

Student Handbook

UC Davis Master of Public Health Degree Program

2009-2010 Academic Year



Table of Contents

Welcome	. . . . .	3
Program at a Glance	. . . . .	4
Program History and Overview	. . . . .	5
Program Mission	. . . . .	6
Program Goals, and Objectives	. . . . .	7
Learning Objectives	. . . . .	8
Public Health Values	. . . . .	10
Principles of Community	. . . . .	11
Expectations of Professional Conduct	. . . . .	12
Admission Requirements and Process	. . . . .	13
MPH Degree Requirements	. . . . .	14
Transfer of Credit	. . . . .	14
Dual Degrees	. . . . .	14
Areas of Emphasis	. . . . .	14
Practicum Placement (Culminating Experience)	. . . . .	15
Advisors	. . . . .	15
Curriculum	. . . . .	16
Required Courses	. . . . .	16
Elective Courses	. . . . .	16
Program faculty	. . . . .	17
Resources for students	. . . . .	21
Master's Degree in Public Health Core Competencies (ASPH)	. . . . .	22

Welcome

to the UC Davis Master of Public Health Program.

I congratulate you on joining a new generation of health professionals focused on improving the lives of the many through the practice of public health.

The UC Davis Master of Public Health Program aims to help meet state and national need for public health professionals. UC Davis is blessed with many unique resources—collectively known as “The UC Davis Advantage”—that contribute to a high-quality MPH program. The campus has a national and world reputation in many areas of public health, including epidemiology, biostatistics, infectious diseases, and informatics. Our location near the state capital and the headquarters of the California Department of Public Health (CDPH) has facilitated long-standing collaboration in research and teaching that now culminate in the establishment of the UCD MPH Program.

We look forward to an exciting educational experience in this and the coming years.

A handwritten signature in black ink that reads "SA McCurdy MD MPH". The signature is written in a cursive, flowing style.

Stephen A. McCurdy, MD, MPH
Professor and Director, UC Davis MPH Program

UCD MPH Program at a Glance

Program Characteristic	Description
Program description	Accredited 56-quarter-unit program leading to the Master of Public Health (MPH) degree.
Admission requirements	<p>1. The program is open to applicants with a baccalaureate degree (GPA \geq3.0).</p> <p>2. Complete and submit results from the Graduate Record Exam (GRE). Applicants must take the GRE by the December test date to insure the scores arrive by the application deadline. The only exception to this are current medical students or holders of the MD/DO degree, who may submit MCAT scores. All GRE and MCAT scores must be taken within 7 years of application.</p> <p>3. Students for whom English is not the native language are required to take the TOEFL and achieve a minimum score of 600 (paper examination), 213 (computer-based examination) or 82 (internet-based examination).</p> <p>4. Three letters of recommendation.</p> <p>5. Goals Statement & CV.</p>
Graduation requirements	<p>56 quarter units to include</p> <ul style="list-style-type: none"> 27 units in required courses 19 units in electives, including at least three courses in Area of Emphasis 10 units practicum (SPH 297) <p>Overall GPA of at least a B-minus (2.7) grade in each core course AND a GPA of at least 3.0 for all core courses combined AND a GPA of at least 3.0 for all courses combined that are applied to the MPH degree.</p>

Program History and Overview

Public health has developed over the last 150 years as scientific knowledge about disease and its control grew, and the need developed to bring this knowledge to the public. In 1866, the New York City Health Department became the first public health agency in the U.S., with others following by 1900. The focus of these public agencies and services expanded from sanitation to laboratory research, epidemiology, individual health care, and health promotion. With the Johnson Administration's War on Poverty, community health centers (CHCs) were established to provide primary health care services to community populations, especially the "medically underserved." Since then, public health has fulfilled the role of improving health and life expectancy for many different populations, with the focus being on population-based research and strategies.

UC Davis has long been a leader in public health research and outreach. In the last several years it has become clear that the need for well-trained public health professionals was not being met by California's existing Master of Public Health programs. UC Davis therefore decided to capitalize on its strength in public health (with its particular concentration in the UCD School of Medicine and the UCD School of Veterinary Medicine) and its location near the state capital.

The resulting program—jointly sponsored by the UCD School of Medicine (through the Department of Public Health Sciences) and the UCD School of Veterinary Medicine—offers a strategic vision of future societal health needs and the training of professionals to achieve that vision. The program reflects the "UC Davis Advantage," drawing upon the disciplines of the many outstanding programs of the University, in particular the Graduate Group in Epidemiology, the Graduate Group in Nutrition, the Center for Health Services Research, the School of Law, and the Master of Preventive Veterinary Medicine Program. Finally, a major strength of the program lies in its collaboration with the California Department of Public Health (CDPH). CDPH personnel are involved at all levels, including planning, teaching, and development of field placements. This collaboration, together with campus resources, makes the UC Davis Master of Public Health Program unique.

The curriculum has been developed to provide the academic underpinnings for a professional career in public health. A required core of class work in epidemiology, biostatistics, environmental and occupational health, health services and administration, and social and behavioral sciences allows the student to develop the necessary fundamental knowledge base. Students also select an Area of Emphasis according to their professional goals. Finally, students attend a seminar series addressing a wide range of topics relevant to public health and complete a field project (capstone experience). The field project allows the student to apply public health knowledge and principles learned in the classroom in a real-world setting. Successful completion of the curriculum leads to the MPH degree and opens the door to a career in public health.

The UCD MPH Program admitted its first class in the Summer of 2002. We are fully accredited by the Council for Education for Public Health (CEPH) since 2005. We received authorization from the campus to open the program to students without a clinical professional health degree in 2007. This is an exciting development for the program, because it allows us to provide professional public health education to an important segment of the future public health work force.

Program Mission

The UCD MPH Program has as its core mission the education of future leaders in public health. In so doing we serve the needs of our main constituents: public health practitioners wishing to develop further professional skills, public health agencies in need of trained public health practitioners, and the community at-large, which benefits from having a well trained professional public health work force.

UCD MPH Program Mission:

Our mission is to develop the public health leaders of the future by providing a high-quality Masters degree curriculum in partnership with the public health community.

We accomplish this by drawing on the unique resources of the UCD MPH Program. These include the collaborative efforts of the School of Medicine, School of Veterinary Medicine, and other academic units, with strength in general public health, agricultural and rural health, reproductive health, cancer, women's health, health disparities, epidemiologic and biostatistical methodology, infectious and zoonotic diseases, health economics, health-care quality and outcomes, and others. Second, we promote a practical public health focus through our historically strong partnership with federal, state, and local public health communities, including the California Department of Public Health, in teaching, student mentorship and field placements, research, direction, and support for the UCD MPH Program.

The unique strengths UC Davis brings to this task are manifold. Among the most important is our proximity to and historical partnership with the CDPH. The CDPH is the largest health department in the nation. Its talent bench is deep and broad, with cutting-edge programs in tobacco control, chronic disease, nutrition, maternal and child health, infectious diseases, and other areas of public health.

The UCD School of Medicine, Department of Public Health Sciences, the administrative home of the UCD MPH program, has a long history of fruitful collaboration with the CDPH. Indeed, one of the past department chairs was previously the Director of the CDPH. CDPH personnel have played a key role in the development of the UCD MPH Program, including planning, teaching of courses, preceptoring MPH students for Practice Placements, and financial support. Among state health departments, CDPH holds a preeminent leadership position, and the UCD MPH program is uniquely situated to capitalize on the educational and research benefits that accrue.

