MOTHER AND CHILD HEALTH PROGRAM
OMENTUS
Overview 2
Goals 2
Core Competencies 3
Leadership Development in MCH 4
MCH CURRICULUM
One-Year MPH Curriculum 5
Summer Session Information 6
Two-Year MPH Curriculum 7
Recommended Two-year Course Sequence 8
CAPSTONE PROTOCOL
MCH Capstone/Comprehensive Exams 9

PROGRAM OVERVIEW
The UC Berkeley Maternal and Child Health Program (MCH) has provided superior graduate training, continuing education, research and service since its founding in 1953. The program has over 1,200 alumni across the country and around the world.

It is our mission to develop the next generation of leaders equipped to solve the health challenges facing women, children, adolescents and families of the 21st century.

The MCH Program’s multifaceted and interdisciplinary curriculum and dynamic learning environment are designed to respond to newly emerging issues in MCH and to the unique needs of the diverse communities and cultures of the San Francisco Bay area, State of California, and the world, and to inspire students to use their skills and expertise to achieve health equity for all.

GOALS
As a Center of Excellence in MCH education, science, and practice, our three overall goals are:

- To provide the best education possible to develop graduates who are prepared to lead Title V and other MCH organizations and promote and protect the health status of diverse MCH populations.

- To prepare public health and health care professionals to be leaders in the field of MCH with a culturally competent, multi-disciplinary, community oriented, ethical, and cost-effective vision of maternal, child and adolescent health, with the skills that can help solve the health challenges of the 21st century.

- To work closely with Title V and other MCH programs at the state, local, national, and global levels to mobilize large scale, synergistic efforts to reduce and eliminate health disparities and barriers to health that affect MCH populations.

For information about the UC Berkeley MCH Center of Excellence at the School of Public Health, visit: www.ucbmch.com.
By the end of their studies at the University of California, Berkeley, Maternal and Child Health Program graduates will be able to:

- Discuss the major health and social problems facing MCAH populations from demographic, health, social, political and community perspectives, as well as the scientific basis for these concerns and strategies to address them.

- Describe the historical roots and current structure of MCH services in the United States, including Title V legislation, and be able to discuss the core values and strategic objectives that necessitate a special focus on MCAH populations to promote equity in health care (a focus on prevention, individuals and populations, cultural competence, family-centered and community-based systems of services, elimination of health disparities, and evidence-based practice).

- Identify the major sources of information related to MCAH populations, assess their strengths and limitations, and use population data to assist in determining the needs of a population for the purposes of designing programs, formulating policy, and conducting research or training.

- Learn basic principles and applications of quantitative and qualitative research and epidemiology for addressing MCH problems and demonstrate expertise in these skills by completing a capstone research project.

The UCB MCH Program is a Center of Excellence in MCH (formerly known as the MCH Leadership Training Program) supported by the Health Resources Services Administration (HRSA) Maternal and Child Health Bureau (MCHB). Centers of Excellence in MCH further the development of a workforce that is knowledgeable about public health principles that focus on children and families. All MCH training programs aim to promote comprehensive, coordinated, family-centered, and culturally sensitive systems of health care that serve the diverse needs of all families within their communities.

All students in the UCB MCH program are considered MCH trainees, and have access to additional networking and leadership development opportunities across the MCHB trainee network.

For the full set of 12 MCH Leadership competencies please see: http://leadership.mchtraining.net/.

For more information about the MCH Training Grantee Network please see: http://mchtraining.net/.
The 1-year MPH curriculum in Maternal and Child Health (MCH) is offered to health professionals with experience in health services for women, children and families (physicians, nurses, psychologists, social workers, and other masters-level professionals). It is an intensive, full-time course of study running from July to May (11 months). The program requires completion of at least 16-18 units of coursework in the fall and spring semesters. Curricular requirements are summarized below.

In addition to these requirements, students in the 1 year program may be able to transfer 4 units of graduate level course work from an accredited medical school or other masters’ level program that they have already completed. Please note that students must petition the Graduate Division in order to transfer units.

