Graduate Student Handbook

Academic Year 2017 – 2018
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Section 1: General Information
Mission
The mission of the Joseph J. Zilber School of Public Health is to advance population health, health equity, and social and environmental justice among diverse communities in Milwaukee, the state of Wisconsin, and beyond through education, research, community engagement, and advocacy for health-promoting policies and strategies.

To view the Values Statement, Goals, and Objectives, see the CEPH Self-Study, published online.

Academic Programming
The Master of Public Health (MPH) is designed to prepare students with the foundation necessary to build a career of leadership in public health. The MPH program has five specialty tracks – Biostatistics, Community & Behavioral Health Promotion, Environmental Health Sciences, Epidemiology, and Public Health Policy & Administration. Learn more about the Master of Public Health tracks online and in the first section of this handbook.

The PhD in Environmental Health Sciences offers graduate study leading to the doctoral degree. Faculty for this program are drawn from a number of departments and research units at UWM, affording the students an unparalleled opportunity for cross-disciplinary training and the performance of novel research projects. Laboratories and equipment are available across campus to promote innovative concepts in issues of Environmental Health Sciences.

The PhD in Public Health – Biostatistics is designed to train students in the development of techniques, methods and tools to conduct public health research using rigorous statistical, bioinformatics and general quantitative methods.

The PhD in Public Health - Community & Behavioral Health Promotion is designed to train students in social and behavioral science aspects of public health research and intervention with a particular emphasis on the development of community-level interventions.

The PhD in Epidemiology prepares students to conduct independent research to examine the distribution and determinants of health and translate epidemiologic findings into actionable interventions and policy strategies to promote population health, health equity and social justice. Coursework focuses on theory, quantitative and qualitative methods, community-engagement, and the intersection of epidemiologic research and public health policy.
# Zilber School of Public Health Primary Graduate Faculty

<table>
<thead>
<tr>
<th>Name</th>
<th>Track</th>
<th>E-mail</th>
<th>Granting Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paul Auer, PhD</td>
<td>BIOS</td>
<td><a href="mailto:paul.wl.auer@gmail.com">paul.wl.auer@gmail.com</a></td>
<td>Purdue University</td>
</tr>
<tr>
<td>Young Cho, PhD</td>
<td>CBHP</td>
<td><a href="mailto:cho3@uwm.edu">cho3@uwm.edu</a></td>
<td>University of Illinois at Chicago</td>
</tr>
<tr>
<td>Youngjoo Cho, PhD</td>
<td>BIOS</td>
<td><a href="mailto:cho23@uwm.edu">cho23@uwm.edu</a></td>
<td>Pennsylvania State University</td>
</tr>
<tr>
<td>Keith Dookeran, MBA, MD, MBBS, PhD</td>
<td>EPI</td>
<td><a href="mailto:dookeran@uwm.edu">dookeran@uwm.edu</a></td>
<td>University of Illinois at Chicago</td>
</tr>
<tr>
<td>Phoenix Do, PhD</td>
<td>PHPA/EPI</td>
<td><a href="mailto:dphuong@uwm.edu">dphuong@uwm.edu</a></td>
<td>RAND Graduate School</td>
</tr>
<tr>
<td>Paul Florsheim, PhD</td>
<td>CBHP</td>
<td><a href="mailto:paulf@uwm.edu">paulf@uwm.edu</a></td>
<td>Northwestern University</td>
</tr>
<tr>
<td>Amy Harley, PhD, MPH, RD</td>
<td>CBHP</td>
<td><a href="mailto:harley@uwm.edu">harley@uwm.edu</a></td>
<td>The Ohio State University</td>
</tr>
<tr>
<td>Spencer Huang, PhD</td>
<td>BIOS</td>
<td><a href="mailto:huangcc@uwm.edu">huangcc@uwm.edu</a></td>
<td>University of Michigan, Ann Arbor</td>
</tr>
<tr>
<td>Mustafa Hussein, PhD</td>
<td>PHPA</td>
<td><a href="mailto:husseimh@uwm.edu">husseimh@uwm.edu</a></td>
<td>The University of Tennessee</td>
</tr>
<tr>
<td>Amy Kalkbrenner, PhD, MPH</td>
<td>EHS</td>
<td><a href="mailto:kalkbren@uwm.edu">kalkbren@uwm.edu</a></td>
<td>University of North Carolina at Chapel Hill</td>
</tr>
<tr>
<td>Linnea Laestadius, PhD, MPP</td>
<td>PHPA</td>
<td><a href="mailto:laestad@uwm.edu">laestad@uwm.edu</a></td>
<td>John Hopkins University</td>
</tr>
<tr>
<td>Michael Laiosa, PhD</td>
<td>EHS</td>
<td><a href="mailto:laiosa@uwm.edu">laiosa@uwm.edu</a></td>
<td>State University of New York Upstate Medical University</td>
</tr>
<tr>
<td>Hongbo Ma, PhD</td>
<td>EHS</td>
<td><a href="mailto:hongboma@uwm.edu">hongboma@uwm.edu</a></td>
<td>The University of Georgia</td>
</tr>
<tr>
<td>Lorraine Halinka Malcoe, PhD, MPH</td>
<td>EPI</td>
<td><a href="mailto:malcoe@uwm.edu">malcoe@uwm.edu</a></td>
<td>University of California, Berkeley</td>
</tr>
<tr>
<td>Helen Meier, PhD, MPH</td>
<td>EPI</td>
<td><a href="mailto:meierh2@uwm.edu">meierh2@uwm.edu</a></td>
<td>University of Michigan, Ann Arbor</td>
</tr>
<tr>
<td>Todd Miller, PhD</td>
<td>EHS</td>
<td><a href="mailto:millertr@uwm.edu">millertr@uwm.edu</a></td>
<td>University of Maryland</td>
</tr>
</tbody>
</table>
For a list of faculty by program, visit the Graduate Bulletin at http://uwm.edu/graduateschool/explore-our-programs/.

**Administrative Structure**

The Zilber SPH Graduate Program Committee (GPC) sets policies for the operations of all academic programming. The GPC oversees the MPH program with input from the full Zilber School faculty, the Zilber School Dean, the Associate Dean of Academic Affairs, and the Zilber School staff. Each track designates a Faculty Lead and students elect two representatives to serve on the Graduate Program Committee: one PhD student and one MPH student. Information for Academic Year 2017-2018 representatives is listed below:
<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty Chair</td>
<td>Michael Laiosa</td>
<td><a href="mailto:laiosa@uwm.edu">laiosa@uwm.edu</a></td>
</tr>
<tr>
<td>UWM Graduate Representative</td>
<td>Paul Florsheim</td>
<td><a href="mailto:paulf@uwm.edu">paulf@uwm.edu</a></td>
</tr>
<tr>
<td>MPH Director</td>
<td>Emmanuel Ngui</td>
<td><a href="mailto:ngui@uwm.edu">ngui@uwm.edu</a></td>
</tr>
<tr>
<td>Program Track Faculty Leads</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biostatistics</td>
<td>Spencer Huang, PhD</td>
<td><a href="mailto:huangcc@uwm.edu">huangcc@uwm.edu</a></td>
</tr>
<tr>
<td>Community &amp; Behavioral Health Promotion</td>
<td>Paul Florsheim, PhD</td>
<td><a href="mailto:paulf@uwm.edu">paulf@uwm.edu</a></td>
</tr>
<tr>
<td>Environmental Health Sciences</td>
<td>Kurt Svoboda, PhD</td>
<td><a href="mailto:svobodak@uwm.edu">svobodak@uwm.edu</a></td>
</tr>
<tr>
<td>Epidemiology</td>
<td>Ellen Velie, PhD</td>
<td><a href="mailto:velie@uwm.edu">velie@uwm.edu</a></td>
</tr>
<tr>
<td>Public Health Policy &amp; Administration</td>
<td>Phoenix Do, PhD</td>
<td><a href="mailto:dphuong@uwm.edu">dphuong@uwm.edu</a></td>
</tr>
<tr>
<td>Student Representatives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPC (MPH representative)</td>
<td>Fauzia Osman</td>
<td><a href="mailto:fosman@uwm.edu">fosman@uwm.edu</a></td>
</tr>
<tr>
<td>GPC (PhD representative)</td>
<td>Jenn Woo</td>
<td><a href="mailto:woomj@uwm.edu">woomj@uwm.edu</a></td>
</tr>
<tr>
<td>MPHCC</td>
<td>Krisin Komnik</td>
<td><a href="mailto:kkomnick@uwm.edu">kkomnick@uwm.edu</a></td>
</tr>
<tr>
<td>MPHCC</td>
<td>Chelsea Moore</td>
<td><a href="mailto:cemoore@uwm.edu">cemoore@uwm.edu</a></td>
</tr>
<tr>
<td>PhDCC</td>
<td>Darren Raush</td>
<td><a href="mailto:drausch@uwm.edu">drausch@uwm.edu</a></td>
</tr>
</tbody>
</table>

**For Assistance**

Public Health students’ first point of contact is Katie Cubberley, Graduate Program Manager. She may connect you with other appropriate university staff, depending on the request. Students are also encouraged to call the Main Contact Line (414) 227-3001. All Zilber School staff whose duties interact with students (and are named in processes in this Handbook) are listed below.

*Call or email Katie if you have any questions about the programs, policies, or procedures in this handbook.*

**Staff and Administration Contact Information (Listed alphabetically)**

**Main Contact Line**

**ZSPH Fifth Floor Reception Desk**

Phone: (414)227-3001 Nathan Carter, Building Events Coordinator

ZSPH Building Reception

Phone: (414)227-3003

njcarter@uwm.edu
Katie Cubberley, MSP, Graduate Program Manager  
ZSPH Building Room 521  
Phone: (414)227-3256  
Email: cubberL2@@uwm.edu

George Henion, Faculty Support Associate  
ZSPH Building Room 550  
Email: henion@uwm.edu

Heidi Janzen, Assistant Dean for Business and Finance  
ZSPH Building Room 527  
Phone: (414)737-4984  
Email: heidij@uwm.edu

Michael Laiosa, Faculty Chair  
Email: laiosa@uwm.edu

Elise Papke, DrPH, Field Experience Instructor; Senior Public Health Specialist  
ZSPH Building Room 540  
Phone: (414)227-3001  
Email: mepapke@uwm.edu

Ron Perez, PhD, Dean  
Email: perez@uwm.edu

Tanika Reesnes, Human Resources Manager  
ZSPH Building Room 509  
Phone: (414)227-3131  
Email: reesnes@uwm.edu

Thalia Williams, PhD, Community Engagement Coordinator  
ZSPH Building Room 531  
Phone: (414)227-4128  
Email: thaliaw4@uwm.edu

Karen Vanalkan Dean’s assistant  
ZSPH Building Reception  
Phone: (414)227-3003
Financial Information: Tuition and Segregated Fees
Credits taken per semester and student residency status determine the exact program cost.

Note: Segregated fees are included in the Resident, Non-Resident and Minnesota rates. Classes held strictly off-campus are not charged Segregated Fees. Students in public health degree programs typically pay on-campus tuition rates. The segregated fees area part of the total amount paid to the University by students taking credit classes on campus. These funds are earmarked for the support of certain student services. Students enrolling exclusively in audit or off-campus classes are not charged segregated fees and will not be able to use some campus facilities or obtain a University bus pass. If you fall into one of these categories for a semester but want full access to all campus facilities, you may pay an additional fee based on the number of credits taken. Contact the Cashier’s Office, Mitchell Hall room 285 or (414) 229-4914 for more information.

Graduate tuition schedule for fall 2017:

<table>
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<th># of Credits</th>
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<th>Minnesota w/ Reciprocity</th>
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</tr>
</tbody>
</table>

The amounts listed on the above fee schedule do not include any special course fees, distance education fees, or differential tuition that will be charged in addition to normal tuition. For example, online public health (PH) courses will incur an additional fee of $250.00. Consult the Schedule of Classes for a complete listing of other departments’ fees.

Financial Information: Textbooks
Many public health classes will require the students to purchase textbooks and other materials. Students can search the Schedule of Classes online to view required textbooks. Class listings will often include a syllabus, which outlines topics covered in class and associated readings.
Students may search for course textbooks at the UWM Bookstore online (http://uwm.booksbyecampus.com/). Many books are for sale at the UWM Bookstore in the Kenwood campus student union.

Students may also purchase textbooks from other vendors. Check with the course instructor listed on the Schedule of Classes to ensure they order the correct edition of required books. Any question about assigned textbooks, readings, and assignments should be directed to the course instructor. Many Faculty post readings on D2L, UWM’s web-based course management system.

Note that many scholarly journals are available for UWM students to download articles for free. Students can access these journals on the UWM Libraries website. You can search by topic, author, title, etc.

Financial Information: Applying for Loans
All students are strongly encouraged to apply for financial aid every year. The first step in the process includes filling out the Free Application for Federal Student Aid (FAFSA). This should be done online at www.fafsa.gov.

You are encouraged to file FAFSA as soon after January 1st as possible for the following fall. Once the priority filing date has passed, you are still encouraged to apply for aid. As long as you are still enrolled in classes or the enrollment period has not begun, you will be offered aid from the programs that have funding remaining at the time the file is reviewed. The final date to submit a FAFSA is actually in June AFTER the Academic Year is over. However, a student must still be enrolled in classes in order for financial aid be offered and any loans must be certified by that date as well. The entire process can take 6-10 weeks.

Visit http://www4.uwm.edu/financialaid/ for more information.

Financial Information: Assistantships, Fellowships and Scholarships
Continuing students are automatically considered for assistantships and scholarships. If you have a particular financial need that should be considered, communicate it to Katie by January 6th. To apply for scholarships, you may be asked to submit a resume or CV and answer the following questions:
1. What are your career goals? Be specific in how your goals demonstrate a commitment to social and environmental justice.