UCD is one of the few institutions that is home to both a medical and veterinary medicine school. The UCD MPH program is unique in that it is jointly sponsored by the School of Medicine and School of Veterinary Medicine. This partnership is a major strength when addressing human health issues related to nutrition, zoonotic infectious diseases, and bioterrorism. UCD also hosts a number of academic units focusing on important problems in public health. These include the Western Center for Agricultural Safety and Health; Graduate Groups in Epidemiology, Nutrition, Pharmacotoxicology, and others; the Center for Occupational and Environmental Health; the Center for Advanced Studies in Nutrition and Social Marketing; the Cancer Research Program; the Violence Prevention Research Program; and the Center for Health Services Research in Primary Care. Others include the MIND Institute, focusing on childhood neurological development, and the Genome Center. The campus's many strengths attract a dynamic faculty and high-caliber students, contributing importantly to UCD's academic vigor.

Program Goals and Objectives

The programmatic goals for the UCD MPH program flow naturally from the Mission Statement cited above. The major goals lie in the areas of instruction, research, and service. Each of the goals is supported by specific objectives describing how the program intends to realize its goals, and thereby carry out its mission.

Instructional Goals:

1. Educate MPH students in the core public health content areas necessary for a career and leadership in public health.
2. Provide practicum placements with the public health community as a setting for integrating theory and practice for locally relevant public health problems.
3. Encourage partnership with School of Medicine, School of Veterinary Medicine, other campus faculty, and the public health community in development and delivery of program curriculum.
4. Provide continuing education with and for the local medical and public health community.

Instructional Objectives:

- 1a. Require satisfactory completion of identified coursework in the five core areas of public health: epidemiology, biostatistics, health services administration, environmental and occupational health, and social and behavioral sciences.
- 1b. Require participation in the Topics in Public Health Seminar featuring leading professionals and issues in public health.
- 1c. Require satisfactory completion of three courses in an identified Area of Emphasis focusing on a specific area of public health.
- 2a. Require satisfactory completion of a practicum.
- 3a. Include faculty from the School of Medicine, School of Veterinary Medicine, and the California Department of Public Health on curricular development committees and as co-faculty for selected core courses.
- 4a. Provide an annual Continuing Education symposium drawing for community practitioners.

Research Goal:

1. Maintain and support a program of research addressing public health.

Research objectives:

- 1a. Develop or maintain at least one current public health research project for each faculty instructor of record in the core MPH courses.

Service Goals:

1. Collaborate with institutional partners by providing consultation and student involvement with faculty mentorship for study and improvement of public health programs.
2. Establish linkages with public health and community organizations through field placements, research, and other activities.

Service Objectives:

- 1a. Each of our MPH students will complete a Practice Placement as Culminating Experience in which they obtain hands-on experience working with a local or state public health agency or program and including UCD faculty mentorship. Through this experience, our students and faculty will provide service to the public health community while gaining valuable skills.
- 2a. Encourage service activities in accordance with existing campus professional advancement requirements (for faculty) and by promoting a culture of community service through programmatic teaching and research activities (for faculty and students).

Learning objectives

The UCD MPH Program has detailed learning objectives for each course as well as global learning objectives for the program as a whole. The UCD MPH Program has adopted programmatic learning objectives adapted from Association of Schools of Public Health Core Competencies Project (<http://www.asph.org/>)

These core competencies were developed over a years-long process involving numerous individuals and organizations in public health. In keeping with our mission to educate today the public health professionals of tomorrow, we believe that these consensus competencies should form the basis of the learning objectives for our program. Each of the Areas of Emphasis shares these same learning objectives, although their realization is in a setting related to their Area of Emphasis. Students master these objectives in the course of class work and the Practice Placement (EPP 297).

The programmatic learning objectives are organized according to discipline-specific competencies and interdisciplinary, or cross-cutting, competencies. These are listed below, and the specific competencies are included on page 9. page

Discipline-Specific Competencies:

A. Biostatistics

Biostatistics is the development and application of statistical reasoning and methods in addressing, analyzing and solving problems in public health; health care; and biomedical, clinical and population-based research.

B. Environmental health sciences

Environmental health sciences represent the study of environmental factors including biological, physical and chemical factors that affect the health of a community.

C. Epidemiology

Epidemiology is the study of patterns of disease and injury in human populations and the application of this study to the control of health problems.

D. Health policy and management

Health policy and management is a multidisciplinary field of inquiry and practice concerned with the delivery, quality and costs of health care for individuals and populations. This definition assumes both a managerial and a policy concern with the structure, process and outcomes of health services including the costs, financing, organization, outcomes and accessibility of care.

E. Social and behavioral sciences

The social and behavioral sciences in public health address the behavioral, social and cultural factors related to individual and population health and health disparities over the life course. Research and practice in this area contributes to the development, administration and evaluation of programs and policies in public health and health services to promote and sustain healthy environments and healthy lives for individuals and populations.

Interdisciplinary, or cross-cutting, competencies:

F. Communication and informatics

The ability to collect, manage and organize data to produce information and meaning that is exchanged by use of signs and symbols; to gather, process, and present information to different audiences in-person, through information technologies, or through media channels; and to strategically design the information and knowledge exchange process to achieve specific objectives.

G. Diversity and culture

The ability to interact with both diverse individuals and communities to produce or impact an intended public health outcome.

H. Leadership

The ability to create and communicate a shared vision for a changing future; champion solutions to organizational and community challenges; and energize commitment to goals.

I. Public health biology

The ability to incorporate public health biology – the biological and molecular context of public health – into public health practice.

J. Professionalism

The ability to demonstrate ethical choices, values and professional practices implicit in public health decisions; consider the effect of choices on community stewardship, equity, social justice and accountability; and to commit to personal and institutional development.

K. Program planning

The ability to plan for the design, development, implementation, and evaluation of strategies to improve individual and community health.

L. Systems thinking

The ability to recognize system level properties that result from dynamic interactions among human and social systems and how they affect the relationships among individuals, groups, organizations, communities, and environments.

Public Health Values Animating the UCD MPH Program

The UCD MPH Program commits itself to public health values, concepts, and ethics underlying our mission to “educate today the public health leaders of tomorrow.” Chief among these values are:

- **Health:** The paramount public health value is health itself. Good health is, if not an absolute prerequisite, an important basis for a happy and productive life. Public health practitioners have responsibility to promote conditions conducive to good health in the population.
- **Community:** The community is the fundamental unit in which public health is practiced. Interventions designed to improve health, while ultimately affecting individuals, are nevertheless focused on populations and communities. Public health practitioners must also be a part of the communities for which they care.
- **Respect for individuals:** While focusing on the community as a whole, conflicts may arise in which the freedom of individuals is affected. Public health practitioners must carefully consider the dignity of individuals and work with communities in a manner to minimize deleterious effects for individuals.
- **Professionalism:** Public health practitioners must maintain high standards for their work. This applies to those engaged in education, research, and practical application. It includes the necessity of remaining apprised of important developments in the field and abiding by generally recognized ethical standards in the conduct and publication of research. The effectiveness of the public health workforce is closely associated with its public standing and reputation. Failure to maintain high professional standards of quality, honesty, and compassion will inevitably lead to decreased effectiveness and unnecessary harm to the public's health.

