data collection approaches including interviewing, focus groups, and ethnographic strategies such as photo elicitation. Special attention will be paid to implementation of qualitative methods to collect timely information for the evaluation of interventions in health care settings serving diverse communities.

146302 Data Visualization for Public Health I

> Subject: Catalog Nbr: CMPH

0326

2024 SPRG Primary Owais Gilani Owais.Gilani@tufts.edu

While rigorous statistical analysis is a crucial component of any quantitative scientific study, the analysis alone is of limited utility if the results cannot be effectively communicated to relevant audiences. The art of scientific storytelling is greatly enhanced by including exciting and appropriate visualizations that help us understand both the underlying data and the statistical analysis performed. However, misleading graphical displays also have the power to distort interpretation and undermine public understanding. In this course, students will be introduced to various traditional and modern forms of data visualizations and their uses and misuses. They will learn how to create these displays using the statistical software R, how to understand and correctly interpret them, and how to effectively discuss them with various audiences.

146303 **Data Visualization for Public Health II** 

> Subject: Catalog Nbr:

**CMPH** 0327

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

146452 **Introduction to Systematic Review** 

> Subject: Catalog Nbr:

PH 0280

> Shayesteh.Jahanfar@tufts.edu 2023 FALL Primary Shayesteh Jahanfar

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

146453		Intermediate Systematic Review				
	Subject:	Catalo	g Nbr:			
	PH	0281				
	202	4 SPRG	Primary	Shavesteh Jahanfar	Shayesteh.Jahanfar@tufts.edu	

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

146454	Skills and Tools for Engaged Practice I (STEP I)						
	Subject: Catalog	g Nbr:					
	PH 0311						
	2023 FALL	Primary	Alice Tang	alice.tang@tufts.edu			
	2023 FALL	Primary	Signe Flieger	Signe.Flieger@tufts.edu			

Skills and Tools for Engaged Practice (STEP) I is the first of a three-course sequence designed for students completing the MPH degree. This course enables students to plan their MPH training experience and future public health career, while acquiring knowledge, skills, and perspectives essential for addressing critical public health challenges. This course includes didactic sessions on foundational public health skills, such as literature reviews, citation management, and ethics. Students will work in small groups with the instructor to discuss public health interests, plan their MPH experience, and identify potential organizations for the Applied Practice Experience (APE). Additionally, students will explore topics, mentors, projects, and methods for the culminating Integrative Learning Experience (ILE).

146512		Public He	alth Education		
	Subject:	Catalog Nbr:			
	CMPH	0452			
	202	23 FALL	Primary	Ylisabeth Bradshaw	libby.bradshaw@tufts.edu

This is a career development course for 4th year MD/MPH students interested in enhancing and expanding their public health educator skills to potentially become clinician/public health educators. Fourth year students participating in this course will be mentored by public health faculty to facilitate and plan sessions in the Public Health Integration Seminar that they participated in as 1st, 2nd, and 3rd year students. In addition, they will participate in course planning, skill development, student assessment, and session and course evaluation.

146517	Trauma, Trauma-Informed Care, Recovery and Resilience



Skills and Tools for Engaged Practice II (STEP II)			
Subject: Cata	og Nbr:		
PH 0312			
2023 FALL	Primary	Signe Flieger	Signe.Flieger@tufts.edu
2024 SPRG	Primary	Alice Tang	alice.tang@tufts.edu

Skills and Tools for Engaged Practice (STEP) II is the second of a three-course sequence designed for students completing the MPH degree. This course enables students to progress through their MPH training experience while acquiring knowledge, skills, and perspectives essential for addressing critical public health challenges. This course includes didactic sessions on budgeting, management, leadership, and working with professionals from other professions and sectors. Students will work in small groups with the instructor to refine their course plan and complete their proposals for the Applied Practice Experience (APE) and the culminating Integrative Learning Experience (ILE).

146521	Skills and Tools for Engaged Practice III (STEP III)				
	Subject	: Catalo	g Nbr:		
	PH	0313			
	2	023 FALL	Primary	Signe Flieger	Signe.Flieger@tufts.edu
	2	024 SPRG	Primary	Alice Tang	alice.tang@tufts.edu

Skills and Tools for Engaged Practice (STEP) III is the final course of a three-course sequence designed for students completing the MPH degree. In this course, students will submit and present their Applied Practice Experience (APE) deliverables, obtain support for completing their Integrative Learning Experience (ILE), and continue to develop skills for their public health career. Students will have the opportunity to participate in a variety of workshops and modules to advance their knowledge, skills, and perspectives across an array of public health topics.

146570		Global One Health: How Intersections between Humans, Animals & the Environment Shape Public Health			
	Subject:	Catalo	g Nbr:		
	PH	0218			
	202	24 SPRG	Primary	Jonathon Gass	Jonathon.Gass@tufts.edu

Worldwide, increasing, and significant public health challenges result from complex and inextricable interactions between humans, animals, and the environment, necessitating a One Health systems approach to addressing these challenges. This interdisciplinary course will introduce the concept of One Health as an increasingly important approach to a holistic understanding of the interrelationships between human, animal, and environmental health. Among the topics covered are bi-directional impacts of human and animal health (with particular emphasis on zoonotic diseases), the impact of earth's changing ecology on health of populations, anthropogenic drivers of emerging and re-emerging viruses in human populations, issues of food

and water security, animals as sentinels of environmental hazards, emergency preparedness, and the benefits of comparative medicine among animals and humans.