# Community Health Program Summer Courses 2016

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<th>Course Code</th>
<th>Course Title</th>
<th>Time Block</th>
<th>Prerequisites</th>
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<tr>
<td>CH 54/CEE 54</td>
<td>Fundamentals of Epidemiology</td>
<td>ONLINE COURSE</td>
<td>None, but previous coursework in statistics or research design helpful.</td>
<td>This is an introductory course in the epidemiologic method intended for undergraduate students. Course participants will gain a familiarity with basic epidemiologic approaches and an ability to evaluate the results of epidemiologic studies. Examples from environmental and occupational epidemiology will be used in conjunction with material addressing health system and health service research topics. A primary focus of the course is in becoming a critical consumer of the epidemiologic literature. The course text is Epidemiology in Medicine by Hennekens and Buring.</td>
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<tr>
<td>CEE 194A</td>
<td>Introduction to GIS</td>
<td>TBA</td>
<td></td>
<td>Guided independent study of an approved topic at the graduate level. Credit as arranged. Recommendations: Consent of instructor.</td>
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<td>Geographic Information Systems (GIS) are computer-based systems used to enter, store, transform, map, analyze, and interpret spatial data. A variety of disciplines make use of GIS, including city and regional planning, health sciences, geography, geology, cartography, environmental science, and civil &amp; environmental engineering. In this introductory course, we will study how GIS systems work, how data is compiled and distributed, and how to use software tools to map and analyze GIS data.</td>
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<tr>
<td>CH 194</td>
<td>Global Health Crises: Epidemics, the Environment, and Public Policy</td>
<td>Tufts in Talloires</td>
<td></td>
<td>Find out why the control of global disease requires not only solid science but also effective public policy and politics. This course examines the growing health challenges posed by both emerging and reemerging diseases associated with environmental degradation, the increasing mobility of people, global climate change, and changes in human host factors. We probe the pathologic basis of diseases such as Ebola, H1N1, HIV/AIDS, malaria, anthrax, small pox, avian flu, and the drug-resistant strains of familiar diseases such as tuberculosis, and review how they are transmitted and distributed globally looking across person, place, and time. We will also provide opportunities for class participants to gain access and familiarity with the many international health and environmental organizations in Geneva to gain a more “hands on” appreciation of how global intervention strategies are conceived, implemented and assessed as to their efficacy.</td>
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<tr>
<td>CH 180 (C)</td>
<td>Internship</td>
<td>12 Week Session Wed 9:00-10:30 am</td>
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<td>The internship, a one-credit field placement (CH 180) is an integral part of the Community Health Department. It is designed to offer juniors and seniors the opportunity for &quot;hands-on&quot; experience in the health care field. Placements are available in diverse settings that allow the theories of the classroom to be applied and evaluated in real-life situations. Internships are available in hospitals, hospices, neighborhood health centers, government agencies at the city, state and federal levels, consulting firms, non-profit agencies, and health advocacy and public interest groups. The internship is designed to enable both agency and student to benefit from the experience. Placements offer students valuable opportunities for interacting with professionals and clients/consumers in the health field. MUST ATTEND MANDATORY CLASS MEETINGS, and two additional individual meetings.</td>
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### CH 56 - Introduction to Global Health
Kosinski

**Time Block:** T Th 9:00-12:30

**Stand Alone Major = Core**
**Plan B = Frameworks/Comparative**

This is an introductory level course in global health that is designed for freshmen- and sophomore-level students interested in global health, community health, public health, and the health sciences. The course focuses primarily on health in low- and middle-income countries. The main principles of global health will be covered along with topics such as the following: health determinants and health disparities; socioeconomic status and health; human rights; culture and health; maternal and child health; water, sanitation, and hygiene; parasitic diseases and the Neglected Tropical Diseases (NTDs); HIV/AIDS, tuberculosis, and malaria; and occupational health. Class participation is an important part of the learning process and is highly encouraged.

### CH 99 - Behavioral Determinants of Health
Cohen

**Time Block:** ONLINE COURSE

**Stand Alone Major = Mid-level CH elective**
**Plan B = Frameworks**

Introduction to selected contemporary problems in community health. Please see departmental website for specific details.