Professionalism in the student context is similar to that expected of practicing professionals. Specifically, this entails being on time for classes and meetings and in handing in assignments, reliability, high standards for work product, and civility. This is especially important for the practicum assignment, where it is also expected that the student will establish and maintain a mutually agreed-upon schedule with the preceptor. Where unforeseen changes in this schedule are required, they will be communicated expeditiously and new arrangements made. It is also imperative that the student adopt a professional manner and dress for the practicum. Immodest clothing or unusual body jewelry or personal grooming that does not fit into the culture and norms for the practicum site are inappropriate. Because our MPH program will be judged by the practicing public health community based on their experience with our students, failure to follow these standards of professionalism may lead to disciplinary action, including dismissal from the program.

Principles of Community

The UCD MPH Program is an integral part of the University of California, Davis campus and subscribes to the campus-wide Principles of Community (<http://principles.ucdavis.edu/>), cited below.

"The University of California, Davis, is first and foremost an institution of **learning** and teaching, committed to **servicing** the needs of society. Our campus community reflects and is a part of a society comprising all [races](#), creeds and social circumstances. The successful conduct of the university's affairs requires that every member of the university community acknowledge and practice the following basic principles:

We affirm the **inherent dignity** in all of us, and we strive to maintain a **climate of justice** marked by respect for each other. We acknowledge that our society carries within it historical and deep-rooted misunderstandings and [biases](#), and therefore we will endeavor to foster **mutual understanding** among the many parts of our whole.

We affirm the right of [freedom of expression](#) within our community and affirm our commitment to the highest standards of **civility** and decency towards all. We recognize the right of every individual to think and speak as dictated by personal belief, to **express** any idea, and to disagree with or counter another's point of view, limited only by university regulations governing time, place and manner. We promote open expression of our individuality and our [diversity](#) within the bounds of **courtesy**, **sensitivity** and **respect**.

We confront and reject all manifestations of [discrimination](#), including those based on [race](#), [ethnicity](#), [gender](#), [age](#), disability, [sexual orientation](#), [religious](#) or political beliefs, status within or outside the university, or any of the other differences among people which have been excuses for misunderstanding, dissension or hatred. We recognize and **cherish** the richness contributed to our lives by our diversity. We take **pride** in our various achievements, and we **celebrate** our differences.

We recognize that each of us has an obligation to the community of which we have chosen to be a part. We will strive to build a true community of **spirit** and purpose based on **mutual respect** and caring."

Where students believe they have not been treated according to these principles, several levels of redress are available. First and foremost, in most cases, will be an attempt by the student to address complaints or problems with the person the student believes is acting unfairly. Should this not be feasible or satisfactory, the student may discuss the situation with the Program Director. If this does not lead to satisfactory resolution, the student may turn to Dean for Student Affairs within the School of Medicine. Further avenues are available through the School of Medicine and the general campus depending on the situation.

Expectations of Professional Conduct

The UCD MPH program is a part of the general UCD campus. Accordingly, expectations of professional conduct are campus-wide and apply to all MPH students. These expectations are shown below; updates may be available at <http://sja.ucdavis.edu/scs.html>.

All members of the academic community are responsible for the academic integrity of the Davis campus. Existing policies forbid cheating on examinations, plagiarism and other forms of academic dishonesty. Academic dishonesty is contrary to the purposes of the University and is not to be tolerated. A code of conduct for the campus community must exist in order to support high standards of behavior.

Examples of academic misconduct include:

- receiving or providing unauthorized assistance on examinations and homework meant to be completed individually
- using unauthorized materials during an examination or homework meant to be completed individually
- plagiarism - using materials from sources without citations
- altering an exam and submitting it for re-grading
- fabricating data or reference
- using false excuses to obtain extensions of time

The ultimate success of a code of academic conduct depends largely on the degree to which it is willingly supported by students themselves.

Students are expected to:

- Be honest at all times.
- Act fairly toward others. For example, do not disrupt or seek an unfair advantage over others by cheating, or by talking or allowing eyes to wander during exams.
- Take group as well as individual responsibility for honorable behavior. Collectively, as well as individually, make every effort to prevent and avoid academic misconduct, and report acts of misconduct which you witness.
- Do not submit the same work in more than one class. Unless otherwise specified by the instructor, all work submitted to fulfill course requirements must be work done by the student specifically for that course. This means that work submitted for one course cannot be used to satisfy requirements of another course unless the student obtains permission from the instructor.
- Unless permitted by the instructor, do not work with others on graded coursework, including in class and take-home tests, papers, or homework assignments. When an instructor specifically informs students that they may collaborate on work required for a course, the extent of the collaboration must not exceed the limits set by the instructor.
- Know what plagiarism is and take steps to avoid it. When using the words or ideas of another, even if paraphrased in your own words, you must cite your source. Students who are confused about whether a particular act constitutes plagiarism should consult the instructor who gave the assignment.
- Know the rules - ignorance is no defense. Those who violate campus rules regarding academic misconduct are subject to disciplinary sanctions, including suspension and dismissal.

Questions of student misconduct will be addressed initially with the Program Director. Should this not lead to satisfactory resolution, the matter will be referred to the School of Medicine and/or general campus administration, as appropriate. In all cases the policies and procedures set forth by the campus (<http://www.ucop.edu/ucophome/coordrev/ucpolicies/aos/toc.html>) will be followed.

Admission Requirements and Process

Prospective students will find application materials at our website, mph.ucdavis.edu. Further information may be obtained from:

Amber Carrere
UCD MPH Program Administrative Coordinator
University of California, Davis
One Shields Avenue, MS 1C
Davis, CA 95616-8638
530-754-4992 FAX 530-752-3239

Email: PHSInstAffairs@phmail.ucdavis.edu

Applications must be submitted online by December 1 (priority deadline) or January 15 (Final deadline) of the year of anticipated admission.

Academic requirements for admission

1. Applicants must have a baccalaureate degree from an accredited institution with at least a 3.0 grade-point average (GPA) on graduation. Degrees must be conferred before the program starts in August.

The following prerequisite courses are required for admission:

- Mathematics (equivalent at least to UC Davis' pre-calculus Math 12)
 - Biological sciences (equivalent at least to UC Davis' Biology BIS 1A and 1B or 2A and 2B courses),
 - Social sciences (for example, courses equivalent to UC Davis' General Psychology PSC 1, or Cultural Anthropology ANT 2, or Principles of Microeconomics ECN 001A, or Introduction to Sociology SOC 1 courses),
 - We recommend at least one course in chemistry (for example, courses equivalent to UC Davis' General Chemistry CHE 2A).
2. Complete and submit results from the [Graduate Record Exam](#) (GRE). For reporting scores, use the Institution Code: 4834 and Department Code: 0616. Applicants must take the GRE by the December test date to insure the scores arrive by the application deadline. The only exception to this are current medical students or holders of the MD/DO degree, who may submit MCAT scores. All GRE and MCAT scores must be taken within 7 years of application.
 3. Students for whom English is not the native language are required to take the TOEFL and achieve a minimum score of 600 (paper examination), 213 (computer-based examination) or 82 (internet-based examination). Information and an application for the TOEFL can be obtained at most US Consulates or at TOEFL® Services, Educational Testing Service.
 4. Three letters of recommendation.
 5. Personal Statement & CV.