2. What unique or unusual circumstances set you apart? (include if you are a low-income and/or first generation college student)

3. What are the strengths of your academic career to date?

Financial Information: Assistantships

Visit the Graduate School’s website at http://uwm.edu/graduateschool/graduate-assistant-policies-procedures/ for complete information about assistantship funding, policies, and procedures. The Zilber SPH offers some assistantship support. Assistantships are typically awarded to students through a competitive application process.

Teaching Assistants

The title Teaching Assistant is used for graduate students enrolled in the University of Wisconsin System who are regularly assigned teaching and related responsibilities (other than manual or clerical responsibilities) under the supervision of a member of the faculty.

The UWM International Teaching Assistant Assessment (MITAA) is a requirement for some international teaching assistants who are non-native speakers of English and who will be assigned classroom duties as part of a graduate teaching assistantship. A Department representative must be available to participate in the assessment. There is no charge for the MITAA.

Program Assistants & Project Assistants

Program Assistant or Project Assistant means a graduate student enrolled in the University of Wisconsin System who is assigned to conduct training, administrative responsibilities or other academic or academic support projects or programs, except regular preparation of instructional materials for courses or manual or clerical assignments, under the supervision of a member of the faculty or academic staff, primarily for the benefit of the University, faculty or academic staff supervisor or a granting agency.

Research Assistants

Research Assistant means a graduate student enrolled in the University of Wisconsin System who is assigned to conduct research that is for the benefit of the student’s own learning and research and for the benefit of the University, faculty or academic staff supervisor or granting
Financial Information: Fellowships

The Graduate School currently offers three types of fellowships for full-time study, each with a monthly stipend for the academic year, coverage of in-state tuition and remission of out-of-state tuition (for students who are not residents of the State of Wisconsin), and eligibility for state-sponsored health insurance. To apply for any of the fellowships, you must complete the fellowship application online. These fellowship applications include letters of recommendation. Enter online the letter writers' names and emails. The School must receive all letters of recommendation by January 6th for the application for the fellowship(s) to be considered complete.

See the Zilber School of Public Health Procedure for UWM Graduate Student Fellowships in the Policies and Procedures section of this Handbook for more information about the application and selection process. Note: Graduate School fellowship stipends count as financial aid.

The **Distinguished Graduate Student Fellowship (DGSF)** for new and continuing UWM graduate students. The DGSF is a one-year, non-renewable fellowship. The Academic Year stipend for 2017-2018 is $15,000. In addition, Fellowship recipients will benefit from a $1,000 travel award that will accompany each fellowship award. The money should be spent in accordance with UWM travel regulations by the end of the fiscal year following the year in which the fellowship award is held. The money will be spent on travel to present at a major national or international conference in the student's discipline. The DGSF is not open to doctoral students who will achieve dissertator status by the application deadline for the award.

The **Distinguished Dissertation Fellowship (DDF)** for current UWM PhD students who have either achieved dissertator status or will achieve dissertator status during the award year. The DDF is a one-year, non-renewable fellowship. The academic-year fellowship stipend for 2017-2018 is $16,500. In addition, recipients will benefit from a $1,000 travel award that will accompany each fellowship award.

The **Advanced Opportunity Program (AOP) Fellowship**. Stipend for 2017-2018 academic year is $15,000 and students will also receive a $1000 travel stipend New and continuing qualified UWM graduate students who must be at least one of the following:
• Individuals from racial or ethnic populations which are under-represented among students of higher education.
• First-generation college students.
• Individuals with disabilities.
• Individuals from financially disadvantaged backgrounds or circumstances.
• Recent Immigrants (must be U.S. citizens or permanent residents of the United States).
• Participants in TRIO pre-college or undergraduate programs for students (e.g., Upward Bound, Talent Search, Student Support Services, McNair, Project 1000, etc.).

Fellowship nominees/awardees must maintain a 3.0 GPA and make reasonable progress toward their degree. Fellowship nominees/awardees cannot be on academic probation and cannot have engaged in academic or non-academic misconduct during their current graduate program, based on transcript notations at the time of nomination/award. If the fellowship nominees/awardees become ineligible, the graduate fellowship award/offer is forfeited, effective the date that the sanctions are implemented.

Applicants shall be considered in their entirety and reviewed individually, and no applicant shall receive a fellowship simply because he or she fulfills one or more of the above-listed classifications.

Procedure for UWM Graduate Student Fellowships
Approved by the Graduate Program Committee 2/25/2014

Graduate students have the opportunity to submit applications for three fellowships through the UWM Graduate School:

• The Distinguished Graduate Student Fellowship
• The Distinguished Dissertation Fellowship (PhD students only)
• The Advanced Opportunity Program Fellowship

These fellowships are designed to support excellent students while they complete their graduate studies and develop their professional or research portfolio. This procedure is to describe the steps involved the application process.

1. In early Fall of each Academic Year, the Senior Graduate Program Manager will send a notice to all graduate students at the Zilber School informing them of the three fellowship opportunities.
2. A student who is interested in applying for any of these fellowships must visit the Graduate School’s website and read the application instructions, paying attention to the eligibility requirements and the need for letters of recommendation. http://graduateschool.uwm.edu/students/financial-support/fellowships/

3. A student who wishes to apply must complete the application by January 6th so that the Fellowship Selection Subcommittee can review all applications and forward the most qualified applications to the Graduate School for consideration.

- A student must submit a resume or CV and respond to the following short essay responses to below questions (3 pages total; about 250 words per question)
  1. What are your career goals? Be specific in how your goals demonstrate a commitment to social and environmental justice.
  2. What unique or unusual circumstances set you apart? (include if you are a low-income and/or first generation college student)
  3. What are the strengths of your academic career to date?

The Fellowship Selection Subcommittee will recommend up to the number of students allowable by the Graduate School each year for the Advanced Opportunity Program Fellowship, the Distinguished Graduate Student Fellowship, and the Distinguished Dissertation Fellowship.

The Fellowship Selection Subcommittee will consider all materials in the comprehensive package of materials submitted and will review each application “holistically”. The subcommittee will base their recommendations on the following factors:

- Grades in Graduate School and completion of coursework needed to successfully achieve fellowship goals/proposed project
- Quality of statements required (quality of the writing and depth of experience)
- Quality of research and/or practice experience evident in prior and current activities
- Community service and/or University service activities
- Quality of Letter(s) of Recommendation received by the application due date

4. Students who are on academic probation are not eligible to apply for the fellowships.
5. The Zilber School of Public Health nominations (and accompanying letters) are sent to the Graduate School by their established deadline.

6. The Zilber School GPC Chair will inform students whether their application(s) have been recommended to be forwarded to the Graduate school. These nominations (and accompanying letters) are due to the Graduate School in early February.

7. The Graduate School will notify students of their application outcome in mid-March.

Financial Information: Scholarships

All scholarships are awarded on a competitive basis. Apply by January 7th for consideration. If you have a particular financial need that should be considered, communicate it to the Graduate Program Manager.

To apply for scholarships, you may be asked to submit a resume or CV and answer the following questions:

1. What are your career goals? Be specific in how your goals demonstrate a commitment to social and environmental justice.
2. What unique or unusual circumstances set you apart? (include if you are a low-income and/or first generation college student)
3. What are the strengths of your academic career to date?

Many students receive renewable scholarships upon admission into the School, such as a Zilber Award. These awards are automatically renewed, as long as the student maintains good academic standing (GPA above 3.0).
Student Travel for University Business

Note that if a student is traveling using School funds, grant funds, travel awards, or professor's start-up funds, a travel authorization form must be filed.

The form will need to be signed by the individual authorizing funds or the Graduate Program Manager.

Please turn in the form and copies of any e-mail denoting award, use of funds, etc. to the Faculty Support Office. These should be turned in as soon as possible and, preferably, before you begin to plan the travel. When traveling on university business, it is highly recommended to work with George Henion (henion@uwm.edu) for pre-travel arrangements. Note that AirBnB will never be reimbursable by university funds. All flights must be booked through Fox Travel.

See this handbook’s Appendices for the Travel Support Request form. Students who receive School funding for travel are required to work with George Henion (henion@uwm.edu) for post-travel reimbursement.
Section II: The Master of Public Health (MPH) Program
Overview

The Zilber School of Public Health (SPH) offers a Master of Public Health (MPH), a professional master’s degree program with five distinct tracks of study. The MPH program provides students with a broad understanding of public health practice and allows specialization in Biostatistics, Community & Behavioral Health Promotion, Environmental Health Sciences, Epidemiology, or Public Health Policy & Administration.

Like most MPH programs, the Zilber SPH’s program imparts knowledge and skills in each of these core disciplines in public health, helping prepare all students to analyze information and consider solutions to public health problems using a social justice lens at the community, institutional, and societal levels. Courses are designed to teach program- and track-level competencies as defined by Zilber SPH faculty. Program-level competencies reflect key public health skills including systems thinking, ethics, analytical methods, communications/informatics, diversity/culture, leadership, and professionalism. In addition, students engage in a specific track of study, gaining deeper competency in one of the five areas. Upon graduation, students are prepared for positions in a range of population health settings and/or for doctoral-level study.

Track Summaries

**Biostatistics (BIOS):** The Biostatistics track builds on the classic Public Health Biostatistics skill and knowledge base and takes advantage of special knowledge of its faculty in the areas of genetics, bioinformatics, network analysis, causal inference, and big data science. Students have the opportunity to learn and apply statistical genetics in the context of complex disease study, high throughout computing used in ‘big’ data science, applications in evidence-based patient-centered outcome studies, and population-based epidemiological studies. Courses include topics and material such as interpretation of personalized and evidence-based medicine in the context of public health; basic understanding of genetics and epigenetics; general ‘omic’ approaches and concepts; as well as classic Biostatistics topics such as Survival and Categorical data analysis.

**Community & Behavioral Health Promotion (CBHP):** The CBHP track focuses on promoting the health of communities through innovative approaches to community engagement and collaborative practice. Coursework addresses theories and frameworks in social and behavioral science, evidence-based methods for program planning (including assessment) and implementation, and program evaluation. Students apply a social justice and equity-centered approach to public health training and practice. Methodological approaches address quantitative, qualitative, and community-engaged techniques.
Environmental Health Sciences (EHS): The EHS track offers students an opportunity to specialize in environmental threats to the public's health, while simultaneously obtaining a strong scientific background that connects environmental sources, distributions, exposures, and biological mechanisms to ultimate health impacts. Students benefit from faculty expertise in environmental and developmental toxicology, environmental microbiology, immunotoxicology, environmental epidemiology, and the use of animal models to research public health issues. Didactic coursework includes introduction to the core disciplines of public health, specialization in areas such as environmental epidemiology and risk assessment, along with student-selected opportunities to deepen knowledge in the areas of the biological, chemical, and built environment. A Field Experience with a public health agency or another environmental health-based community partner and Capstone incorporate environmental health theories with crosscutting public health competencies like communication, public health biology, systems-thinking, and leadership.

Epidemiology (EPI): The Epi track is unique in its emphasis on integrating epidemiologic theory and methods with essential interdisciplinary tools for analyzing socio-structural processes that influence health and advancing health equity. Our comprehensive and multidisciplinary curriculum facilitates learners’ analysis of interrelationships among theory, research, and practice, as well as among historical and contemporary structures of inequality. Students are thereby prepared to engage in rigorous, collaborative, evidence-informed, and reflexive public health praxis. Through both didactic and experiential learning, students apply social justice, epidemiologic, and critical social theories to research and practice while developing skills in reframing public health issues, applied epidemiological methods, epidemiologic data analysis, social epidemiology, and building community partnerships. Graduates are able to collect, analyze, and interpret epidemiological data from health equity perspectives, generate theory-driven research questions, and work in collaboration with diverse community partners to promote systems-level social change for eliminating health inequities.

Public Health Policy & Administration: The PHPA track equips students with an intersectoral, systems-level, applied approach to informing public health policy and administration that promotes health equity. Emphasizing a comprehensive perspective and integrated strategy that links theory with practice, the PHPA curriculum provides students with a foundational understanding of social and policy theory, quantitative and qualitative methods, and policymaking within a broad context. Graduates obtain a breadth of knowledge and skills applicable to a variety of fields in the public and private sectors as well as the ability to effectively apply their knowledge and tools to practice.
MPH Program Competencies

1. Explain the foundational principles and historical perspectives that shape the field of public health.
2. Describe how multiple determinants, including socioeconomic, biological, behavioral and environmental, and the interrelations among these determinants shape population health and health inequities.
3. Integrate principles of social and environmental justice within public health practice and research.
4. Employ ethical principles and protocols in public health practice and research.
5. Implement approaches to public health practice and research that recognize the social, cultural and environmental circumstances of individuals, communities and populations.
6. Utilize appropriate quantitative and/or qualitative methods in public health practice and research.
7. Apply inter-disciplinary theories, research methods and best practices to address public health issues and promote population health.
8. Collect, synthesize and critically analyze information and data to identify and address public health issues and inform interventions.
9. Practice professionalism; demonstrated by integrity, respect, transparency, sound judgment, and constructive interactions with colleagues, community members, stakeholders and the public at large.
10. Demonstrate leadership and partnership skills that foster and support collaborations across diverse communities, settings and sectors.
11. Communicate effectively about public health issues with diverse audiences using a variety of strategies and modalities.
12. Advocate for the public’s health and health equity.
Track Competency Sets

Biostatistics Track
1. Function as a collaborator with community partners on public health projects and in developing recommendations for appropriate study designs that advance social justice and population health.
2. Translate research objectives into testable hypotheses.
3. Differentiate between quantitative problems that can be addressed with routine methods and those requiring input from a doctoral-level biostatistician.
4. Demonstrate a broad knowledge and understanding of statistical techniques used in public health studies and health-related scientific investigations.
5. Identify and apply a variety of appropriate statistical methods for developing inferences about public-health-related questions.
6. Demonstrate basic programming skills in multiple statistical software packages and data management and integration techniques for public health and big data projects.
7. 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.
8. Interpret and critique statistical analyses in publications for public health professionals.
9. Demonstrate a cognizance of the social, environmental and public health contexts that are impacted by the results of statistical analyses.
10. Demonstrate effective written and oral communication skills when reporting statistical results to different audiences of public health professionals, policy makers and community partners.
11. Formulate and produce graphical displays of quantitative information (e.g., scatter plots, box plots and line graphs) that effectively communicate analytic findings.
12. Differentiate between ethical and unethical reporting of data and results.