The 1-year program also requires completion of a capstone research project completed by the student during the year. This project satisfies the comprehensive examination requirement as well as the field practicum requirement. Projects are presented at the end of the Fall and Spring semesters in written and oral formats.

In addition to these requirements, students in the 1 year program may be able to transfer 4 units of graduate level course work from an accredited medical school or other masters’ level program that they have already completed. Please note that students must petition the Graduate Division in order to transfer units.

NOTE: Modifications in program requirements and course offerings may occur from year to year.

*This requirement may also be fulfilled by passing an exemption exam or by completing an SPH-approved higher-level alternative course (see SPH Student Handbook for a complete list of approved alternatives. Alternatives should be discussed with the MCH Assistant Director and a student's faculty academic advisor). **Students may choose one of these two courses in order to satisfy the requirement for the MCH Program ***4 units of independent study with your committee chair may be taken in the Fall or Spring; (2) each semester or all in one semester.

**SUMMER SESSIONS**

The School of Public Health offers several courses during Summer Sessions. Introduction to Biostatistics (PH141) and Epidemiologic Methods I (PH250A) can fulfill two of the MPH Degree breadth requirements and are generally offered in the session beginning in early July. Please check the online schedule for summer session courses and exact dates. Registration for incoming graduate students is usually available in June. More information can be found at summer.berkeley.edu

One-year program students who plan to take the exemption exam(s) for Introduction to Biostatistics or Epidemiologic Methods I should still plan to complete at least four course units during Summer Sessions. Students much consult with the MCH Assistant Director regarding alternative courses and procedures for pursuing an exemption. Additional details regarding the exemption exams are available on the SPH website: http://sph.berkeley.edu/student-resources/helpful-links

---

**ONE-YEAR MPH CURRICULUM**

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Summer</strong></td>
</tr>
<tr>
<td>141* Introduction to Biostatistics</td>
</tr>
<tr>
<td>250A* Epidemiological Methods</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
</tr>
<tr>
<td>200J Health Policy &amp; Management Breadth Course</td>
</tr>
<tr>
<td>200K Environmental Health Sciences Breadth Course</td>
</tr>
<tr>
<td>210 Maternal and Child Health Core Course</td>
</tr>
<tr>
<td>210E Practicum in MCH Data Analysis I</td>
</tr>
<tr>
<td>290 Applied Linear Models</td>
</tr>
<tr>
<td>293 MCH Journal Club</td>
</tr>
<tr>
<td>Electives (to be chosen by student)*</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
</tr>
<tr>
<td>200L Health &amp; Social Behavior Breadth Course</td>
</tr>
<tr>
<td>210F Practicum in MCH Data Analysis II</td>
</tr>
<tr>
<td>2180** Evaluation of Health and Social Programs</td>
</tr>
<tr>
<td>290C** Needs Assessment &amp; Program Planning Development</td>
</tr>
<tr>
<td>299C*** Independent Study–MCH Capstone</td>
</tr>
<tr>
<td>Electives (to be chosen by student)*</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
</tr>
</tbody>
</table>

**Required course work (including electives)** 38 units

**Capstone Project*** 4 units

**TOTAL** 42 units
The 2-year curriculum for the MPH in Maternal & Child Health (MCH) is offered to post-baccalaureate students who seek competency in MCH analytic, research, and programmatic skills. It requires completion of a quantitative capstone research project that fulfills the comprehensive examination requirement for the School of Public Health and a 3-month supervised summer internship.