Applications are reviewed by the Admissions and Advancement Committee. An interview may be required. Letters of acceptance or denial will be sent as soon as practicable.

Master of Public Health Degree Requirements

Satisfactory completion of 56 units as described below.

- a. Core required courses (27 units; see Curriculum)
- b. Selection of an Area of Emphasis (see Curriculum)
- c. Elective courses, including at least three from Area of Emphasis (19 units)
- d. Public Health Practicum (SPH 297, Capstone Experience; 10 units)
- e. Grade of at least a B-minus (2.7) grade in each core course AND a GPA of at least 3.0 for all core courses combined AND a GPA of at least 3.0 for all courses combined that are applied to the MPH degree.

Transfer of Credit

With the consent of the Program Director, some work taken elsewhere may be credited toward degree requirements. The limit for the transfer of such credit is six units from a non-University of California institution or up to 24 units from a University of California campus. Units accepted in transfer may not have been used to satisfy the requirements for another degree.

Dual Degrees

Some students may wish to obtain a dual degree, such as the Master in Veterinary Preventive Medicine (MPVM). Students obtaining dual degrees must meet the requirements for each degree separately. Where coursework overlaps between two degrees, a maximum of 12 units may be counted for both degrees. (For students obtaining an MPVM degree in addition to the MPH, the biostatistics courses MPM 402 and MPM 403 and the epidemiology course EPI 205A are required for both degrees and total 12 units.)

Areas of Emphasis

Students select an Area of Emphasis reflecting their professional interests. The Area of Emphasis must be declared by the end of the Fall Quarter. Change in Area of Emphasis is not encouraged, but may be made subsequently with approval of the Program Director. Currently approved Areas of Emphasis include:

- Epidemiology
- Nutrition
- Environmental Health
- Human and Zoonotic Infectious Diseases
- Veterinary Public Health
- Informatics (pending)
- General Public Health

Students select at least three elective courses within their chosen Area of Emphasis. The General Public Health option represents an individualized Area of Emphasis. Elective coursework for this option is chosen under guidance and approval of the student's advisor.

Practicum Placement as Culminating Experience

SPH 297: Public Health Practicum is a program requirement. The practicum aims to provide students with the opportunity to gain experience with a public health project in the real world. The program maintains a list of past mentors, most of whom are affiliated faculty working for the state or local health departments. Students may work with other mentors subject to approval by the program director. Students are encouraged to meet with potential mentors early in the year to identify a public health project. Such projects may involve, for example, working on a specific aspect of an ongoing health department initiative. Laboratory-based or bench-science projects are not appropriate for the practicum. Students develop a written plan for the project, which is approved by their UCD faculty advisor and the site preceptor. A form for this has been developed and is available through the program office. This is submitted to the Program Director (Dr. McCurdy) for final approval by the 5th week of the Winter Quarter.

A total of 10 academic quarter units are devoted to the practicum project, which corresponds to approximately 300 hours. The course begins in the Winter Quarter (with about 10 hours of class meeting and individual preparatory work by the student, corresponding to 2 quarter units of the total 10 units required) and continues into the Spring Quarter. Students are encouraged to get an early start on their practice placement and accordingly may receive credit toward the required 10 total units in earlier quarters. On completing the practice placement, students prepare oral and written presentation and a poster for fellow students and program faculty. Students present their reports, posters and slide presentations in digital format to the Program Director.

UCD Faculty Advisors

Incoming students will be assigned a faculty advisor. Students and advisor are required to meet during the Summer II session to review the student's academic plan. Subsequent meetings are on a quarterly basis, with additional meetings at the discretion of the student and advisor.

UCD MPH Program Advisor Responsibilities

Thank you for agreeing to serve as a faculty advisor to one or more MPH students for the duration of their studies at UC Davis. In general, the MPH advisor's role will be to serve as a mentor to the MPH Students to whom they have been assigned.

1. Establish and maintain a mentoring relationship through quarterly meetings.
2. Review planned coursework in context of graduation requirements (see Student Handbook).
3. Advise regarding selection of Area of Emphasis (see Student Handbook).
4. Advise regarding selection of electives (See Student Handbook).
4. Advise for the EPP 297 Practicum experience:
 - Selection of topic, site, and preceptor as needed
 - Review progress at mid Spring Quarter
 - Evaluate progress at completion of project (usually end of Spring Quarter)

Curriculum

Core Courses (required courses: 27 units)		Faculty	Qtr	Units
Biostatistics				
MPM 402	Medical Statistics I	Dr. Farver	Su II	4
MPM 403	Medical Statistics II	Dr. Farver	F	4
SPH 210	Public Health Informatics	Dr. Hogarth	Su II	2
Epidemiology				
EPI 205A	Principles of Epidemiology	Drs. Miller & Gold	F	4
Environmental Health Science				
SPH 262	Principles of Environmental Health Science	Dr. Bennett	F	3
Health Services Administration				
SPH 273	Health Services Administration	Drs. Leigh	W	3
Social and Behavioral Influences on Health				
SPH 222	Social and Behavioral Approaches to Public Health Issues	Dr. Cassady	W	3
Public Health Seminar				
SPH 290	Seminar in Public Health	Dr. McCurdy Dr. Schenker Dr. Leistikow Dr. Kass	Su II F W Spr	1/qtr 4 units total
Practice Placement: Culminating Experience (required course: 10 units)		Faculty	Qtr	Units
SPH 297	Public Health Practicum	Staff	W	2
SPH 297	Public Health Practicum	Staff	Spr & Sum*	8

* Students are encouraged to begin their practice placement early, and accordingly may receive credit toward the required 10 total units in earlier quarters. As of 2008/2009, we strongly encourage students to plan practicum work into the Summer Quarter, thereby leaving room for electives and a more longitudinal practicum experience.

For course availability, please see the most recent University General Catalog and official course listings. Below are recommended courses; courses not listed below may be appropriate and may be counted toward degree electives with the approval of the advisor and Program Director.

Students may choose appropriate electives in consultation with their advisor. In addition to the courses listed under the Areas of Emphasis, some additional courses are listed below which might be of interest to students. Check the MPH website for the most current information on electives. <http://mph.ucdavis.edu/documents/MPHOverallElectivesedit062708.pdf>