Community & Behavioral Health Promotion Track
1. Demonstrate a broad knowledge and understanding of community and behavioral health theories and their application to health promotion and prevention.
2. Apply relevant theories, concepts and models from the social and behavioral sciences to public health research and practice.
3. Engage and include key stakeholders in the planning, implementation and evaluation of public health programs, policies, and interventions.
4. Demonstrate cultural humility and collaborative skills when working with disadvantaged individuals and diverse communities on public health problems and solutions.
5. Identify and operationalize social and community-level solutions to public health problems.
6. Develop and apply collaborative partnership and engagement skills with diverse community agencies and stakeholders to address health disparities and promote health equity.
7. Assess for potential social and behavioral factors influencing the health of individuals and communities.
8. Assess the strengths and limitations of social and behavioral science interventions and policies within the context of health promotion.
9. Apply qualitative and quantitative methods to the assessment of public health problems, the articulation of community strengths, and the evaluation of prevention and intervention programs.
10. Identify and apply theoretically grounded, evidence-based approaches to the development and implementation of social and behavioral science interventions.
11. Facilitate and/or lead the planning, implementation and evaluation of public health programs, policies and interventions.
12. Integrate principles of social justice and human rights into planning, implementing and assessing public health interventions.
13. Develop and apply effective health communication strategies with diverse stakeholders.

**Environmental Health Sciences Track**
1. Describe/understand the direct and indirect human health effects of major physical, chemical and biological factors from both natural and built environments.
2. Describe genetic, physiological and overall human health effects of primary environmental hazards resulting from both chronic and acute exposures.
3. Describe/understand how animal models are utilized to address societal issues that intersect between basic science and public health.
4. Describe approaches for assessing, preventing and controlling environmental hazards that pose risks to both human and ecological health.
5. Perform a risk assessment of an environmental health agent.
6. Identify, locate and use appropriate reference materials.
7. Comprehend the primary scientific research literature, and obtain information directly from experts in the field of environmental health sciences.
8. Analyze data statistically and conceptually, interpret results, make conclusions, and describe the relevance of such results to public health problems/issues.
9. Communicate and disseminate complex scientific and public health information simply and accurately in both written and spoken word, in both informal and formal interactions, targeted appropriately and respectfully to audiences of diverse backgrounds.

10. Interact and collaborate with individuals and organizations across the spectrum of public health disciplines.

**Epidemiology Track**

1. Apply multidisciplinary social and environmental justice, human rights, critical social science, population health and health equity perspectives to frame and interpret epidemiologic research and practice.

2. Identify and describe socio-structural, environmental, behavioral and biological determinants of health and health equity.

3. Systematically gather, critically evaluate and synthesize epidemiological literature and other relevant information to advance population health and health equity.

4. Apply epidemiological skills in collaboration with community partners and key stakeholders to advance social and environmental justice and population health.

5. Use interdisciplinary knowledge to formulate theory-driven hypotheses and research questions with relevant policy and practice implications for advancing population health and health equity.

6. Apply appropriate field and surveillance methods to investigate disease outbreaks and assess patterns of exposures and health outcomes in the population.

7. Engage ethically in interactions with study participants, communities and colleagues, in the performance of research and practice activities, and reporting of data and findings.

8. Select epidemiologic methods and conduct statistical analyses to describe patterns of health and determinants of health, assess associations between exposures and health outcomes while minimizing threats to causal inference.

9. Interpret and contextualize results, with attention to strengths and limitations of the study framing, design and analysis, and policy and practice implications.

10. Communicate epidemiologic findings using a variety of modalities to diverse audiences and translate how findings are relevant to academics, community organizations, policy-makers, public health practitioners and other stakeholders.

**Public Health Policy & Administration Track**

1. Distinguish public health policy and administration from health care policy and administration, and articulate the importance of health in all policies.
2. Examine how public policy and established socio-economic structures influence population health and health disparities.

3. Develop strategies for leveraging policy to promote population health, health equity, and social and environmental justice.

4. Integrate ethical principles into public health policy, practice, research and administration by ensuring respect for diverse values, beliefs, and cultures and the dignity of individuals and communities.

5. Demonstrate effective oral and written communication skills to present, explain, and advocate for public health policies and programs.

6. Describe the policy-making process and identify the actors, structures and forces that influence and shape the public health policy process.

7. Conduct policy analysis in public health policy and administration, identifying and assessing policy options, outcomes, and potential contributions to population health and health disparities.

8. Apply appropriate methods to gather and analyze a robust basis of evidence to inform and evaluate public health policy, practice and administration.

9. Assess and translate available evidence into public health policy and administrative planning, development and implementation to promote population health and health equity.

10. Describe the organizational structures and administration of public health and health care systems.

11. Describe best-practice leadership and management principles as they relate to public health practice.
Curriculum and Courses

All students enrolled in the MPH program take a common set of core classes designed to give basic skills and knowledge of public health concepts. The core curriculum consists of at least 20 credit hours, including at least three credits Field Experience and a two-credit capstone seminar. In addition to the common core, students complete the required coursework in one of five specialization tracks: Biostatistics, Community and Behavioral Health Promotion, Environmental Health Sciences, Epidemiology, or Public Health Policy and Administration. The MPH degree varies from 42-44 credits depending on the track. Students must maintain a cumulative G.P.A. of 3.0 or better in order to progress through the program.

MPH Required Common Core Courses (at least 20 credits)

- PH 702: Introduction to Biostatistics (3 credits)
- PH 703: Environmental Health Sciences (3 credits)
- PH 704: Principles and Methods of Epidemiology (3 credits)
- PH 705: Public Health Policy and Administration (3 credits)
- PH 706: Perspectives in Community and Behavioral Health (3 credits)
- PH 790: Field Experience in Public Health (at least 3 credits)
- PH 800: Capstone in Public Health (2 credits)
Curriculum and Courses: Biostatistics Track (42 total required credits)

**Required Courses (13 credits)**
- PH 710: Seminar in Biostatistics and Bioinformatics (1 credit)
- PH 711: Intermediate Biostatistics (3 credits)
- PH 712: Probability and Statistical Inference (3 credits)
- PH 713: Analyzing Observational and Experimental Data (3 credits)
- PH 718: Data Management and Visualization in R (3 credits)

“S”electives – Choose three (9 credits minimum)
- PH 707: Introduction to Statistical Computing (1 credit)
- PH 709: Public Health Informatics (3 credits)
- PH 714: Statistical Genetics and Genetic Epidemiology (3 credits)
- PH 715: Applied Categorical Data Analysis (3 credits)
- PH 716: Applied Survival Analysis (3 credits)
- PH 717: Applied Longitudinal Data Analysis (3 credits)
- PH 720: Special Topics in Biostatistics and Bioinformatics (1 – 3 credits)
- PH 721: Introduction to Translational Bioinformatics (3 credits)
- PH 722: Introduction to Bioinformatics in Biomedical and Public Health Sciences (3 credits)
- PH 723: Clinical Trials (3 credits)
Curriculum and Courses: Community & Behavioral Health Promotion (CBHP) Track (44 total required credits)

**Required Courses (15 credits)**
- PH 701: Public Health Principles and Practice (3 credits)
- PH 725: Theories and Models of Health Behavior (3 credits)
- PH 726: Community Health Assessment (3 credits)
- PH 727: Program Planning and Implementation in Public Health (3 credits)
- PH 728: Program Evaluation in Public Health (3 credits)

**Methods “S”electives- choose two (6 credits minimum)**
- PH 729: Survey Research Methods in Public Health (3 credits)
- PH 736: Advanced Qualitative Methods (3 credits)
- PH 776: Qualitative Approaches in Public Health Policy and Administration (3 credits)
- PH 831: Community Engaged and Participatory Research and Practice (3 credits)

**Electives – Choose one (3 credits minimum)**
- PH 719: Social Justice in Public Health (3 credits)
- PH 740: Special Topics in Public Health (3 credits)
- PH 752: Public Health and Mental Health (3 credits)
- PH 999: Independent Study (1-3 credits)
- KIN 732: Physical Activity and Health across the Lifespan (3 credits)

*Other classes as approved by advisor*
Curriculum and Courses: Environmental Health Sciences (EHS) Track
(42 total required credits)

**Required Courses (11 credits)**
PH 701: Public Health Principles and Practice (3 credits)
PH 743: Environmental Risk Assessment (3 credits)
PH 750: Seminar in Environmental Health Sciences (1 credit x 2)
PH 762: Environmental Epidemiology (3 credits)

**Built Environment “S” elective – Choose one**
ARCH 790: LEED for Existing Buildings: Operations and Maintenance Assessment for Environmental, Economic, and Social Impact (3 credits)
GEOG 520: The Physical Geography of the City (3 credits)
GEOG 880/URBPLAN 880: Challenges to Urban Sustainability (3 credits)
GEOG 945: The Internal Structure of the City (3 credits)
IE 580 Ergonomics (3 credits)
URBPLAN 791 Intro to Urban GIS for Planning (3 credits)
Other classes as approved by advisor

**Chemical Environment “S” elective- Choose one**
PH 741: Environmental Health Microbiology (3 credits)
PH 744: Environmental Toxicology (3 credits)
PH 745: Developmental Toxicology (3 credits)
Other classes as approved by advisor

**Biological Environment “S” elective- Choose one**
PH 741: Environmental Health Microbiology (3 credits)
PH 744: Environmental Toxicology (3 credits)
PH 745: Developmental Toxicology (3 credits)
PH 775: Mechanisms of Infectious Disease (2 credits)
Other classes as approved by advisor

**Elective – Choose one additional course**
from the Built, Chemical, or Biological “S” electives listed above or other classes as approved by advisor
Curriculum and Courses: Epidemiology (EPI) Track (44 total required credits)

Required Courses (15 credits)

PH 700: Structures of Inequality and Population Health (3 credits)
PH 758: Social Epidemiology (3 credits)
PH 759: Applied Quantitative Methods for Studying Population Health and Health Disparities (3 credits)
PH 761: Epidemiology Field Methods (3 credits)
PH 763: Epidemiology in Action for Equity (3 credits)

Content “S”electives – Choose one (3 credits minimum)

PH 762: Environmental Epidemiology (3 credits)
PH 768: Cancer Epidemiology (3 credits)
PH 769: Critical Perspectives in Nutritional Epidemiology and Food Systems (3)
Other classes as approved by advisor

Electives – Choose two (6 credits minimum)

PH 713: Analyzing Observational and Experimental Data (3 credits)
PH 714: Statistical Genetics and Genetic Epidemiology (3 credits)
PH 715: Applied Categorical Data Analysis (3 credits)
PH 716: Applied Survival Analysis (3 credits)
PH 717: Applied Longitudinal Analysis (3 credits)
PH 727: Program Planning and Implementation in Public Health (3 credits)
PH 728: Program Evaluation in Public Health (3 credits)
PH 729: Survey Research Methods in Public Health or SOC 752: Fundamentals of Survey Methodology (not both) (3 credits)
PH 784: Social Policy as Health Policy (3 credits)
PH 868: Links between Infectious and Chronic Disease (3 credits)
GEOG 525: Geographic Information Science (3 credits)
UrbPlan 692: Data Analysis and Visualization (3 credits)
Other classes as approved by advisor
Curriculum and Courses: Public Health Policy & Administration (PHPA) Track
(44 total required credits)

Required Courses (15 credits)
- PH 700: Structures of Inequality and Population Health (3 credits)
- PH 776: Applied Qualitative Methods for Public Health Policy and Administration (3 credits)
- PH 777: Survey of Quantitative Research and Methods for Public Health Policy and Administration (3 credits)
- PH 779: Public Health Policymaking and Policy Analysis (3 credits)
- PH 781: Public Health Administration (3 credits)

Fundamental Methods “S”elective – choose one (3 credits)
- PH 728: Program Evaluation in Public Health (3 credits)
- PH 785: Principles of Public Health Economics (3 credits)
- PUB ADM 630: Budgeting and Finance in the Public Sector (3 credits)

Content Elective- Choose at least one (3 credits minimum)
- PH 708: Health Systems and Population Health (3 credits)
- PH 774: Violence and Public Health (3 credits)
- PH 784: Social and Economic Policy as Health Policy (3 credits)
- PH 786: [AMS1] Critical Perspectives on Nutritional Epidemiology and the Food Systems (3 credits)
- PH 820: Maternal and Child Health Foundations, Policy and Practice (3 credits)
Other classes as approved by advisor

Methods & Practice Elective- Choose at least one (3 credits minimum)
(Must be different from Fundamentals Methods Elective)
- PH 759: Applied Quantitative Methods for Studying Population Health and Health Disparities (3 credits)
- PH 785: Principles of Public Health Economics (3 credits)
- PH 728: Program Evaluation in Public Health (3 credits)
- PH 726: Community Assessment (3 credits)
- PH 727: Program Planning and Implementation in Public Health (3 credits)
- PH 729: Survey Research Methods in Public Health (3 credits)
- PH 763: Epidemiology in Action for Equity (3 credits)
- URBPLAN 791: Intro to Urban GIS for planning (3 credits)
PUB ADM 630: Budgeting and Finance in the Public Sector (3 credits)
BUSMGMT 718: Concepts and Practice of Nonprofit Management (3 credits)
ED POL 601: Foundations of Community-Based Organizations (3 credits)