SCHOOL-WIDE REQUIRED COURSES

- **Fall**
  - 142.2 Introduction to Probability & Statistics in Biology and Public Health 4 units
  - 200J Health Policy & Management Breadth Course 2 units
  - 200L Health & Social Behavior Breadth Course 2 units
  - 250A Epidemiologic Methods I 3 units
  - 297* Public Health Field Placement 3 units

- **Spring**
  - 200K Environmental Health Breadth Course 2 units

MCH REQUIRED & HIGHLY RECOMMENDED COURSES

- **Fall**
  - 210 Maternal and Child Health Core Course 3 units
  - 210B** Adolescent Health 3 units
  - 210D** Practicum in MCH Data Analysis I 2-5 units
  - 212A** International MCH 2 units
  - 213A** Family Planning, Population Change, & Health 3 units
  - 293.2 MCH Journal Club 2 units
  - 290.5 MCH Leadership Seminar 2 units
  - 210D** Reproductive & Perinatal Epidemiology 2 units

- **Spring**
  - 290.3 Applied Linear Models 4 units
  - 245 Introduction to Multivariate Statistics 4 units
  - 241 Statistical Analysis of Categorical Data 4 units
  - 251A Analytic Methods for Health Policy & Management 3 units

- **Spring**
  - 210D Reproductive & Perinatal Epidemiology 2 units
  - 218B Evaluation of Health & Social Programs 4 units
  - 290 Needs Assessment & Program Planning 4 units

METHODS OF MEASUREMENT AND ANALYSIS (at least one of the following)

- **Fall**
  - 290.3 Applied Linear Models 4 units
  - 245 Introduction to Multivariate Statistics 4 units
  - 241 Statistical Analysis of Categorical Data 4 units
  - 251A Analytic Methods for Health Policy & Management 3 units

APPLIED PROGRAMMATIC SKILLS (at least one of the following)

- **Spring**
  - 210D Reproductive & Perinatal Epidemiology 2 units
  - 218B Evaluation of Health & Social Programs 4 units
  - 290 Needs Assessment & Program Planning 4 units

*Students are required to choose one course from the offerings in the area of methods of measurement and analysis and one from the offerings in applied programmatic skills. Please see details on the previous page.

All courses have a PB HLTH prefix.

RECOMMENDED COURSE SEQUENCE

The Fall semester is pre-scripted with required coursework. The Spring semesters offer students the opportunity to take electives specific to their areas of interest. Students should plan to meet regularly with their faculty advisor and the MCH Program Assistant Director to discuss course options and to insure that they are on-track to complete their degree.

FIRST YEAR—Fall 15-18 units, Spring 12+ units

- 142A Introduction to Probability & Statistics in Biology and Public Health 4 units
- 200J Health Policy & Management Breadth Course 2 units
- 200L Health & Social Behavior Breadth Course 2 units
- 210 Maternal and Child Health Core Course 3 units
- 250A Epidemiologic Methods I 3 units
- 297** Public Health Field Placement, 3 units
- Elective Courses 0-3 units

SECOND YEAR—Falll 12-16 units, Spring 12+ units

- 210E Practicum in MCH Data Analysis I 2-3 units
- 290 Applied Linear Models* 4 units
- 297** Public Health Field Placement, 3 units
- Elective Courses 3+ units

- **Spring**
  - 218B Evaluation of Health & Social Programs* 4 units
  - 210F Practicum in MCH Data Analysis II 1-4 units
  - Elective courses 4+ units

The 2-year curriculum is a full-time course of study, requiring a minimum of 48 units of coursework over four academic semesters and one summer (12 units required per semester). Courses on preparation for teaching as a GSI (375 series courses) and lower-division undergraduate courses do not count toward the 48 overall units, though they do count toward the semester 12-unit minimum.

NOTE: Modifications in program requirements and course offerings may occur from year to year.

MINIMUM UNIT REQUIREMENT

The Graduate Council requires that all graduate students be enrolled in a minimum of 12 units per semester regardless of their employment status. This is especially important for students receiving Block grant and other campus fellowships/awards; the campus will rescind their award for under enrollment/non-compliance if this unit requirement is not followed.