MPH Graduate Program Faculty

SOM PHS Faculty		Department	Title	Email
Albrecht, PhD	Huguette	Public Health Sciences	Assistant Professional Researcher	huguette.albrecht@ucdmc.ucdavis.edu
Alcalay, PhD	Rina	Public Health Sciences	Emeritus Professor	realcalay@ucdavis.edu
Beckett, PhD	Laurel	Public Health Sciences	Department Vice-Chair, Biostat Division Chief, Professor	labeckett@ucdavis.edu
Bell, PhD	Robert	Communications	Professor & Chair	rabell@ucdavis.edu
Bennett, PhD	Deborah	Public Health Sciences	Assistant Professor	dhbennett@ucdavis.edu
Buckpitt, PhD	Alan R.	Public Health Sciences	Professor	ar buckpitt@ucdavis.edu
Cassady, DrPH	Diana	Public Health Sciences	Assistant Professor	dlcassady@ucdavis.edu
Cress, DrPH	Rosemary	Public Health Sciences	Assistant Professor	rcress@ccr.ca.gov
Denny-Garamendi	Colleen	Public Health Sciences	Assistant Professor	cdenny@ucdavis.edu
DeRiemer, PhD, MPH	Kathryn	Public Health Sciences	Assistant Professor	kderiemer@ucdavis.edu
Garcia, DrPH, MPH	Lorena	Public Health Sciences	Assistant Professor	lgarcia@ucdavis.edu
Gibson, PhD	David Ross	Public Health Sciences	Emeritus	dr gibson@ucdavis.edu
Gold, PhD	Ellen B.	Public Health Sciences	Department Chair, Epidemiology Division Chief, Professor	ebgold@ucdavis.edu
Harvey, PhD	Danielle	Public Health Sciences	Assistant Professor	djharvey@ucdavis.edu
Hertz-Picciotto, PhD	Irva	Public Health Sciences	Professor	ihp@ucdavis.edu
Hirsch, MD	Calvin H.	Public Health Sciences	Professor of Clinical Medicine	chirsch@ucdavis.edu
Iosif, PhD	Ana-Maria	Public Health Sciences	Assistant Professor	aiosif@ucdavis.edu
Kass, DVM, MPVM, PhD	Philip H.	SOVM: Population Health and Reproduction	Associate Professor	phkass@ucdavis.edu
Kim, PhD	Kyoungmi	Public Health Sciences	Assistant Professor	kmkim@ucdavis.edu
Kipke	Robin	Public Health Sciences	Evaluation Associate	rakipke@ucdavis.edu
Leigh, PhD	J. Paul	Public Health Sciences	Professor	pleigh@ucdavis.edu
Leistikow, MD	Bruce N.	Public Health Sciences	Associate Professor	bnleistikow@ucdavis.edu
Li, PhD	Chin-Shang	Public Health Sciences	Associate Professor	cssli@ucdavis.edu
McCurdy, MD, MPH	Stephen A.	Public Health Sciences	Professor	samccurdy@ucdavis.edu
Nguyen, PhD	Danh	Public Health Sciences	Associate Professor	ucdnguyen@ucdavis.edu
Qi, PhD	LiHong	Public Health Sciences	Assistant Professor	lhqi@ucdavis.edu
Rocke, PhD	David	Public Health Sciences	Professor	dmrocke@ucdavis.edu
Schenker, MD, MPH	Marc B.	Public Health Sciences	Professor	mbschenker@ucdavis.edu
Yang, PhD	Xiaowei	Public Health Sciences	Assistant Professor	xdyang@ucdavis.edu
Yunis, PhD	Reem	Public Health Sciences	Assistant Project Scientist	reem.yunis@ucdmc.ucdavis.edu , ryunnis@ucdavis.edu
Non PHS Dept. Faculty		Department	Title	Email
Bauer, MD	Gerhard	Internal Med	Asst. Adjunct Prof., Lab Director GMP Facility	gerhard.bauer@ucdmc.ucdavis.edu
Belafsky, MD, MPH, PhD	Peter	Otolaryngology - Head and Neck Surgery	Asst. Prof.	peter.belafsky@ucdmc.ucdavis.edu

Bommer, MD	William	Internal Med/Cardiology	Professor	wjbommer@ucdavis.edu
Breslau, PhD, ScDc	Joshua	Internal Med	Asst. Prof. In-Residence	jabreslau@ucdavis.edu
Chomel, PhD, DVM	Bruno	Vet Med		bbchomel@ucdavis.edu
Dalrymple, MD, MPH	Lorien	Nephrology	Asst. Prof.	lorien.dalrymple@ucdmc.ucdavis.edu
de la Torre, PhD	Adela	Chicano Studies	Prof.	adelatorre@ucdavis.edu
De Mattos, MD, MPH	Angelo	Medicine	Associate Prof.	angelo.demattos@ucdmc.ucdavis.edu
Deng, PhD	Wenbin	Cell Bio. & Human Anat.	Asst. Prof.	wbdeng@ucdavis.edu
Farver, MS, PhD	Thomas	Vet Med: Pop Hlt & Repro	Professor	tbfarver@ucdavis.edu
Geraghty, MD, MPH	Estella	Internal Medicine	Asst Professor of Clinical Internal Med	estella.geraghty@ucdmc.ucdavis.edu
Gross, MD, PhD	Douglas	Cell Bio. & Human Anat.	Senior Lecturer, SOE	dsgross@ucdavis.edu
Hird, DVM, PhD	David	SOVM	Emeritus	dwhird@ucdavis.edu
Hogarth, MD	Mike	SOM: Pathology	Assoc Professor	mahogarth@ucdavis.edu
Holmes, MD, MPH	James	Emergency Med	Associate Prof.	jfholmes@ucdavis.edu
Ikemoto, JD, LLM	Lisa	UCD School of Law	Professor of Law	lcikemoto@ucdavis.edu
Kravitz, MD, MPH	Richard	Internal Med	Prof., Co-Vice Chair of Research	rlkravitz@ucdavis.edu
Marcin, MD, MPH	James	Peds	Associate Prof.	jpmarcin@ucdavis.edu
Miller, MD, PhD	Elizabeth	Pediatrics	Asst Professor	elizabeth.miller@ucdmc.ucdavis.edu
Miller, PhD	Joshua	Med Pathology & Lab Med	Associate Professor In Residence	jwmiller@ucdavis.edu
Miller, DVM, MPVM, PhD	Woutrina	Vet Med: Pathology, Micro & Imm	Adjunt Assit. Prof	wamiller@ucdavis.edu
Osburn, PhD, DVM	Bennie	SOVM	Dean	biosburn@ucdavis.edu
Pan, PhD	Ning	Bio. and Agri. Engineering/ Textiles	Prof.	npan@ucdavis.edu
Pan, MD, PhD	Richard	Clinical Peds	Assoc. Prof.	richard.pan@ucdmc.ucdavis.edu
Panacek, MD, MPH	Edward	Emergency Med	Prof.	eapanacek@ucdavis.edu
Paterniti, PhD	Debora	Internal Med/Sociology	Assoc. Adjunct Prof.	dapaterniti@ucdavis.edu
Ragland, PhD	J. Daniel	Psyc. & Behavioral Sci.	Assoc. Prof.	jdragland@ucdavis.edu
Rich, JD, PhD	Ben	Internal Med/ Anesth. & Pain Med	Prof.	barich@ucdavis.edu
Romano, MD, MPH	Patrick	Internal Med/ Peds	Prof.	psromano@ucdavis.edu
Sandrock, MD, MPH	Christian	Pulmonary & Critical Care	Asst Professor	christian.sandrock@ucdmc.ucdavis.edu
Shaikh, MD, MPH	Ulfat	Pediatrics	Asst Professor	ushaikh@ucdavis.edu
Szabo, MD, MPH	Robert	Orthopedics	Prof.	rmszabo@ucdavis.edu
Tharratt, MD, MPVM	R. Steven	Anesth./ Pulmonary & Critical Care	Prof.	rstharratt@ucdavis.edu
Villablanca, MD	Amparo	Cardio	Prof.	avillablanca@ucdavis.edu
von Friederichs-Fitzwater, PhD, MS, MPH	Marlene	Internal Med/ Hemoc	Asst. Adjunct Prof.	marlene.vonfriederichs-fitzwater@ucdmc.ucdavis.edu