ED POL 711: Community Organizing: Collective Action for Social Change (3 credits)
NONPROF 791: Nonprofit Advocacy and Public Policy (3 credits)
ED POL 602: Proposal Writing and Fundraising Skills for Community-Based Organizations (3 credits)

Other classes as approved by advisor
## Biostatistics Track Plan of Study (for students beginning in fall 2017)

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<thead>
<tr>
<th>Fall 1 (12 credits)</th>
<th>Spring 2 (12 credits)</th>
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<tbody>
<tr>
<td>PH 702 Introduction to Biostatistics</td>
<td>PH 703 Environmental Health Sciences</td>
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<td>PH 705 Public Health Policy and Administration</td>
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<td>PH 711 Intermediate Biostatistics</td>
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<td>PH 790 Field Experience in Public Health (1, 2, or 3 credits)</td>
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<tr>
<td>Biostatistics “S”electives 1 *(3 credits)</td>
<td>PH 718 (3 credits) Data Management and Visualization in R</td>
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<tr>
<td>Biostatistics “S”electives 2 *(3 credits)</td>
<td>Biostatistics “S”electives 3 *(3 credits)</td>
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<tr>
<td>PH 720 (1 credit) Special Topics in Biostatistics and Bioinformatics</td>
<td>Biostatistics “S”electives 4 *(3 credits) “S”elective 4 is optional</td>
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<td>PH 800 (2 credits) Capstone in Public Health</td>
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  - PH 709: Public Health Informatics *(3 credits)*
  - PH 714: Statistical Genetics and Genetic Epidemiology *(3 credits)*
  - PH 715: Applied Categorical Data Analysis *(3 credits)*
  - PH 716: Applied Survival Analysis *(3 credits)*
  - PH 717: Applied Longitudinal Data Analysis *(3 credits)*
  - PH 720: Special Topics in Biostatistics and Bioinformatics *(1 – 3 credits)*
  - PH 721: Introduction to Translational Bioinformatics *(3 credits)*
  - PH 722: Introduction to Bioinformatics in Biomedical and Public Health Sciences *(3 credits)*
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## CBHP Track Plan of Study (for students beginning in Fall 2017)

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<td><strong>CBHP Methods “S” elective 1</strong></td>
<td><strong>CBHP Methods “S” elective 2</strong></td>
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<td><em>Elective 2 is optional</em></td>
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<td>“S”elective 1</td>
</tr>
<tr>
<td>Perspectives in Community and Behavioral Health</td>
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<tr>
<th>Summer 1 (0 - 3 credits)</th>
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<tbody>
<tr>
<td>PH 790</td>
</tr>
<tr>
<td>Field Experience in Public Health (1, 2, or 3 credits)</td>
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<tr>
<td>or no summer classes</td>
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<thead>
<tr>
<th>Fall 2 (7 - 10 credits)</th>
<th>Spring 2 (6 or 9 credits)</th>
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<tbody>
<tr>
<td>PH 743</td>
<td>PH 750 - 2</td>
</tr>
<tr>
<td>Environmental Risk Assessment</td>
<td>Seminar in Environmental Health Sciences</td>
</tr>
<tr>
<td>PH 750 – 1</td>
<td>“S”elective 3 or 4</td>
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<tr>
<td>Seminar in Environmental Health Sciences (1 credit)</td>
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<tr>
<td>PH 790 (1, 2, or 3 credits)</td>
<td>“S”elective 4 or none</td>
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<tr>
<td>Field Experience in Public Health</td>
<td>or none</td>
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<td>or “S”elective 2</td>
<td>“S”elective 2 or 3</td>
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<tr>
<td>“S”elective 2 or 3</td>
<td>PH 800 (2 credits)</td>
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<td>or none</td>
<td>Capstone</td>
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Note that part-time students should maintain an updated Plan of Study with their Faculty Advisor.
## EPI Track Plan of Study (for students beginning in fall 2017)

<table>
<thead>
<tr>
<th>Fall 1 (12 credits)</th>
<th>Spring 1 (12 credits)</th>
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<tbody>
<tr>
<td>PH 700 Structures of Inequality and Population Health</td>
<td>PH 703 Environmental Health Sciences</td>
</tr>
<tr>
<td>PH 702 Introduction to Biostatistics</td>
<td>PH 705 Public Health Policy and Administration</td>
</tr>
<tr>
<td>PH 704 Principles and Methods of Epidemiology</td>
<td>PH 761 Field Methods in Epidemiology</td>
</tr>
<tr>
<td>PH 706 Perspectives in Community and Behavioral Health</td>
<td>PH 759 Applied Quantitative Methods for Studying Population Health and Health Disparities</td>
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### Summer 1 (3 credits)
- PH 790 Field Experience in Public Health

<table>
<thead>
<tr>
<th>Fall 2 (6 or 9 credits)</th>
<th>Spring 2 (9 or 11 credits)</th>
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<tbody>
<tr>
<td>PH 758 Social Epidemiology</td>
<td>PH 763 Epidemiology in Action for Equity</td>
</tr>
<tr>
<td>Epidemiology Content “S” elective or Elective 1</td>
<td>Epidemiology Content “S” elective or Elective 1</td>
</tr>
<tr>
<td>Elective 2 (here or in spring 2017)</td>
<td>Elective 2 (if not taken in fall 2016)</td>
</tr>
<tr>
<td>Elective 2 (if not taken in fall 2016)</td>
<td>PH 800 (2 credits) Capstone</td>
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</table>
# PHPA Track Plan of Study (for students beginning in Fall 2017)

<table>
<thead>
<tr>
<th>Fall 1 (12 credits)</th>
<th>Spring 1 (12 credits)</th>
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<tbody>
<tr>
<td>PH 700</td>
<td>PH 703 Environmental Health Sciences</td>
</tr>
<tr>
<td>Structures of Inequality and Population Health</td>
<td>PH 705 Public Health Policy and Administration</td>
</tr>
<tr>
<td>PH 702</td>
<td>PH 704 Principles and Methods of Epidemiology</td>
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<tr>
<td>Introduction to Biostatistics</td>
<td>PH 706 Qualitative Approaches in Public Health Policy and Administration</td>
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<tr>
<td>PH 704</td>
<td>PH 707 Perspectives in Community and Behavioral Health</td>
</tr>
<tr>
<td>Principles and Methods of Epidemiology</td>
<td>PH 776 Quantitative Approaches in Public Health Policy and Administration</td>
</tr>
<tr>
<td>PH 706</td>
<td>PH 777 Fundamentals of Community and Behavioral Health</td>
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<tr>
<td>Perspectives in Community and Behavioral Health</td>
<td>PH 781 Public Health Administration</td>
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**Summer 1 (0 or 3 credits)**

| PH 790                                  | PH 780 Field Experience in Public Health                 |
| Field Experience in Public Health       | or Elective**                                            |
| or no summer classes                    |                                                           |

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<thead>
<tr>
<th>Fall 2 (12 credits)</th>
<th>Spring 2 (5 to 11 credits)</th>
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<tbody>
<tr>
<td>PH 779</td>
<td>PH 781 Public Health Administration</td>
</tr>
<tr>
<td>Public Health Policymaking and Policy Analysis</td>
<td>PH 800 (2 credits) Capstone in Public Health</td>
</tr>
<tr>
<td>PH 790</td>
<td>PH 781 Field Experience in Public Health</td>
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<tr>
<td>Field Experience in Public Health</td>
<td>or Elective**</td>
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<tr>
<td>or Elective**</td>
<td>PH 800 (2 credits) Capstone in Public Health</td>
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Note that this is the updated curriculum and that part-time students should maintain an updated Plan of Study with their Faculty Advisor.

** Students must take one Fundamental Methods Elective, one Content Elective, and one Methods & Practice Elective. Additional electives are optional.
PH 790 Field Experience

PH 790 Field Experience (minimum of 3 credits total; may be taken for 1, 2 or 3 credits in a given semester; Satisfactory/Unsatisfactory)

The purpose of the Field Experience is to provide students with a practical public health experience that allows them to apply the knowledge and skills learned in the classroom to public health problems. Students work with their Faculty Advisor and school staff to identify a placement that matches the student’s public health interests and career goals. Students complete three credits (80 contact hours per one credit, 240 hours total) with the organization. Many students choose to complete their field experience working in a local health department or community-based organization with public health-related programs and services. The experience is a mentored placement engaging both a Faculty Advisor and a Site Preceptor.

The over-arching objectives of the practice experience are:

- To demonstrate practical skills related to specified track competencies that are useful to public health professions and that are not available solely through academic instruction.
- To explain the political, economic, environmental, and social contexts in which the public health activities for the particular project are conducted, integrating principles of social and environmental justice as they relate to the project.
- To characterize key features of the organizational and/or community contexts that might or do have an impact on the public health activities necessary for the particular project.
- To apply a minimum of four specified competencies learned in the MPH coursework in a public health practice setting. Two MPH Program competencies are REQUIRED:
  - Practice professionalism, demonstrated by integrity, respect, transparency, sound judgment, and constructive interactions with colleagues, community members, stakeholders and the public at large.
  - Communicate effectively about public health issues with diverse audiences using a variety of strategies and modalities.
PH 800 Capstone in Public Health
PH 800 Capstone in Public Health (2 credits), completed in the final year of study
The capstone requires students to integrate the knowledge and skills learned in the classroom, Field Experience, and/or lab into some aspect of professional public health practice. Students work with their Faculty Advisor to write a project proposal the semester prior to the capstone reflecting the student’s interests and career goals. Students then implement the project during their final semester of the program. The project has both a written paper and oral presentation component, in addition to attending a weekly seminar. The capstone project is an opportunity for students to demonstrate public health competencies.

Course Descriptions
PH 700: Structures of Inequality and Population Health (3 credits)
This course covers theory, practice-based skills, and foundations of traditional public health and health equity practice. Students will identify assumptions, core constructs, and explanatory frameworks of key public health, social justice, and critical social science theories. Prereq: grad st.

PH 701: Public Health Principles and Practice (3 credits)
Examination of fundamental principles designed to improve the health of the public, public health theories, domains, and practices. Prereq: grad st.

PH 702: Introduction to Biostatistics (3 credits)
Development and application of statistical reasoning and methods in addressing, analyzing and solving problems in public health. Prereq: grad st; Competency in College Algebra as reflected with a grade of B or better in a course (or diagnostic exam) equivalent to UWM’s MATH 116 College Algebra.

PH 703: Environmental Health Sciences (3 credits)
Survey of effects environment has on humans, and effects humans have on environment, emphasis on toxicology and infectious disease. Prereq: grad st.

PH 704: Principles and Methods of Epidemiology (3 credits)
Introduction of the quantitative study of patterns and determinants of health in human populations, including problem conceptualization, study design, measurement, causal inference, estimation accuracy, and threats and solutions to validity. Prereq: grad st; completion of or concurrent enrollment in PH 702 or equivalent statistics course by consent of instructor.

PH 705: Principles of Public Health Policy and Practice (3 credits)
This course discusses the integral role of policy in influencing population health, explores policies and policy strategies that protect and promote public health, provides a framework for the policymaking process, and introduces public health planning and administration. Pre-req: grad stat, PH704 preferred

**PH 706: Perspectives in Community and Behavioral Health (3 credits)**
Philosophical underpinnings, conceptual frameworks, and strategies for the application of behavioral and social science concepts to the goals of public health. Prereq: grad st.

**PH 707: Introduction to Statistical Computing (1 credit)**
Introduction to statistical methods as implemented in SAS, including macros and core statistical analysis functions. Prereq: grad st; PH 702(C) or cons intr.

**PH 708: Health Systems and Population Health (3 credit)**
This course comparatively discusses healthcare systems in the US and other countries, recognizing the political-economic origins of their organizational structures, and their performance in improving population health and health equity. Prereq: grad st.

**PH 709: Public Health Informatics (3 credits)**
Overview of the rapidly emerging and evolving field of public health informatics - active learning and exposure to new and relevant public health informatics methods, applications, and tools. Prereq: grad st; PH 702 or cons inst.

**PH 710: Seminar in Biostatistics and Bioinformatics (1 credit)**
The Biostatistics, Bioinformatics or Data Science Seminar will be held every semester and will have a different theme each semester rotating through special topics in Biostatistics, broad overview of Bioinformatics or recent developments in Data Science and Genetics. Prereq: grad st.

**PH 711: Intermediate Biostatistics (3 credits)**
Introduction to modern multivariable statistical analysis, based on generalized linear models. Topics include linear regression, logistic regression, one-way and two-way ANOVA, longitudinal analysis, missing data, and mixed models. Prereq: grad st; PH 702(P) or cons instr

**PH 712: Probability and Statistical Inference (3 credits)**
This introductory course covers mathematical treatment and understanding of key concepts in probability and distribution theory, and statistical inference. Covers probability, discrete, and continuous distributions, expectation, generating functions, limit theorems, transformations,
sampling theory, statistical point and interval estimation, hypothesis testing, method of moments, and maximum likelihood, among other topics. Prereq: grad st; Calculus I and II or cons inst.

**PH 713: Analyzing Observational and Experimental Data (3 credits)**
This is a graduate-level course that will provide students with a basic understanding of issues involved in analyzing data from both experiments and observational studies. The distinction between experiments and observational studies will be cast within a causal inference framework, and applications in public health will be emphasized. This course will cover randomization, confounding, blocking, ANOVA, selection bias, and missing or mis-measured data. Prereqs grad st; PH 702 (P); or cons instr

**PH 714: Statistical Genetics and Genetic Epidemiology (3 credits)**
Statistical methods for the analysis of family and population based genetic data. Topics include allele frequency estimation, classical segregation and linkage analysis, family- and population-based association studies. Students will be exposed to the latest statistical methodology and computer tools on gene mapping in complex human disease. Prereq: grad st; PH 711 or cons inst.