MINIMUM GRADE

BREADTH REQUIREMENT

MPH students are required to attain a B- or better in Breadth Course Requirements (Epidemiology PH 250A, Biostatistics PH 142, Health Policy & Management 200J, Environmental Health PH 200K, Health and Social Behavior PH 200L).

Students attaining less than a B- will be required to retake the course. To receive the MPH degree, the student must also meet the Good Academic Standing Rule, i.e. average overall GPA is a B average (3.0).
MCH CAPSTONE OVERVIEW

As part of the requirement for the MPH, each MCH student must complete a quantitative capstone research project. This project consists of a written and oral component and is considered to be the comprehensive examination for MCH students. The MCH capstone seminars (Practicum in MCH Data Analysis I and II) are designed to support students in the capstone process.

The purpose of the MCH capstone research project is to engage students in learning:

- How to formulate a good research question
- How to identify the appropriate methods to address the research question
- How to test the research question with empirical data
- How to analyze/interpret/summarize and present the findings, linking these to the existing body of scientific literature
- How to present the findings in a formal paper and link them to implications for policy
- How to orally present and defend research findings in an academic setting

The goals of the MCH capstone research project are to:

- Demonstrate that the student has mastered each of the skills necessary to complete an in-depth, quantitatively based research project.
- Ensure that the student has attained an in-depth understanding of and exposure to specific MCH topics that are relevant to their career goals and interests.
- Develop proficiency of the topic researched through a written paper and oral presentation of the research findings to one's peers and faculty.

REQUIREMENTS FOR THE MCH CAPSTONE

1. COMMITTEE

Each student must identify a committee of three members, at least two of whom are School of Public Health Faculty members. Exceptions will be granted on a case by case basis. The committee chair must be MCH core faculty. The following faculty may serve as MCH Committee Chairs:

- Julianna Deardorff
- Brenda Eskenazi
- Sylvia Guendelman
- Kim Harley
- Cheri Pies
- Malcolm Potts
- Ndola Prata

The third or optional fourth committee member may be chosen from within SPH, within UCB, or from another UC campus or partner organization.

When students are using a data set from a community agency or other affiliated program, they must ask whomever they receive the data from to serve as a third committee member. The third committee member may also be an MCH professional who has a specific expertise in the subject area that the student is researching. All committee members must be approved by the student’s Committee Chair.

2. TOPIC

The topic for the capstone project is your choice, based upon your interests. You should discuss possible topics in advance with your Committee Chair as you will need their approval. Aim to have a topic and possible data set selected by the end of September.

The written portion of the capstone needs one specific research question. The research question must be limited to one or two outcomes and (except in unusual cases without clear and reasonable alternatives) one or two main exposures. This means that you will not be allowed to do an “exploratory” or “hypothesis generating” study, one with many “outcomes” or many “predictors.”

You will not be allowed to pursue a descriptive study, such as a needs assessment. Such studies, while valuable, do not provide you with the opportunity to exercise your analytic skills to the extent necessary for your master’s degree.

3. DATA SET

Each student must identify and obtain a dataset that they can use for their research. All research activities for your capstone must be approved by the UC Berkeley Committee for the Protection of Human Subjects before activities begin. Please discuss this with your Committee in enough time to apply for and secure approval prior to beginning your research. If you are using data collected by a UC Berkeley faculty member, you will probably need to have the faculty member add you onto their human subjects’ approval. If you work on data already collected by someone else outside of UC Berkeley, then you may qualify for an exemption. Check the UC Berkeley Committee for the Protection of Human Subjects web page for more information.

4. MANUSCRIPT

The written portion of the capstone should not be longer than a standard prepublication manuscript. The average length is about 15-20 pages of double spaced text plus references and tables/figures. It may include a more detailed introduction and literature review and more tables than are usually included in a manuscript for publication, but should otherwise be similar to a published public health paper. The manuscript may be shortened for submission for publication if the student and Committee Chair decide that the findings are publishable. If you wish to see examples of past capstone research projects please contact the MCH Program office.