White, MD	Richard	Internal Med	Prof.	rhwhite@ucdavis.edu
Wuertz, PhD	Stefan	Civil & Environ. Eng	Prof.	swuertz@ucdavis.edu
Zidenberg-Cherr, PhD	Sheri	Nutrition	UCCE Specialist/AES Scientists	sazidenbergcherr@ucdavis.edu
Volunteer Clinical Faculty		Department	Title	Email
Acree, MD, MPH, JD	Kathleen H.	Public Health Sciences	Chief, Chronic Disease Control Branch, CDPH	kacree@dhs.ca.gov
Bates, MD, MPH	Robert O.	Public Health Sciences	Medical Consultant	bates3@sbcglobal.net
Bronshvag, MD	Michael M.	Public Health Sciences	Physician	bronsmail@aol.com
Chavez, MD, MPH	Gilberto F.	Public Health Sciences	Associate Director for Public Health and State Epidemiologist, CDPH	gchavez1@dhs.ca.gov
Doebbert, MA	Gwendolyn	Public Health Sciences	Assistant Chief, Health Information Policy & Projects, CDPH	gdoebber@dhs.ca.gov
Ferguson, MD, MPH, PhD	Thomas J.	Public Health Sciences	Medical Director, Cowell Student Health Center, UC Davis	tjferguson@ucdavis.edu
Foerster, MPH	Susan	Public Health Sciences	Chief, Cancer Prevention and Nutrition Section, CDPH	Sfoerste@dhs.ca.gov
Griffin, PhD	Erin	Public Health Sciences	Research Program Specialist, CA Dept of Motor Vehicles	ErinGriffin@prodigy.net
Hinton, MD	Bette G.	Public Health Sciences	Retired Health Officer/Director, Yolo County Health Department	hinton@pacbell.net
Hodges, MD, MPH	Frederick B.	Public Health Sciences	Program Development Section, Chronic Disease Control Branch, CDPH	fhodges@dhs.ca.gov
Kelter, MD	Alexander	Public Health Sciences		akmd@macnexus.org
Koga, MD, MPH	Patrick Marius	Public Health Sciences	Community Health Director, Romanian Community Center of Sacramento	pmkoga@ucdavis.edu
Lake	Stephanie	Public Health Sciences	ADAPT Coordinator/Health Education, Cowell Student Health Center, UC Davis	sjlake@ucdavis.edu
Lianov,	Liana	Public Health Sciences		liana@lianalianovmd.com
Lyman, MD, DTPH	Donald O.	Public Health Sciences	Chief, Chronic Diseases and Injury Control, CDPH	dlyman@dhs.ca.gov
Nash, MD, MPH	Suzanne	Public Health Sciences	Physician, University of California, Davis Employee Health Services	scnash@ucdavis.edu
Núñez de Ybarra, MD, MPH	Jessica	Public Health Sciences	Public Health Medical Officer, Division of Communicable Disease Control, CDPH	Jessica.NunezdeYbarra2@cdph.ca.gov
O'Malley, MD, MPH	Michael A.	Public Health Sciences	Director, UCD Employee Health Services	maomalley@ucdavis.edu
Parikh-Patel, PhD, MPH	Arti	Public Health Sciences	Research Scientist, California Cancer Registry	aparikh@ccr.ca.gov

Paulson, MPH, MA	Polly	Public Health Sciences	Health Educator, Cowell Student Health Center, UC Davis	pcpaulson@ucdavis.edu
Pecoraro, MD, MPH	Maria Lucia de Campos	Public Health Sciences	Associate Director. Director Clinical Development - Dynavax Tech	mlpecoraro@uol.com.br
Plough, III, MPH, PhD	Alonzo L			alonzoplough@ca.rr.com
Shack, PhD, MPH	Kathryn	Public Health Sciences	Health Educator, Nutritionist	kwshack@comcast.net
Snipes, MD	Kurt P.	Public Health Sciences	Acting Chief, Cancer Planning, Research, & Disparities Section, CDPH	ksnipes@dhs.ca.gov
Starr, DVM, MPVM, Dipl. ACVPM	Mark	Public Health Sciences	Director, Community Health & Clinics and Animal Services	mstarr@placer.ca.gov
Sun, MD, MPH, FACPM	Richard	Public Health Sciences	Medical Consultant II, Office of Health Plan Administration, Health Benefits Branch, California Public Employees' Retirement System (CalPERS)	rsun@dhs.ca.gov
Trent, PhD	Roger B.	Public Health Sciences	Chief, Injury Surveillance & Epidemiology Section, SACB Branch, CDPH	rtrent@dhs.ca.gov
Trochet, MD	Glennah	Public Health Sciences	Sacramento County Public Health Officer	TrochetG@saccounty.net
Wiggins, MD, MPH	Patricia	Public Health Sciences		plwiggins@ucdavis.edu
Emeritus SOM PHS Faculty		Department	Title	Email
Duerr	Jacqueline	Public Health Sciences	SACB	

Student Resources

MPH Program office:

Amber Carrere
UCD MPH Program Administrative Coordinator
University of California, Davis
One Shields Ave.
Davis, CA 95616-8638
530-754-4992 FAX 530-752-3239
Email: PHSInstAffairs@phmail.ucdavis.edu

Hours are 7:30am-4:00pm on normal University work days.

Graduate Student Association
253 South Silo
Ph: (530) 752-6108 / Fax: (530) 752-5158
Monday-Friday 9:00-4:00 PM (GSA Office is Closed for Lunch 12:00-1:00 PM)
<http://gsa.ucdavis.edu/>

Counseling and Psychological Services (CAPS)
219 North Hall
Ph: (530) 752-0871
M - F: 8AM - 4:45PM
errodolfa@ucdavis.edu
<http://caps.ucdavis.edu/index09.htm>

Women's Resources and Research Center
First Floor, North Hall
Ph: (530) 752-3372
Monday – Friday, 8:00 am - 5:00 pm
<http://wrrc.ucdavis.edu/>

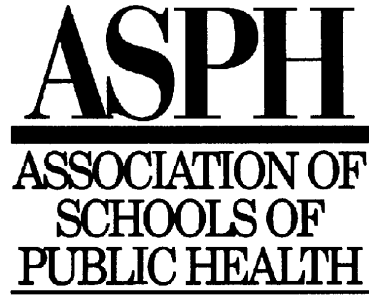
Sexual Harassment Resources
<http://sja.ucdavis.edu/sexual-harassment.html>
http://www.hr.ucdavis.edu/Health_Services/Sexual_Harassment

Learning Skills Center
2205 Dutton Hall
752-2013
<http://www.lsc.ucdavis.edu/>

Student Disability Center
160 South Silo
Monday - Friday
8 a.m. to noon and 1:00 p.m. to 5:00 p.m.
<http://sdc.ucdavis.edu/>

Student lounge, lockers, and computer stations:

Students are welcome to use the new student lounge and lockers in the School of Veterinary Medicine adjacent to Room 2018 in Valley Hall, the new Veterinary Medicine Instructional Facility. Please contact Amber Carrere for a card key to Valley Hall.