**PH 715: Applied Categorical Data Analysis (3 credits)**
This course will cover key concepts for analyzing contingency tables such as odds-ratios, relative risks, tests of independence and trend tests. Generalized linear regression models for the analysis of categorical data will be covered including logistic, probit, Poisson, and multinomial response models. Prereq: grad st; PH 711 or cons inst.

**PH 716: Applied Survival Analysis (3 credits)**
This course covers the statistical concepts and techniques that are commonly used in the practice of survival analysis. Survival functions, hazard rates, types of censoring and truncation will be introduced. Life tables, Kaplan-Meier plots, log-rank tests, Cox regression models. Inference for parametric regression models will be covered. Prereq: grad st; PH 711 or cons inst.

**PH 717: Applied Longitudinal Data Analysis (3 credits)**
This course covers modern methods for the analysis of repeated measures, correlated outcomes, and longitudinal data, including the unbalanced and incomplete data that are characteristic of biomedical research. Connections with multilevel modeling will be discussed. Prereq: grad st; PH 711 or cons inst.

**PH 718: Data Management, and Visualization in R (3 credits)**
This course covers basics of data management in UNIX and R and an introduction to databases (e.g., SQL). Data visualization and large-scale, parallel and batch computing will be taught within the context of implementing common algorithms in statistical computing. Applications will focus on research problems encountered in public health investigations. **Prereq:** grad st; **PH 711 or cons inst.**

**PH 719: Social Justice, Race, and Health (3 credits)**
This course is designed to introduce you to the major social variables that affect public health. These include: socioeconomic status, race, poverty, income distribution, social network, social support, social capital, neighborhood/community environment, Psychosocial stress. **Prereq:** grad st

**PH 720: Special Topics in Biostatistics (1 - 3 credits)**
Survey of an area in Biostatistics. Specific credits and additional prerequisites announced in Schedule of Classes each time course offered. **Retakable w/chg in topic to 9 cr max.**

**PH 721: Introduction to Translational Bioinformatics (3 credits)**
Broad overview of bioinformatics and hands-on practice using widely-used bioinformatics software to solve a variety of biological and biomedical problems. Topics include: introduction to high throughput technologies, bioinformatics database searching, supervised and unsupervised analysis, gene ontology analysis, pathway meta-analysis, and network analysis. **Prereq:** grad st; **PH 711 or cons inst.**

**PH 722: Clinical Trials (3 credits)**
Introduction to bioinformatics principles, methods, techniques and tools. Analysis of next generation sequence data, design of NGS based studies, power analysis, processing, integration and analysis of sequence and associated metadata. Topics will include methods and algorithms of sequence mapping, SNP and indel variant detection, methods to detect structural variants (e.g. copy number), approaches methods and resources to annotate variants. Applications and interpretation in biological, biomedical and public health sciences. Students will learn how to store, manage and compute using large data sets on a variety of computational platforms and clusters including cloud-based systems. R, Python or Perl will be used for programming exercises. **Prereq:** grad st; **PH 711 or equivalent or cons inst.**

**PH 723 Clinical Trials (3 credits)**
An introduction to the design, conduct and analysis of randomized clinical trials, including phase I to IV clinical trials. Design issues include randomization, blinding, power and sample size calculations, choosing endpoints, surrogate markers, and non-inferiority trials. We will discuss monitoring phase III trials, including stopping rules, confidentiality of interim results, and the role of data monitoring committees. Analysis issues include intention-to-treat, noncompliance
and missing data. Emphasis will be placed on ethical issues in clinical research throughout the course. **Prereq:** grad st; PH711(P) or cons inst

**PH 725: Theories and Models of Health Behavior (3 credits)**
Examine theories of health behavior targeted to each level of the social ecological model, including historical and public health context. Assess utility of these theories in various domains. **Prereq:** grad st.

**PH 726: Community Health Assessment (3 credits)**
Introduction to the concepts and techniques of community health assessment; conducting and critically analyzing community assessments. **Prereq:** grad st; PH 701 or cons instr

**PH 727: Program Planning and Implementation in Public Health (3 credits)**
Systematic approach to planning and implementing public health programs, examining program monitoring, methods of impact assessment, and measuring efficiency. **Prereq:** grad st.

**PH 728: Program Evaluation in Public Health (3 credits)**
Students design and present research and evaluation plans, receive guidance on developing conceptual frameworks and hypotheses, collecting and analyzing data, and developing program evaluation plans. **Prereq:** grad st; PH 702 or cons instr

**PH 729: Survey Research Methods in Public Health (3 credits)**
The application of survey methods with emphases on sampling, survey design and planning, and data collection procedures. **Prereq:** grad st; PH 702 or cons instr

**PH 731: Community Engaged and Participatory Research and Practice**
Community empowerment and involvement plays a role in public health, policy change, social, and environmental justice. This class will introduce students to community engaged and participatory research. The course will cover philosophical, practical, and methodological issues in the conduct of community-based participatory research across different public health disciplines. **Prereq:** grad st.

**PH 732: Youth Mental Health Practice for Non Mental Health Professionals (3 credits)**
Examination of mental health principles and practices from a public health professional’s perspective, including ethical guidelines, necessary interpersonal skills, and mental health screenings and referrals to services. **Prereq:** grad st.
PH 733: Public Health Approaches to Physical Activity and Nutrition (3 credits)
This course will examine major factors contributing to obesity with a key focus on the contribution of physical activity, nutrition and the built environment as contributing factors and key public health intervention strategies. Prereq: grad st

PH 736: Advanced Qualitative Methods (3 credits)
This course will introduce students to qualitative research methods and their application in public health research and practice. Prereq: grad st

PH 740: Special Topics in Public Health (3 credits)
Topics of current interest in public health. May be repeated w/ chg in topic to 9 cr max. Prereq: grad st

PH 741: Environmental Health Microbiology (3 credits)
Study of microbial processes in water, land, and food that affect human health. This course will focus on topics in two major areas: 1) environmental factors regulating disease transmission among human populations, and 2) the role of microorganisms in maintaining sustainable healthy ecosystems (e.g. wastewater treatment). Prereq: grad st; cons inst for MPH students.

PH 743: Environmental Risk Assessment (3 credits)
Introduction to current risk assessment practices and procedures and exploration of the intrinsic complexities and challenges associated with analysis of environmental health risks. Topics include human health risk assessment, risk communication, relevant regulation, management, and mitigation of risks. Risk assessments from federal agencies and international organizations are discussed and evaluated. Prereq: grad st

PH 744: Environmental Toxicology (3 credits)
An introduction to the occurrence of environmental chemical pollutants, their fate and transport in the environment, and their toxicity to humans and the ecosystem. Prereq: grad st

PH 745: Developmental Toxicology (3 credits)
An introduction to the field of developmental toxicology and how environmental contaminants influence vertebrate development, including humans. Prereq: grad st

PH 750: Seminar in Environmental Health Sciences (1-3 credits)
Survey of an area in environmental health. Specific credits and additional prerequisites announced in Schedule of Classes each time course offered. Retakable w/chg in topic to 9 cr max.

**PH 752: Public Health and Mental Health (3 credits)**
Understanding mental health and mental illness from a public health perspective; designed for an interdisciplinary audience of students, researchers and practitioners. *Prereq: grad st (for 734) or cons inst (for 634)*

**PH 758: Social Epidemiology (3 credits)**
This course provides an overview of key concepts and theoretical frameworks for the study of social determinants of health. Students will gain understanding of the biological pathways by which social factors “get under the skin” to perpetuate health inequities over time and learn to critically assess social epidemiology literature. *Prereq: grad st; PH 700, PH 702, and PH 704 or consent of instructor*

**PH 759: Applied Quantitative Methods for Studying Population Health and Health Disparities (3 credits)**
Using STATA, students will learn how to manage and code a large national dataset, build regression models, perform diagnostics, and interpret results. The utilization of social theory to guide the development and interpretation of statistical models in order to study and understand population health and health disparities is emphasized. *Prereq: grad st; B- or better in PH 700, PH 702, and PH 704, or cons inst. This course may satisfy the PH777 requirement with approval of Instructor.*

**PH 761: Epidemiology Field Methods (3 credits)**
This course provides background to prepare students to conduct epidemiologic studies in the field. Students will be introduced to a variety of methods including reviewing literature on a specific topic, designing questionnaires, developing surveillance systems, conducting emergency outbreak investigations, applying for IRB approval, and communicating with partners and the public. *Prereq: grad st; PH 700, PH 702, and PH 704 or consent of instructor*

**PH 762: Environmental Epidemiology (3 credits)**
Expands upon basic epidemiological principles to tackle current problems in studies of health impacts of contaminants in air, water, food supply, consumer products, and indoor spaces, emphasizing a cross-disciplinary approach. *Prereq: grad st; PH 703(P) and PH 704(P) or cons instr.*

**PH 763: Epidemiology in Action for Equity I (3 credits)**
In this course students will work in small groups to partner with a community-based social justice organization and apply their epidemiology knowledge and skills to the design or development of an intervention, program, policy, or other strategy aimed at achieving structural change to promote social and/or environmental justice. Prereq: grad st; PH 700, PH 761; Co-requisite: PH 758 or consent of instructor

**PH 764: Epidemiology in Action for Equity II (3 credits)**
In this course students will partner with a community-based organization to develop applied tools, and collect and analyze data to address a research or evaluation question relevant to advancing the social justice goals of the organization. Prereq: grad st; PH 759, PH 763

**PH 768: Cancer Epidemiology (3 credits)**
The course will focus on cancer surveillance and biology as they impact on the design and interpretation of studies in cancer epidemiology, the understanding of major risk factors for cancer, as well as screening and public health approaches to cancer control. Prereq: grad st; PH 702, PH 704 and PH 759 or consent of instructor

**PH 769: Nutritional Epidemiology (3 credits)**
The course will focus on the role of diet and nutrition in disease etiology and prevention. Research methods in nutritional epidemiology and issues related to study design, analysis and interpretation will be discussed. Prereq: grad st; PH 702, PH 704 and PH 759 or consent of instructor

**PH 773: Immigration Policies and Health (3 credits)**
This seminar introduces students to the interrelationships between migration and health in the United States. This course will examine historical and contemporary policies shaping immigrant, refugee, and asylee health, and how these policies relate with other social determinants of health. Prereq: grad st; PH 700 and 705 or cons inst.

**PH 774: Crime Policies and Public Health (3 credits)**
This seminar examines criminal justice policy in the United States from a public health perspective. It examines how mass incarceration contributes to racial, gender, and class inequalities and thereby works as a social determinant of health. Students will also explore alternative models to harm and violence prevention. Prereq: grad st; PH 700 and 705 or cons inst.

**PH 775: Mechanisms of Infectious Disease (2 credits)**
Molecular and cellular means by which microorganisms facilitate infection, withstand or evade immune response, induce damage to host, and ensure transmission to human populations. C L Sci
775 & PH 775 are jointly offered; they count as repeats of one another. Prereq: grad st; Ic & Ia course in medical microbiology

PH 776: Applied Qualitative Methods for Public Health Policy and Administration (3 credits)
This course introduces Masters level students to foundational approaches for qualitative research in public health policy and administration. The course reviews research ethics, researcher positionality, and will provide opportunities to practice foundational interview, focus group, participant observation, research analysis, and research design skills. Prereq: grad st; Corequisite: PH777

PH 777: Survey of Quantitative Methods for Public Health Policy and Administration (3 credits)
Using empirical examples and hands-on exercises, this course conceptually introduces students to quantitative research methods for evaluating the effectiveness, equity, and efficiency of public health policies. Prereq: grad st; PH 702(P). Students with a strong background in math may elect to take PH759 in place of this course with approval of PH759 Instructor.

PH 779: Public Health Policymaking and Policy Analysis (3 credits)
This course provides an in depth examination of policymaking and public health policy analysis. Common policymaking models are examined, with discussion of their implications for policy change. Students learn to apply a policy analysis framework, with a focus on identifying policy alternatives and effectively presenting policy recommendations. Prereq: grad st; PH 705 or cons inst.

PH 780: Seminar in Public Health Policy and Administration (1 credit)
This seminar explores current topics in public health policy and administration. The course draws upon the expertise of faculty and practitioners from a wide variety of disciplines and sectors. Content varies from year to year depending upon current issues and interests. Prereq: grad st;

PH 781: Public Health Administration (3 credits)
This introductory-level course introduces basic concepts, best-practice leadership, and management principles with the emphasis on organizational behavior in public health settings. Prereq: grad st.

PH 782: Policy, Politics, and Structural Inequalities (3 credits)
This course is an advanced seminar in critical theories of state, social, and economic power and conflict for health policymaking and social transformation. Case studies explore the
transformation of the health sector in the United States, federalism, and the disciplinary and regulatory roles of health policy. Prereq: grad st; PH 700 and PH 705 or cons inst.

**PH 783: Inequalities in the Socially Just City (3 credits)**
This seminar provides an interdisciplinary grounding in urban theory relevant for understanding the socioeconomic forces and policies that contribute to health disparities and environmental inequities. It explores how principles of urban justice—such as right to the city, environmental justice, and spatial justice—can contribute to health justice. Prereq: grad st; PH 700 and PH 705 or cons inst.

**PH 784: Social Policy as Health Policy (3 credits)**
This course examines how social policies, including education, income re-distribution, and housing shape population health. A broad overview of the social determinants of health is introduced/reviewed and current knowledge of the impact of social policies on health and health disparities is evaluated through readings, class discussions, and writing assignments. Prereq: grad st; B- or better in PH 759 or cons inst.

**PH 785: Principles of Public Health Economics (3 credits)**
This course introduces the basic principles of microeconomics, and its application to examining public health policy issues. Basic economic concepts including supply and demand, market failure, efficiency, incentives, externalities, and moral hazard as applied to public health and health care are examined. Principles of economic evaluation are introduced. Prereq: grad st.