Acceptance of the manuscript is similar to the process of having an article accepted publication. Students should submit a final version of the manuscript, not a draft, to their committee with the expectation that the committee will have a final round of revisions that must be incorporated by the student before the manuscript is considered complete.

The capstone manuscript should contain the following elements:

- Abstract (250 words)
  - Introduction
  - Statement of question or problem
  - Review of literature
- Methods
  - Description of population
  - Sampling method
  - Description of measures
  - Description of statistical analyses

The final manuscript (round 1) is submitted electronically to your committee on the Friday before Spring Break. The committee has two weeks to return final comments. A student’s advancement to the oral presentation is contingent upon the quality of the final draft of the manuscript (round 1). The final paper (round 2), including the committee’s final revisions, is due within one week after a student’s oral presentation. Timelines are negotiable, on a case by case basis, with the Committee Chair and MCH Program Chair.

The capstone manuscript should contain the following elements:

- Abstract (250 words)
  - Introduction
  - Statement of question or problem
  - Review of literature
- Methods
  - Description of population
  - Sampling method
  - Description of measures
  - Description of statistical analyses
MCH CAPSTONE/COMPREHENSIVE EXAMS

- Results
  - Descriptive tables
  - Grouped comparative analyses
  - Multivariate analyses
- Conclusions/Discussion
  - Summary
  - Public Health and MCH significance
  - Further directions for research

Formatting Requirements
References: American Journal of Epidemiology referencing format.

- Page Size: Standard, 8.5 x 11 inches
- 1 inch margins
- The line spacing should be double-spaced.
- Typeface: Basic manuscript text should be non-italic type font, Black, 12-point, Times New Roman or another easily readable font. For footnotes, captions, tables, charts and graphs, a font size of no smaller than 8-point is to be used.
- Page numbers

The following deadlines are suggested for students and committees to guide the manuscript preparation process:

- Drafts of Introduction & Literature Review sections - due to committee the week following winter break
- Draft of Results Tables - due to committee by end of February
- Final Paper (round 1) – due the Friday before Spring Break (3/18/2016, 3/24/2017, or 3/33/2018 depending on your anticipated date of graduation)
- Committee has two weeks to return final comments
- Final Paper (round 2), with comments incorporated, due within one week following the student's oral presentation.

5. ORAL PRESENTATION

In addition to submitting a written portion of the capstone to your Committee, you will be required to give two oral presentations of your research study and findings; one at the end of Fall semester (December) and again near the end of the Spring semester (April). These presentations provide students an opportunity to share their projects with their peers and faculty. The purpose of the presentation in December is to provide a status report or update on your progress to date and to outline your plans for completing the comp exam

The presentation in April serves as the oral examination component of the comprehensive exam. Students will have already handed in their written portion and the oral presentation is meant to “cap” the experience. Students will present their final product to their peers, families, friends, and faculty. The student will have an opportunity to answer questions from the audience. All faculty present will complete an evaluation form and the student will be provided with that feedback in a private meeting with their Committee Chair within one week of their presentation.

The Oral Presentations will be held in April. The exact dates will be decided in the fall and communicated to all MCH students at that time.

6. COMPREHENSIVE EXAM REPORT FORM

Once your committee is satisfied that the written and oral portions of your comprehensive exam have been completed, the Committee Chair and one other SPH faculty committee member will sign your acceptance form indicating that you have satisfactorily passed your comprehensive exam. Acceptance cannot be granted until both portions of the comprehensive exam are complete. Students will be provided with a copy of the signature page to collect the necessary signatures. Alternatively, Committee members may confirm their acceptance electronically by sending an email to the MCH Program Assistant Director.

At this point, the student should forward a PDF of the final paper to the Assistant Director. Please note that your committee members have until the first week in May to sign off on the comprehensive exams. Reminders will be sent to ensure that all comprehensive exams are completed by that time.

If you have specific questions about the requirements for the comprehensive exam please contact the MCH Program Assistant Director or your Committee Chair.