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**Summer Specific Description:** Health professionals understand that human behaviors impact health and well-being. This course will take a multidisciplinary approach to understanding the impact of human behaviors on health, and explore foundational concepts – for example, “stress” – from a variety of social science perspectives. We will discuss the work of researchers and practitioners which investigates the influences and interactions of psychological, cultural, and biological factors on well-being and promoting healthful change. Students gain analytical skills to think critically about the behavioral determinants of health.

### EC13A - Statistics
Bianconi

**Time Block:** T WTh 1:30-3:45

**Stand Alone Major = Statistics alternative**
**Plan B = Statistics alternative**

An introduction to basic statistical techniques that are used in economic analysis. Major topics include probability, discrete random variables, continuous random variables, sampling distributions, estimation, and hypothesis testing. The course will conclude with some theory and applications of the linear regression model. Required of all economics majors.

Prerequisites: EC 5, MATH 30 and 14 (formerly MATH 5 and 6), or MATH 32 (formerly MATH 11)

### ES 56 - Probability and Statistics
Chudyk

**Time Block:** MW 6:00-9:30

**Stand Alone Major = Statistics alternative**
**Plan B = Statistics alternative**

Application of the concepts of probability and statistics to problem solving in engineering systems. Topics include data reduction techniques, probability, probability distribution functions, error propagation, sampling distributions, estimation, hypothesis testing, simple comparative experiments, and linear regression. Examples are drawn from a variety of disciplines, including the environment, materials, manufacturing, computing, and process design. Recommendations: MATH 42 (formerly MATH 13)

### Math 21A - Introductory Statistics
Garant

**Time Block:** Online Course anytime

**Stand Alone Major = Statistics alternative**
**Plan B = Statistics alternative**

Descriptive data analysis, sampling and experimentation, basic probability rules, binomial and normal distributions, estimation, regression analysis, one and two sample hypothesis tests for means and proportions. The course may also include contingency table analysis, and nonparametric estimation. Applications from a wide range of disciplines.

This online course will have two proctored exams. For more information about how exams are conducted, see "Proctor Information" on the Tufts Summer Session Website.

Prerequisites: High school algebra & geometry.
**NUT 101 (A or B)**  
**Human Nutrition**  
McKay  

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**Course Description**  
Stand Alone Major = elective from other dept.  
Plan B = Science of Health  

To provide an understanding of basic nutrition science to non-science majors and students with a limited scientific background. Students will become familiar with: the principles of diet planning, government standards, and food labeling; the biological functions and food sources of each nutrient; energy balance, weight management, and physical activity; the role of nutrition in chronic disease development; nutrition throughout the life cycle; food safety issues; and current nutrition-related controversies. This course meets the science requirement for undergraduate non-science majors. It is not acceptable for biology credit for biology majors.

**Psych 13B**  
**Social Psychology**  
Sommers  

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| Stand Alone Major = elective from other dept.  
Plan B = Frameworks |

How situations and the people around us influence our thoughts, feelings, and behavior. Aggression, attitudes, attraction, attribution, conformity, group processes, helping behavior, non-verbal behavior, self-knowledge, social cognition, social influence, and stereotypes and prejudice. Applications of social psychological concepts to topics such as health, intergroup relations, and law. Recommendations: PSY 0001, PSY 0009, or Jr/Sr Standing.

**Psych 31A**  
**Statistics for Behavioral Science**  
Barch  

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| Stand Alone Major = Statistics alternative  
Plan B = Statistics alternative |

Statistical methods for the treatment of data in the behavioral sciences. Descriptive and inferential methods will be considered. Computers will be used to explore conceptual issues and analyze data. One laboratory period in addition to lectures. Requires completion of PSY 0001 or PSY 0009 or CD 0001 or equivalent.

**Psych 32B**  
**Experimental Psychology**  
Barch  

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| Stand Alone Major = Research Methods alternative  
Plan B = Inquiry and Evidence |

A laboratory based on individual and group experiments designed to familiarize students with research methods in psychological investigations. Required for psychology majors. Lectures and one laboratory period. Requires completion of PSY 0031 or BIO 0132 or EC 0013 or MATH 162.