**PH 786: The Science and Policy of Sustainable Diets (3 credits)**
Introduces students to the connections between dietary choices, environmental sustainability, and public health. Discusses and evaluates multiple policy approaches to the promotion more environmentally sustainable dietary choices. Prereq: grad st; PH 705 or cons inst.

**PH 787: Public Health Perspectives on the Private Sector (3 credits)**
This seminar explores the relationship between the private sector and public health. Through examination of case studies, students consider corporations’ dual role as both a driver of and a barrier to population health, the rise of public-private partnerships, corporate social responsibility, and approaches to reforming corporate practices. Prereq: grad st; PH 705 or cons inst.

**PH 790: Field Experience in Public Health (1-6 credits)**
Apply skills learned in the classroom to real world public health problems in a mentored field placement, engaging both faculty and site preceptors. Prereq: grad st; PH 701(P), PH 702(P), PH 703(P), PH 704(P), PH 705(P), PH 706(P), and PH 707(P) or cons instr

**PH 800: Capstone in Public Health (2 credits)**
Application of acquired public health knowledge, experience and competencies in developing a public health project that demonstrates readiness for professional practice. Prereq: grad st; PH 790(P) or cons instr

**PH 820: Maternal and Child Health Foundations, Policy, and Practice (3 credits)**
The foundations of MCH, historical context, financing, challenges, and opportunities in advancing MCH at state, national and international level including the integration of men. Prereq: grad st; PH 702(P), 704(P) or cons instr

**PH 859: Racial/Ethnic Health Disparities in the United States (3 credits)**
The course critically examines studies of racial/ethnic health disparities, with a focus on those that apply a multi-level and/or temporal perspective to better understand the social context in which the determinants of racial/ethnic health are embedded. Prereq: grad st; a course covering multiple regression, including PH 711(P), PH 759(P) or cons instr.

**PH 867: Intermediate Epidemiological Theory and Analysis (3 credits)**
This course utilizes readings, lecture, and hands-on data analysis to reinforce and build upon epidemiological concepts relevant to drawing inferences from human population data. Students will complete a data analysis project using the statistical package SAS. Concepts of data visualization and identifying and addressing threats to validity will be emphasized. Prereq: grad st; PH 702, PH 704, and (PH 759 or PH 711), or consent of instructor

**PH 868: Links between Infectious and Chronic Disease (3 credits)**
This course will outline the historical overview of the epidemiologic transitions that have shaped the linkage of infectious and chronic disease over time and students will incorporate sociological, epidemiological and biological frameworks to the examination of the epidemiologic evidence linking infections to various chronic disease outcomes and write a mini-study proposal. Prereq: grad st; PH 704, PH 758 and PH 759 or cons instr.

**PH 999: Independent Study (1-3 credits)**
Independent study on a topic not available as a regular course, directed by a member of the graduate faculty. Prereq: grad st; cons intr.
Master of Public Health Advising
The Zilber School considers advising to be an essential component of student learning that facilitates student development as they progress through the program toward their eventual awarding of the degree. Advisement is not simply a check to verify that a particular track-specific program of study is being followed, but also a comprehensive activity that is conducted throughout a student’s enrollment that includes: review of coursework achievement, plans, and competency attainment; field placement and capstone planning, review, and evaluation; and the establishment of both short and long-term career development goals.

During student orientation, each Master of Public Health (MPH) student will be assigned a track-specific Faculty Advisor. As illustrated on the timeline below, Advisors will meet with their advisee at least once per semester.

- **1st year fall meeting** should include a discussion of: (1) student’s professional goals and major areas of interest, (2) thoughts for their field experience, and (3) if necessary, their course plans and progress.
- **1st year Spring meeting** should include a discussion of: (1) revisiting goals and major areas of interest, and (2) planned field experience as it relates to their goals and interests, as well as the results of the Competency Self-Assessment, and (3) any items pertaining to course plans and progress.

**NOTE:** Before each spring meeting, students will receive an electronic Qualtrics competency self-assessment survey. The answers to the self-assessment will be automatically provided to the Faculty Advisor upon survey completion.

- **2nd year Fall meeting** should include a discussion of: (1) revisiting student’s professional goals and major areas of interest, (2) thoughts for their capstone projects, and (3) any items pertaining to course plans and progress.
- **2nd year Spring meeting** should include a discussion of: (1) the results of the Competency Self-Assessment and (2) a discussion of post-graduate plan to meet career goals.

In addition to the regularly scheduled advisement meetings, students are encouraged to seek advice from their Advisor on any academic or career development questions, including but not limited to funding opportunities, course equivalency requests, internship opportunities, additional post-graduate training or continuing education opportunities, career options, research, teaching, or practice opportunities, conferences and travel, etc. In summary, the goal of the Zilber advisement program is to ensure students are reaching their fullest academic potential in their experience at the Zilber School while preparing them to have fulfilling careers in Public Health.
Students may request a new Faculty Advisor assignment through the Senior Graduate Program Manager.

Find tools to assist in advising online at http://uwm.edu/publichealth/advising/. This includes the above process in timeline form, the fillable Self-Evaluation Progress Report Form, and fillable Plan of Study worksheets for each program and track.

**MPH Track Transfer Process**

To transfer MPH track, a student must answer the application questions with the new track in mind and submit short answers (Suggested length is 250 words per questions) to the Senior Graduate Program Manager in an email that requests the track transfer. The Senior Graduate Program manager forwards the answer along with a current transcript and the original MPH application to the track for which the student wants to transfer. The new track’s faculty reviews these materials to make their decision. In order to request transfer, the student must have completed at least one semester as an MPH student, so the new track’s faculty have some indication of performance in the MPH program.

Note the application questions are as follows:

1. Describe how your professional, volunteer, and educational background has led you to seek a degree in Public Health,
2. How will your desired track of study (Biostatistics, Community & behavioral Health Promotion, Environmental Health Sciences, Epidemiology or Public Health Policy & Administration) help you reach your personal and professional goals in Public Health?
3. Please indicate why you want to study Public Health, specifically at the University of Wisconsin-Milwaukee.

**Time Limit**

The student must complete all requirements for the degree within five years of the date of initial enrollment in the program.

**Graduation**

The Graduate School administers graduation for all graduate students. Here are steps to follow during the semester you expect to graduate:

1. Enroll for a minimum of 1 graduate credit (audit not allowed). Enroll in course 888, "Candidate for Degree." This course does not add to the credit total, apply to the degree, or affect the GPA. The student is assessed the equivalent of one credit in fees and receives a grade of S. [LIL3]
2. Apply for graduation by the posted deadline for the semester in which you intend to graduate. Complete the Master’s Graduation Application and submit it electronically. Applications do not carry forward; you must re-apply if you did not graduate in the semester you anticipated.

3. Pay the non-refundable $40 graduation fee, billed by the Bursar’s Office during the semester.

4. Obtain commencement information from the Secretary of the University (Web site, secofunv@uwm.edu, 229-4163). Ceremonies are optional and are held in May and December; August graduates are invited to the December ceremony. You can order graduation regalia on the Web site as well.

**If you want your name to appear in the commencement bulletin,** be sure that your directory information with the University is not restricted. If you restricted the release of your address, phone number, and other limited information, contact the Department of Enrollment Services Information Center, Mellencamp 274. This should be done by the second week of the semester in which you expect to graduate to ensure that your name will appear in the bulletin.

Removal of the restriction will allow your directory information to be released for all publicity purposes, as well as the commencement booklet.

**Graduation Review and Approval**

The Graduate School reviews the student record to ensure that you will have fulfilled degree requirements at the end of the current semester. Graduate School minimum graduation GPA requirement is a cumulative 3.0 (4.0 basis).

The graduation application is then forwarded to Graduate Program Manager for recommendation and approval. When the Faculty Advisor’s has reviewed and approved the application, it is returned to the Graduate School.

A student cannot graduate with Incomplete, Not Reported, or Progress notations remaining on the grading record. Transcripts and diplomas cannot be released until Hold notations are cleared. The Graduate School has the final authorization to grant the degree.

**If a student does not graduate when anticipated, s/he must re-apply to graduate in the next semester, but a second graduation fee is not required.**
Diploma
Diplomas and a copy of an official transcript will be mailed to the address listed on PAWS approximately 8 to 10 weeks after the official degree conferral date. The name on the diploma will be printed exactly as it exists on the student’s university records. Changes to the name must be made in Mellencamp 274 at least one month before graduation; a fee will be assessed for name changes requested after diplomas have been ordered.

If there is a hold on the record, it must clear it before these documents will be mailed.
Section III: The PhD in Environmental Health Sciences Program
Description
The Environmental Health Sciences (EHS) doctoral program with the Joseph J. Zilber School of Public Health will train the PhD student to become a leading public health professional who will serve as an independent research scientist in a variety of settings. In addition to choosing a specialization from one of three areas of concentration, the student will receive graduate level introductory training in the five major areas of public health to ensure integration into the broader public health profession.

Our faculty is drawn from several schools, departments, and research units at UWM, offering the student an unparalleled opportunity for cross-disciplinary training and the performance of original research projects. In addition, laboratories and equipment are available across campus to promote innovative concepts pertaining to issues of environmental and occupational health that the student may wish to investigate. The partnership with the Milwaukee Health Department is vital to establishing programs in Milwaukee to translate research findings into prevention / intervention activities.

A graduate of our program will be able to understand and interpret the relevant literature in his or her field and conduct high-quality research that is judged by peer review. Through written assignments and oral presentations, the student will also become an effective communicator of his or her work in professional settings. Finally, the graduate will be well-positioned to collaborate with a range of professionals and communities in order to create effective societal policies. This latter objective is of particular importance as successful science is increasingly dependent on interdisciplinary teams capable of investigating complex health issues.

The PhD in EHS 65+ credits beyond the Bachelor’s degree. Coursework includes core courses as outlined below (29 credits), with at least 12 credits of electives taken from the approved list or approved by the student’s advisor. The remaining credits (24) are to be taken as research credit. The core course program of study is designed for students to acquire an interdisciplinary broad foundation in the research and practical aspects of Public Health. Students will also gain Environmental Health Science specific research skills and competencies that will facilitate success in their thesis research.

Graduate credits for relevant coursework taken at other institutions with an earned letter grade of B or higher may be applied towards this total. For students entering with an advanced degree, the Admissions Committee may grant credit for relevant coursework at its discretion, but in no case will it allow more than 12 credits to be applied towards the 64 required credits needed for completion of the degree. Initially, the student's advisor will approve the course of
study; however, later this task will be performed by the student's academic and/or doctoral advisory committee.

**Competencies**

1. Apply public health science theories, principles, and methods when developing and implementing public health programs and research.
2. Correlate issues of population diversity and social justice with principles of environmental and occupational health.
3. Describe the major environmental and occupational agents and their effects on human populations and the environment.
4. Describe genetic, physiologic, and environmental factors that affect susceptibility to adverse health outcomes following exposure to common hazards.
5. Explain current environmental risk assessment methods.
6. Describe approaches for detecting, preventing, and controlling environmental hazards that pose risks to human health and safety.
7. Identify the general mechanisms and/or modes of action of agents in creating an adverse response to environmental exposures via various routes and doses.
8. Develop an original hypothesis and design research studies to test it, and then conduct appropriate research and results synthesis to produce a definitive result.
9. Demonstrate acceptable skills in scientific writing and oral presentation, to both scientific audiences and the general public.
10. Demonstrate knowledge of relevant literature for a selected area of study including identification of knowledge gaps.
Curriculum and Courses:

PhD Common Core Coursework (12 credits):

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH 801</td>
<td>Seminar in Public Health Research</td>
<td>3</td>
</tr>
<tr>
<td>PH 819</td>
<td>Social and Environmental Justice in Public Health</td>
<td>3</td>
</tr>
<tr>
<td>PH 704</td>
<td>Principles and Methods of Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>PH 702</td>
<td>Introduction to Biostatistics</td>
<td>3</td>
</tr>
</tbody>
</table>

EHS PhD Coursework:

Required EHS Concentration Coursework (17 credits)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH 705</td>
<td>Principles of Public Policy and Administration</td>
<td>3</td>
</tr>
<tr>
<td>PH 743</td>
<td>Environmental Risk Assessment</td>
<td>3</td>
</tr>
<tr>
<td>PH 750</td>
<td>Environmental Health Seminar (1 credit, taken twice)</td>
<td>2</td>
</tr>
<tr>
<td>PH 821</td>
<td>Advanced Survey of Environmental Health</td>
<td>3</td>
</tr>
<tr>
<td>PH 822</td>
<td>Molecular and Cellular Basis of Environmental Disease</td>
<td>3</td>
</tr>
<tr>
<td>PH 808</td>
<td>Writing a Federal Grant in the Public Health Sciences</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives (12+ credits)

Electives are divided into three categories (molecular, organismal, and population/environment). It is recommended that the student take courses relevant to their thesis research in consultation with their major professor. As the ZSPH programmatic offerings grow and diversify additional PH courses may be approved by the EHS faculty for inclusion as potential elective options.