ASPH Education Committee

**Master's Degree in Public Health
Core Competency Development
Project**

Version 2.3

*Word Format—Domains and Competencies Only
May 2007*

Discipline-specific Competencies

A. BIostatISTICS

Biostatistics is the development and application of statistical reasoning and methods in addressing, analyzing and solving problems in public health; health care; and biomedical, clinical and population-based research.

Competencies: Upon graduation a student with an MPH should be able to...

- A. 1. Describe the roles biostatistics serves in the discipline of public health.
- A. 2. Describe basic concepts of probability, random variation and commonly used statistical probability distributions.
- A. 3. Describe preferred methodological alternatives to commonly used statistical methods when assumptions are not met.
- A. 4. Distinguish among the different measurement scales and the implications for selection of statistical methods to be used based on these distinctions.
- A. 5. Apply descriptive techniques commonly used to summarize public health data.
- A. 6. Apply common statistical methods for inference.
- A. 7. Apply descriptive and inferential methodologies according to the type of study design for answering a particular research question.
- A. 8. Apply basic informatics techniques with vital statistics and public health records in the description of public health characteristics and in public health research and evaluation.
- A. 9. Interpret results of statistical analyses found in public health studies.
- A. 10. Develop written and oral presentations based on statistical analyses for both public health professionals and educated lay audiences.

Discipline-specific Competencies (continued)

B. ENVIRONMENTAL HEALTH SCIENCES

Environmental health sciences represent the study of environmental factors including biological, physical and chemical factors that affect the health of a community.

Competencies: Upon graduation a student with an MPH should be able to...

- B. 1. Describe the direct and indirect human, ecological and safety effects of major environmental and occupational agents.
- B. 2. Describe genetic, physiologic and psychosocial factors that affect susceptibility to adverse health outcomes following exposure to environmental hazards.
- B. 3. Describe federal and state regulatory programs, guidelines and authorities that control environmental health issues.
- B. 4. Specify current environmental risk assessment methods.
- B. 5. Specify approaches for assessing, preventing and controlling environmental hazards that pose risks to human health and safety.
- B. 6. Explain the general mechanisms of toxicity in eliciting a toxic response to various environmental exposures.
- B. 7. Discuss various risk management and risk communication approaches in relation to issues of environmental justice and equity.
- B. 8. Develop a testable model of environmental insult.

Discipline-specific Competencies (continued)

C. EPIDEMIOLOGY

Epidemiology is the study of patterns of disease and injury in human populations and the application of this study to the control of health problems.

Competencies: Upon graduation a student with an MPH should be able to...

- C. 1. Identify key sources of data for epidemiologic purposes.
- C. 2. Identify the principles and limitations of public health screening programs.
- C. 3. Describe a public health problem in terms of magnitude, person, time and place.
- C. 4. Explain the importance of epidemiology for informing scientific, ethical, economic and political discussion of health issues.
- C. 5. Comprehend basic ethical and legal principles pertaining to the collection, maintenance, use and dissemination of epidemiologic data.
- C. 6. Apply the basic terminology and definitions of epidemiology.
- C. 7. Calculate basic epidemiology measures.
- C. 8. Communicate epidemiologic information to lay and professional audiences.
- C. 9. Draw appropriate inferences from epidemiologic data.
- C. 10. Evaluate the strengths and limitations of epidemiologic reports.

Discipline-specific Competencies (continued)

D. HEALTH POLICY AND MANAGEMENT

Health policy and management is a multidisciplinary field of inquiry and practice concerned with the delivery, quality and costs of health care for individuals and populations. This definition assumes both a managerial and a policy concern with the structure, process and outcomes of health services including the costs, financing, organization, outcomes and accessibility of care.

Competencies: Upon graduation a student with an MPH should be able to...

- D. 1. Identify the main components and issues of the organization, financing and delivery of health services and public health systems in the US.
- D. 2. Describe the legal and ethical bases for public health and health services.
- D. 3. Explain methods of ensuring community health safety and preparedness.
- D. 4. Discuss the policy process for improving the health status of populations.
- D. 5. Apply the principles of program planning, development, budgeting, management and evaluation in organizational and community initiatives.
- D. 6. Apply principles of strategic planning and marketing to public health.
- D. 7. Apply quality and performance improvement concepts to address organizational performance issues.
- D. 8. Apply "systems thinking" for resolving organizational problems.
- D. 9. Communicate health policy and management issues using appropriate channels and technologies.
- D. 10. Demonstrate leadership skills for building partnerships.

Discipline-specific Competencies (continued)

E. SOCIAL AND BEHAVIORAL SCIENCES

The social and behavioral sciences in public health address the behavioral, social and cultural factors related to individual and population health and health disparities over the life course. Research and practice in this area contributes to the development, administration and evaluation of programs and policies in public health and health services to promote and sustain healthy environments and healthy lives for individuals and populations.

Competencies: Upon graduation a student with an MPH should be able to...

- E. 1. Identify basic theories, concepts and models from a range of social and behavioral disciplines that are used in public health research and practice.
- E. 2. Identify the causes of social and behavioral factors that affect health of individuals and populations.
- E. 3. Identify individual, organizational and community concerns, assets, resources and deficits for social and behavioral science interventions.
- E. 4. Identify critical stakeholders for the planning, implementation and evaluation of public health programs, policies and interventions.
- E. 5. Describe steps and procedures for the planning, implementation and evaluation of public health programs, policies and interventions.
- E. 6. Describe the role of social and community factors in both the onset and solution of public health problems.
- E. 7. Describe the merits of social and behavioral science interventions and policies.
- E. 8. Apply evidence-based approaches in the development and evaluation of social and behavioral science interventions.
- E. 9. Apply ethical principles to public health program planning, implementation and evaluation.
- E. 10. Specify multiple targets and levels of intervention for social and behavioral science programs and/or policies.

Interdisciplinary/Cross-cutting Competencies

F. COMMUNICATION AND INFORMATICS

The ability to collect, manage and organize data to produce information and meaning that is exchanged by use of signs and symbols; to gather, process, and present information to different audiences in-person, through information technologies, or through media channels; and to strategically design the information and knowledge exchange process to achieve specific objectives.

Competencies: Upon graduation, it is increasingly important that a student with an MPH be able to...

- F. 1. Describe how the public health information infrastructure is used to collect, process, maintain, and disseminate data.
- F. 2. Describe how societal, organizational, and individual factors influence and are influenced by public health communications.
- F. 3. Discuss the influences of social, organizational and individual factors on the use of information technology by end users.
- F. 4. Apply theory and strategy-based communication principles across different settings and audiences.
- F. 5. Apply legal and ethical principles to the use of information technology and resources in public health settings.
- F. 6. Collaborate with communication and informatics specialists in the process of design, implementation, and evaluation of public health programs.
- F. 7. Demonstrate effective written and oral skills for communicating with different audiences in the context of professional public health activities.
- F. 8. Use information technology to access, evaluate, and interpret public health data.
- F. 9. Use informatics methods and resources as strategic tools to promote public health.
- F. 10. Use informatics and communication methods to advocate for community public health programs and policies.