Molecular Level Course Electives

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH 775</td>
<td>Mechanisms of Infect Disease</td>
<td>2</td>
</tr>
<tr>
<td>BIO SCI 529/</td>
<td>Molecular Biology of Micro-Organisms</td>
<td>3</td>
</tr>
<tr>
<td>BIO SCI 540</td>
<td>Microbial Diversity and Physiology</td>
<td>3</td>
</tr>
<tr>
<td>BIO SCI 564</td>
<td>Eukaryotic Gene Regulation</td>
<td>3</td>
</tr>
<tr>
<td>BIO SCI 700</td>
<td>Principles in Molecular Biology</td>
<td>4</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>CHEM 601</td>
<td>Biochemistry: Protein Structure and Function</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 602</td>
<td>Biochemistry: Cellular Processes</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 604</td>
<td>Biochemistry: Metabolism</td>
<td>3</td>
</tr>
<tr>
<td>CLS 590</td>
<td>Public Health Nutrition and Food Politics</td>
<td>3</td>
</tr>
<tr>
<td>CLS 615</td>
<td>Cellular and Molecular Toxicology</td>
<td>3</td>
</tr>
<tr>
<td>CLS 733</td>
<td>Molecular Epidemiology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Organismal Level Course electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH 745</td>
<td>Developmental Toxicology</td>
<td>3</td>
</tr>
<tr>
<td>BIO SCI 401</td>
<td>Immunology</td>
<td>2</td>
</tr>
<tr>
<td>BIO SCI 556</td>
<td>Developmental Neurobiology</td>
<td>4</td>
</tr>
<tr>
<td>INDEng 580</td>
<td>Ergonomics</td>
<td>3</td>
</tr>
<tr>
<td>INDEng 780</td>
<td>Advanced Ergonomics- Low Back Pain</td>
<td>3</td>
</tr>
<tr>
<td>INDEng 783</td>
<td>Advanced Ergonomics- Upper Extremity</td>
<td>3</td>
</tr>
</tbody>
</table>

**Population Level Course electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH 709</td>
<td>Public Health Informatics</td>
<td>3</td>
</tr>
<tr>
<td>PH 721</td>
<td>Introduction to Bioinformatics</td>
<td>3</td>
</tr>
<tr>
<td>PH 741</td>
<td>Environmental Health Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>PH 762</td>
<td>Environmental Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>AUP 662</td>
<td>Land Use Planning for Urban Redevelopment</td>
<td>3</td>
</tr>
<tr>
<td>AUP 771</td>
<td>Transportation Policy and Planning</td>
<td>3</td>
</tr>
<tr>
<td>AUP 791</td>
<td>Introduction to Urban Geographic Information Systems for Planning</td>
<td>3</td>
</tr>
<tr>
<td>AUP 792</td>
<td>Using Urban Geographic Information Systems (GIS) for Planning</td>
<td>3</td>
</tr>
<tr>
<td>AUP 794</td>
<td>Internet geographic Information Systems (GIS)</td>
<td>3</td>
</tr>
<tr>
<td>AUP 794</td>
<td>Industrial Hygiene</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 520</td>
<td>The Physical Geography of the City</td>
<td>3</td>
</tr>
<tr>
<td>FRSHWTR 506</td>
<td>Ecotoxicology</td>
<td>3</td>
</tr>
<tr>
<td>INDEng 786</td>
<td>Applied Biostatistics in Ergonomics</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 880</td>
<td>Challenges to Urban Sustainability</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 945</td>
<td>The Internal Structure of the City</td>
<td>3</td>
</tr>
</tbody>
</table>
Residence Requirements
The student must complete 8 to 12 graduate credits in each of two consecutive semesters, or 6 or more graduate credits in each of three consecutive semesters, exclusive of summer sessions. Residence requirements cannot be met at the master’s level.

Time Limit
The student must complete all requirements for the degree within 10 years of the date of initial enrollment in the program.

Major Professor & 1st Year Academic Advisory Committee
As specified in Graduate School regulations, each student in the EHS PhD program must have a major professor to advise and supervise his or her studies. Upon admission, the student is assigned a temporary advisor; however, a permanent advisor must be selected during the Spring of first year of study. The major professor serves as the student’s research mentor and will guide the student in course selection and research design. By the end of the fall semester of the first year in the program, the student should form a 1st year academic advisory committee in consultation with the student’s advisor. The 1st year academic advisory committee is comprised of the student's advisor plus two additional faculty members from within the Joseph J. Zilber School of Public Health. The 1st year academic advisory committee must be approved by the EHS Program Chair.

Academic Standing
The student must maintain a minimum of a 3.0 GPA cumulative GPA at the end of each academic semester. In the EHS PhD program, a grade of B- or lower in any course is deemed a failing grade. Students can earn 3 failing grades in this program. If a student receives a grade of B- OR lower in a core course, that course must be taken again and a final grade of B or higher must be earned the second time the course is taken. If a student receives a grade of B- OR lower in an elective course, that course will not need to be retaken.

Poor Academic Standing & Dismissal from the PhD Program
Failing more than 3 courses (earning a letter grade of B- or lower) will result in the student being dismissed from the program. If a student receives a letter grade of unsatisfactory (U) while enrolled in research for credit, he/she will be dismissed from the program. If the student is receiving funding in the form of a TAship, PAship, or RAship, that funding, shall be forfeited immediately.
PhD Advisory Committee
As early as the middle of the second year and no later than the start of the third year, the student will need to assemble a doctoral committee consisting of graduate faculty to guide studies and research. In consultation with the major professor, the student will select four additional members to form a Doctoral Advisory Committee. A minimum of three committee members must be EHS program faculty (including the major professor who chairs the committee). This committee will also approve the dissertation proposal and serve as the doctoral examining committee for dissertation defense.

When forming the committee, the student should keep in mind that he or she will be working closely with its members for an extended period of time. It is important to assemble a cohesive group; choosing members with similar research methods and approaches may be just as important as choosing people with closely compatible research interests. The student’s advisor or other mentors may provide ideas for possible committee members. The student should maintain frequent contact with his or her committee members, as they will be more likely to advise the student of both new developments in his or her field and valuable research opportunities. The student should plan on providing annual research updates for their doctoral advisory committee at least once annually once they have reached dissertator status.

See the Graduate School Doctoral Requirements page for more information on the doctoral committee.

Qualifying Examination
During the end of the second semester of enrollment, a student must pass a brief qualifying exam. The duration of this exam is 90 minutes. The student gives an oral synopsis/self-evaluation of his/her first year in the program and describes highlights from his/her coursework. An academic advisory committee then evaluates if the student has demonstrated a knowledge base in public health that was to be firmly established in the first year of coursework. A grading rubric can be requested from the student’s Faculty Advisor. The academic advisory committee in conjunction with the student also maps any remaining coursework that needs to be completed by the end of the third of year in the program. Students failing this important first exam will not be allowed to continue in the program and will forfeit their TAship, PAship, or RAship, if applicable. Students who wish to contest the decision of the 1” year academic advisory committee are referred to the ZSPH grievances policy found in appendix X of the student handbook.
**Preliminary Examination**

This examination must be taken no later than the end of the third year of study. In order to take the preliminary exam, all formal coursework must be completed with a GPA of 3.0 or higher. The preliminary examination consists of two parts: written and oral.

The written portion of the examination is designed as a grant proposal suitable for a major federal funding agency, such as NIH or NSF. This written proposal serves as the student’s dissertation proposal. In keeping with the NIH/NSF grant proposal formats, the proposal must include sections for Specific Aims, Significance, and Innovation, and each aim must include justification, feasibility, preliminary data, research strategy, expected outcomes, and potential pitfalls and alternative explanation section headings. A strong and relevant hypothesis should be stated, and the work should show evidence of a mastery of the literature in relation to the dissertation topic area.

The dissertation proposal is to be no more than 12 pages single spaced using 0.5 inch margins, 11 point Arial font. Protection of Human subjects and Protection of vertebrate animals’ sections should be included if applicable to the proposed research. References, human subjects and vertebrate animal sections do not count in the 12 pages. It is recommended that students utilize a grant writing resource such as “The Grant Application Writer’s Workbook” by Stephen Russell and David Morrison while developing this section. Students may also refer to a funded grant written by their PI, but, the development of their proposal should be worked on independently.

The oral portion of the examination is broken into two subparts: an oral defense of the proposal and a general public health knowledge phase. The proposal phase consists of the student presenting his/her dissertation proposal to the examining committee. The student is evaluated on the clarity of the presentation, quality of the materials presented, and the logic and creativity of the proposal. The role of the examination committee is to evaluate both the written and oral presentations in detail, probing the student’s knowledge of the dissertation topic.

In the “General Public Health Knowledge Phase” of the preliminary examination, the student will be evaluated (via oral questioning) by the doctoral advisory committee to determine if the student has truly acquired Public Health competencies which should have been acquired by completion of the formal coursework in the EHS PhD program.
If the written dissertation proposal is unsatisfactory to the committee, the oral portion will be postponed and the student will have no more than one month to meet with each individual member of the committee for feedback on how to properly re-write the proposal. The student will then re-submit the dissertation proposal for consideration of the committee and reschedule the oral exam portion one week later (5 weeks after the original exam date). If the student does not successfully write a dissertation proposal and defend it and their public health knowledge during their oral exam, they will be dismissed from the program and any funding will be terminated.

A student who fails the doctoral preliminary examination will be dismissed from the program. After successfully passing the preliminary examination, the candidate is to follow all Graduate School policies and procedures to log milestones of doctoral studies. Visit the Graduate School website for more information.

The assessment rubric outlines the evaluation process for the exam itself, which consists of three parts. For the first part, students write a grant proposal/dissertation proposal suitable for a major federal funding agency, such as NIH or NSF. Evaluation criteria include a strong and relevant hypothesis, mastery of the literature for the dissertation topic, solid organization of the proposal sections, clarity of writing, and overall logic and creativity of the proposal. The Dissertation Preliminary Examination has two oral components. In the first part, the student presents the proposal to the committee. The committee uses the rubric below to evaluate the student’s knowledge of discipline-specific and subject matter concepts within Environmental Health Sciences, clarity of the presentation, ability to synthesize information, originality of the proposal, and feasibility of the research.

Assessment Rubric for the Dissertation Preliminary Examination

- Evaluation Criterion (Scale of 1-5) A score of 5 exceeds expectations
  - A score of 3 meets expectations
  - Anything below a score of 3 does not meet expectations

☐ Did the student demonstrate an integrated knowledge of Public Health?
☐ Did the student demonstrate knowledge of discipline specific concepts within Environmental Health Sciences as well as the subject matter in the specific proposal?
☐ Did the student demonstrate good communication skills, both written and oral?
☐ Did the student demonstrate an ability to synthesize information clearly?
☐ Were the ideas put forth in the proposal original ideas that could ultimately culminate in a PhD thesis?
Are the experiments proposed doable at UWM/Zilber School of Public Health?

**Dissertator Status**
Specific requirements must be completed before a doctoral student qualifies for dissertator status. A student is eligible to become a dissertator when he or she has:

- Completed all major and minor course requirements.
- Passed the doctoral preliminary examination.
- Submitted the dissertation topic summary or proposal hearing form to the Graduate School.
- Met residence requirements. (see above)
- Cleared incomplete and “in progress” grades/reports in non-research courses.
- Achieved a 3.0 or higher cumulative GPA.
- Submitted an application for Doctoral Dissertator Status for this information to be verified and approved by the Graduate School and the graduate program representative. The form must be submitted before the next semester begins.


**Doctoral Research, Dissertation, & Dissertation Defense**
Doctoral students should be aware that the research component is extremely important and requires significant time allocation. The doctoral research must be of high quality and innovative. A full-time commitment is required to complete this critical component of the degree. The definition of full-time varies from advisor to advisor within the Zilber School of Public Health, but successful doctoral students in our EHS program should anticipate working long hours, including on weekends, winter intersession and summer months. Students are also expected to enroll in, and successfully complete at least 24+ hours of research credit. Six or more of these research credits must be obtained at the level of dissertator. Three credits of research per semester is the full-time credit maximum, once a student has reached dissertator status, per Graduate School Policy.

The student is to work closely with a major professor who will advise and supervise the student's studies as specified in Graduate School regulations. The major professor serves as the student's research mentor and will guide the student in course selection and research design. During the process of earning the EHS PhD degree, doctoral students will be expected to present their research findings at local, regional, national, and/or international meetings. Presentation at a minimum of one of these meetings is required before defending the dissertation described below. Such meetings could include but are not limited to: American Public Health Association (APHA),
All successful doctoral students must prepare and successfully defend a dissertation reporting the results of their research. The original research findings embodied in this dissertation will be acceptable for publication in refereed journals. During the final year of study, the candidate must first present a seminar open to the general public on the thesis research. Secondly, the candidate must prepare and successfully defend his/her dissertation conveying the results of the project in a succinct, articulate fashion to the doctoral advisory committee. A full-time student who does not pass the dissertation defense within six years of admission may be required to take another preliminary examination and be readmitted to the program.

EHS faculty use the rubric below in their evaluation process for this last milestone. The dissertation committee is evaluating both the oral defense and the written product. The committee assesses the student’s clarity of presentation, ability to answer questions during both the public and private portions of the defense, knowledge of the subject matter, ability to synthesize information, originality of ideas, appropriateness of experiments, and clarity of writing.

Assessment Rubric for the Dissertation Defense

Evaluation Criterion (Scale of 1-5)

- A score of 5 exceeds expectations
- A score of 3 meets expectations
- Anything below a score of 3 does not meet expectations

☐ Did the student demonstrate an integrated knowledge of Public Health?
☐ Did the student demonstrate knowledge of discipline specific concepts within Environmental Health Sciences as well as the subject matter in the specific proposal?
☐ Did the student demonstrate good communication skills, both written and oral?
☐ Did the student demonstrate an ability to synthesize information clearly?
☐ Were the ideas/results put forth in the thesis original ideas with no duplication with previous studies?
☐ Was the science/experimental methodology presented performed appropriately?
☐ Will the data chapters in the thesis document be able to be converted into manuscripts, if they have not been published prior to the thesis defense?
Graduation
The Graduate School administers graduation for all graduate students. To graduate, meet these deadlines:

1. Apply for graduation by the posted deadline for the semester in which the student intends to graduate. Submit the Application for Graduation to the Graduate School. Applications do not carry forward; a student must re-apply if s/he did not graduate in the semester anticipated.
2. At least two weeks before the graduation ceremony date: Hold the dissertation defense.
3. Submit the final dissertation by the posted submission deadline.