Interdisciplinary/Cross-cutting Competencies (continued)

G. DIVERSITY AND CULTURE

The ability to interact with both diverse individuals and communities to produce or impact an intended public health outcome.

Competencies: Upon graduation, it is increasingly important that a student with an MPH be able to...

- G. 1. Describe the roles of, history, power, privilege and structural inequality in producing health disparities.
- G. 2. Explain how professional ethics and practices relate to equity and accountability in diverse community settings.
- G. 3. Explain why cultural competence alone cannot address health disparity.
- G. 4. Discuss the importance and characteristics of a sustainable diverse public health workforce.
- G. 5. Use the basic concepts and skills involved in culturally appropriate community engagement and empowerment with diverse communities.
- G. 6. Apply the principles of community-based participatory research to improve health in diverse populations.
- G. 7. Differentiate among availability, acceptability, and accessibility of health care across diverse populations.
- G. 8. Differentiate between linguistic competence, cultural competency, and health literacy in public health practice.
- G. 9. Cite examples of situations where consideration of culture-specific needs resulted in a more effective modification or adaptation of a health intervention.
- G. 10. Develop public health programs and strategies responsive to the diverse cultural values and traditions of the communities being served.

Interdisciplinary/Cross-cutting Competencies (continued)

H. LEADERSHIP

The ability to create and communicate a shared vision for a changing future; champion solutions to organizational and community challenges; and energize commitment to goals.

Competencies: Upon graduation, it is increasingly important that a student with an MPH be able to...

- H. 1. Describe the attributes of leadership in public health.
- H. 2. Describe alternative strategies for collaboration and partnership among organizations, focused on public health goals.
- H. 3. Articulate an achievable mission, set of core values, and vision.
- H. 4. Engage in dialogue and learning from others to advance public health goals.
- H. 5. Demonstrate team building, negotiation, and conflict management skills.
- H. 6. Demonstrate transparency, integrity, and honesty in all actions.
- H. 7. Use collaborative methods for achieving organizational and community health goals.
- H. 8. Apply social justice and human rights principles when addressing community needs.
- H. 9. Develop strategies to motivate others for collaborative problem solving, decision-making, and evaluation.

Interdisciplinary/Cross-cutting Competencies (continued)

I. PUBLIC HEALTH BIOLOGY

The ability to incorporate public health biology – the biological and molecular context of public health – into public health practice.

Competencies: Upon graduation, it is increasingly important that a student with an MPH be able to...

- I. 1. Specify the role of the immune system in population health.
- I. 2. Describe how behavior alters human biology.
- I. 3. Identify the ethical, social and legal issues implied by public health biology.
- I. 4. Explain the biological and molecular basis of public health.
- I. 5. Explain the role of biology in the ecological model of population-based health.
- I. 6. Explain how genetics and genomics affect disease processes and public health policy and practice.
- I. 7. Articulate how biological, chemical and physical agents affect human health.
- I. 8. Apply biological principles to development and implementation of disease prevention, control, or management programs.
- I. 9. Apply evidence-based biological and molecular concepts to inform public health laws, policies, and regulations.
- I. 10. Integrate general biological and molecular concepts into public health.

Public Health Biology Illustrative Sub-competencies are available at <http://www.asph.org/document.cfm?page=928>.

Interdisciplinary/Cross-cutting Competencies (continued)

J. PROFESSIONALISM

The ability to demonstrate ethical choices, values and professional practices implicit in public health decisions; consider the effect of choices on community stewardship, equity, social justice and accountability; and to commit to personal and institutional development.

Competencies: Upon graduation, it is increasingly important that a student with an MPH be able to...

- J. 1. Discuss sentinel events in the history and development of the public health profession and their relevance for practice in the field.
- J. 2. Apply basic principles of ethical analysis (e.g. the Public Health Code of Ethics, human rights framework, other moral theories) to issues of public health practice and policy.
- J. 3. Apply evidence-based principles and the scientific knowledge base to critical evaluation and decision-making in public health.
- J. 4. Apply the core functions of assessment, policy development, and assurance in the analysis of public health problems and their solutions.
- J. 5. Promote high standards of personal and organizational integrity, compassion, honesty and respect for all people.
- J. 6. Analyze determinants of health and disease using an ecological framework.
- J. 7. Analyze the potential impacts of legal and regulatory environments on the conduct of ethical public health research and practice.
- J. 8. Distinguish between population and individual ethical considerations in relation to the benefits, costs, and burdens of public health programs.
- J. 9. Embrace a definition of public health that captures the unique characteristics of the field (e.g., population-focused, community-oriented, prevention-motivated and rooted in social justice) and how these contribute to professional practice.
- J. 10. Appreciate the importance of working collaboratively with diverse communities and constituencies (e.g. researchers, practitioners, agencies and organizations).
- J. 11. Value commitment to lifelong learning and professional service including active participation in professional organizations.

Interdisciplinary/Cross-cutting Competencies (continued)

K. PROGRAM PLANNING

The ability to plan for the design, development, implementation, and evaluation of strategies to improve individual and community health.

Competencies: Upon graduation, it is increasingly important that a student with an MPH be able to...

- K. 1. Describe how social, behavioral, environmental, and biological factors contribute to specific individual and community health outcomes.
- K. 2. Describe the tasks necessary to assure that program implementation occurs as intended.
- K. 3. Explain how the findings of a program evaluation can be used.
- K. 4. Explain the contribution of logic models in program development, implementation, and evaluation.
- K. 5. Differentiate among goals, measurable objectives, related activities, and expected outcomes for a public health program.
- K. 6. Differentiate the purposes of formative, process, and outcome evaluation.
- K. 7. Differentiate between qualitative and quantitative evaluation methods in relation to their strengths, limitations, and appropriate uses, and emphases on reliability and validity.
- K. 8. Prepare a program budget with justification.
- K. 9. In collaboration with others, prioritize individual, organizational, and community concerns and resources for public health programs.
- K. 10. Assess evaluation reports in relation to their quality, utility, and impact on public health.

Interdisciplinary/Cross-cutting Competencies (continued)

L. SYSTEMS THINKING

The ability to recognize system level properties that result from dynamic interactions among human and social systems and how they affect the relationships among individuals, groups, organizations, communities, and environments.

Competencies: Upon graduation, it is increasingly important that a student with an MPH be able to...

- L. 1. Identify characteristics of a system.
- L. 2. Identify unintended consequences produced by changes made to a public health system.
- L. 3. Provide examples of feedback loops and “stocks and flows” within a public health system.
- L. 4. Explain how systems (e.g. individuals, social networks, organizations, and communities) may be viewed as systems within systems in the analysis of public health problems.
- L. 5. Explain how systems models can be tested and validated.
- L. 6. Explain how the contexts of gender, race, poverty, history, migration, and culture are important in the design of interventions within public health systems.
- L. 7. Illustrate how changes in public health systems (including input, processes, and output) can be measured.
- L. 8. Analyze inter-relationships among systems that influence the quality of life of people in their communities.
- L. 9. Analyze the effects of political, social and economic policies on public health systems at the local, state, national and international levels.
- L. 10. Analyze the impact of global trends and interdependencies on public health related problems and systems.
- L. 11. Assess strengths and weaknesses of applying the systems approach to public health problems.

More information about Systems Thinking is available at <http://www.asph.org/document.cfm?page=898>.