Submission to the Graduate School must include:

- An electronic submission of the thesis through ProQuest ETD Administrator. More information on the submission process found on the UWM ETD Web site.
- Thesis & Dissertation Approval and Publishing Options Form with an original signature from the student and the major professor.
- Complete the online Survey of Earned Doctorates

If any of these deadlines are not met, the student must apply and graduate in the next semester. The student will not be required to register for the next semester if the dissertation has been defended, passed, and accepted by the Graduate School before the first day of classes for the next semester. The date of graduation, however, will be the next semester.

If you want your name to appear in the commencement bulletin, be sure that your directory information with the University is not restricted. If you restricted the release of your address, phone number, and other limited information, contact the Department of Enrollment Services Information Center, Mellencamp 274. This should be done by the second week of the semester in which you expect to graduate to ensure that your name will appear in the bulletin.

Removal of the restriction will allow your directory information to be released for all publicity purposes, as well as the commencement booklet.

Graduation ceremonies are held in May and December. August graduates attend the December graduation ceremony.

About one month before graduation, all eligible degree candidates will receive a letter from the Secretary of the University’s office containing the date, location, and time of the ceremony, as
well as information on ordering caps and gowns. Any questions about the commencement ceremony should be directed to the Secretary of the University.

**Diploma**

Diplomas and a copy of an official transcript will be mailed to the address listed on PAWS approximately 8 to 10 weeks after the official degree conferral date. The name on the diploma will be printed exactly as it exists in university records. Changes to the name must be made in Mellencamp 274 at least one month before graduation; a fee will be assessed for name changes requested after diplomas have been ordered.

If there is a hold on the record, it must clear it before these documents will be mailed.
Section IV: The PhD in Public Health Program
Description
Beginning in Fall 2017, the Zilber School of Public Health offers a Master of Public Health (MPH), a PhD in Public Health with Concentrations in Biostatistics and Community and Behavioral Health Promotion, and a PhD in Environmental Health Sciences.

Students will choose between two concentrations in the PhD in Public Health offered by UW-Milwaukee’s Joseph J. Zilber School of Public Health. The two concentrations share a common core of four courses for a total of 12 credits toward the required course work. Students in the Concentration in Biostatistics will select an elective to replace the introductory biostatistics course, as they will likely enter the program having already completed that level. The following sections describe each concentration in more detail.

Track Summaries
Concentration in Biostatistics:
The Biostatistics doctoral program is designed to train students in the development of techniques, methods and tools to conduct public health research using rigorous statistical, bioinformatics and general quantitative methods. Faculty interest areas include bioinformatics, statistical genetics, network analysis, causal inference, biostatistical methods, and high throughput computing.

Students entering the program will be trained at the graduate level in the analysis of data from genetics and genomics, electronic medical records, and population-based epidemiological studies. Such research will include approaches requiring large populations, large data sets, and as needed, the collection, processing and analysis of data used in the pursuit of improving the public’s health. Graduates of this program will be able to participate and execute the study design, data collection, analysis and dissemination of results. Technical areas include database management, causal inference, network analysis, medical and population genetics, as well as tools and techniques for acquiring, processing, warehousing, and analyzing public health data. Other areas of expertise include data mining, computer-based decision support systems, statistical genetics, and computational biology. The PhD in Public Health with a concentration in Biostatistics requires 69 course credits beyond the Bachelor’s degree. Course work includes core courses as outlined below, methods courses, electives, and credits taken as doctoral research.
Concentration in Community and Behavioral Health Promotion (CBHP):
The Community and Behavioral Health Promotion (CBHP) doctoral program is designed to train students in social and behavioral science aspects of public health research and intervention with a particular emphasis on the development of community-level interventions. Faculty interest areas include: maternal, infant, and child health; health disparities; obesity; nutrition; food security; HIV and STD prevention; adolescent health; violence prevention; substance abuse prevention; creating healthy environments; and promoting mental health.

Students entering the program will be trained at the graduate level in health promotion from a public health perspective. Students will also have exposure to other key areas of public health (environmental health, epidemiology, biostatistics, and policy and administration), which will allow them to be integrated into the broader public health profession upon graduation. The PhD in Public Health with a concentration in CBHP requires 69 course credits beyond the bachelor’s degree. Course work includes core courses as outlined below, research and methods courses, electives, and credits taken as pre-dissertation research supporting CBHP faculty research. In addition, students will prepare for public health leadership through their own original research.

Student research in community and behavioral health promotion may focus on the social and behavioral determinants of disease and injury, the interaction of social and behavioral factors with other disease susceptibility or health promoting factors, or on interventions that seek to improve health through social and behavioral strategies within a community.

The PhD programs in both concentrations align with UWM’s mission to further academic opportunities at all levels for women, minority, part-time students, and financially or educationally disadvantaged students. In addition, the program consistently strives for diversity within its faculty ranks to achieve the University’s goal for cultural competency in teaching and learning.
Competencies

Upon graduation, a student completing the requirements for the PhD in Public Health with a concentration in **Biostatistics** will be able to:

1. Develop new statistical methodologies to solve problems in biomedical, clinical, public health, or other fields
2. Contribute to the body of knowledge in the field of biostatistics by writing and successfully submitting manuscripts for publication in a peer-reviewed journal
3. Perform all responsibilities of a statistician in collaborative research; in particular: design studies, manage and analyze data and interpret findings from a variety of biomedical, clinical or public health experimental and observational studies
4. Communicate statistical information effectively with individuals with varying degrees of statistical knowledge through written and oral presentations
5. Use statistical, bioinformatics and other computing software to organize, analyze, and visualize data
6. Review and critique statistical methods and interpretation of results in published research studies, presentations, or reports
7. Demonstrate solid theoretical knowledge necessary for the development and study of new statistical methods.
8. Understand and implement modern statistical approaches emerging in the literature to improve biomedical and public health

Upon graduation, a student completing the requirements for the PhD in Public Health with a concentration in **Community and Behavioral Health Promotion** will be able to:

1. Identify individual, organizational, community, and societal influences on health, health behaviors, disease, injury, illness, and disability
2. Develop, implement, and evaluate behavioral and structural interventions to prevent disease and injury, alleviate illness and disability, improve the quality of life, and reduce health disparities
3. Conduct and disseminate rigorous and innovative social and behavioral science research of relevance to public health
4. Serve as an expert social and behavioral scientist on a collaborative team of public health investigators
5. Appreciate the history and philosophy of public health, health behavior, health education, and health communication as well as understand similarities and differences of these disciplines from other social science disciplines
Curriculum and Courses
The concentrations in Biostatistics and CBHP require the same core PhD courses (12 credits). The credits and courses are described below for each concentration.

Concentration in Biostatistics: Minimum degree requirement is 60 graduate credits beyond the bachelor's degree (plus an additional 9 credits dedicated toward dissertation writing and research), at least 35 of which must be earned in residence at UWM. The student, in consultation with the major professor, must create a plan of study and submit to the Biostatistics Faculty by the end of the first year. Minimum course requirements for all work requires approximately two to three full years of study.

Required Core PhD Courses, 12 credits:
PH 702 Introduction to Biostatistics, 3 cr**
PH 704 Principles and Methods of Epidemiology, 3 cr
PH 801 Seminar in Public Health Research, 3 cr
PH 819 Social and Environmental Justice in Public Health, 3 cr
** It is expected that PH 702 will be waived for the majority of PhD students based on prior training, and an additional elective will be substituted

Required Methods Courses, 27 credits:
MTHSTAT 761 Mathematics Statistics, 3 cr
MTHSTAT 762 Mathematical Statistics, 3 cr
MATH 571 Introduction to Probability Models, 3 cr, or MATH 771 Theory of Probability, 3 cr
PH 711 Intermediate Biostatistics, 3cr
PH 8XX Generalized Linear Models, 3cr
PH 8XX Practice of Biostatistical Consulting, 3cr
PH 718 Data Management and Visualization in R, 3cr
PH 8XX Statistical Computing, 3cr
PH 713 Analyzing Observational and Experimental Data, 3cr

Electives, at least 21 credits:
PH 710 Seminar in Biostatistics and Bioinformatics, 1cr (TBD)
PH 714 Statistical Genetics and Genetic Epidemiology, 3cr
PH 715 Applied Categorical Data, 3cr
PH 716 Applied Survival Analysis, 3cr
PH 717 Applied Longitudinal Data Analysis, 3cr
PH 720 Special Topics in Biostatistics, 3cr
PH 721 Introduction to Translational Bioinformatics, 3cr
PH 723 Design, Conduct and Analysis of Clinical Trials, 3cr
PH 758 Social Epidemiology, 3cr
PH 762 Environmental Epidemiology, 3cr
PH 768 Cancer Epidemiology, 3cr (TBD)
PH 769 Critical Perspectives in Nutritional Epidemiology and Food Systems (3)
PH 7XX Introduction to Bioinformatics in Biomedical and Public Health Sciences, 3cr (TBD)
PH 8XX Statistical Learning, 3cr (TBD)
PH 8XX Network Analysis, 3cr (TBD)
PH 8XX Causal Inference, 3cr (TBD)
CompSci 708 Scientific Computing
CompSci 711 Pattern Recognition - Statistical, Neural, and Fuzzy Approaches, 3cr
BIOL 597 RNA structure, function, and metabolism, 3cr
BIOL 490 Molecular Genetics, 3cr
MTHSTAT 564 Time Series Analysis, 3cr
MTHSTAT 565 Nonparametric Statistics, 3cr
MATH 768 Applied Stochastic Processes, 3cr
MTHSTAT 863 Hypothesis Testing, 3cr
MTHSTAT 869 Advanced Topics in Mathematics Statistics, 3cr

**Doctoral Thesis at least 9 credits:**
PH 990 Research and Dissertation, 3cr. repeatable

**Concentration in Community and Behavioral Health Promotion:**
A minimum of 69 credits of coursework beyond the bachelor’s level must be completed to earn the degree, at least 35 of which must be earned in residence at UW-Milwaukee. The course list consists of required common PhD core courses, CBHP core courses, research and methods courses, and elective courses. Also, students will be required to complete three credits of supervised research under the tutelage of the primary advisor prior to the required dissertation research requirement. This is to ensure that all students obtain hands-on, supervised research training. After achieving dissertator status, students will enroll in three research credits per semester for at least three semesters.

The PhD is the highest degree awarded in the field of public health and dissertation is expected to demonstrate an extraordinarily high level of knowledge, expertise and originality. Students are
required to register for a minimum of 9 credits for dissertation, but a high quality dissertation will likely require much more than the time equivalent of 9 credit hours. Given the vast differences between students and the types of research that qualify as dissertation research, it is impossible to predetermine a necessary amount of time. Expectations regarding the level of difficulty of the dissertation will be addressed at the time of the dissertation proposal.

The assemblage of elective courses is not exhaustive but reflects a starting point for the new program. With few exceptions, all of the courses are graduate-level courses. Those that are designated as Undergraduate/Graduate (U/G) classes are taught at the level of advanced undergraduate students, but include additional material and assignments consistent with graduate-level curricula. Zilber School of Public Health faculty will continue to expand the choice of elective courses as future programs develop.

In addition to regular coursework and research, doctoral students are expected to attend monthly seminars. ZSPH hosts the seminar series, "On Public Health," regularly during the lunchtime and evening hours. The seminar series provides doctoral students the opportunity to meet with ZSPH faculty and affiliated Center scientists who will present on critical public health-related research and new developments in all areas of public health. Seminars are free and open to the public. Students must regularly attend the On Public Health series in-person or remotely to successfully progress in the PhD program.

Common Required PhD Courses (12 cr.)
PH 702 Introduction to Biostatistics, 3 cr.
PH 704 Principles and Methods of Epidemiology, 3 cr.
PH 801 Seminar in Public Health Research, 3 cr.
PH 819 Social and Environmental Justice in Public Health, 3 cr.

CBHP PhD Required Core Courses (18 cr.)
PH 725 Theories and Models of Health Behavior, 3 cr.
PH 727 Program Planning & Implementation in Public Health, 3 cr.
PH 820 Maternal and Child Health Foundations, Policy and Practice, 3 cr.
PH 826 Principles of Community Intervention Research, 3 cr.
PH 831 Community Engagement and Participatory Research Approaches in Public Health, 3 cr.
PH 919 Core Seminar in Community and Behavioral Health Promotion (TBD)
Research and Methods Required Courses (18 cr.)

PH 827 Research Design in Community and Behavioral Health Promotion, 3 cr.
PH 736 Advanced Qualitative Methods, 3 cr. (TBD)
PH 728 Program Evaluation in Public Health, 3 cr.
PH 729 Survey Research Methods in Public Health, 3 cr.

Choose one of the following:

PH 711 Intermediate Biostatistics, 3 cr.
PH 759 Applied Quantitative Methods for Studying Population Health and Health Disparities, 3 cr. (TBD)
PH 823 Applied Methods & Analysis in Public Health Research (TBD)
SOC WRK 962 Applied Multiple Regression Analysis, 3 cr.

Choose one of the following:

PH 715 Applied Categorical Data Analysis, 3 cr. (TBD)
PH 716 Applied Survival Analysis, 3 cr. (TBD)
PH 717 Applied Longitudinal Data Analysis, 3 cr. (TBD)
SOC 982 Advanced Quantitative Analysis, 3 cr.
ED PSY 823 Structural Equation Modeling, 3 cr.
ED PSY 826 Analysis of Cross-Classified Categorical Data, 3 cr.

CBHP Elective Courses (9 cr.)

ANTHRO 803 Survey of Cultural Anthropology, 3 cr.
ANTHRO 744 Theories of Social Action: Understanding Agency & Social Structure, 3 cr.
PH 758 Social Epidemiology, 3 cr.
PH/HS 917 Seminar in Health Outcome Assessment, 3 cr. (TBD)
PH 734 Public Health and Mental Health, 3 cr. (TBD)
PH 768 Cancer Epidemiology, 3 cr. (TBD)

PH 769 Critical Perspectives in Nutritional Epidemiology and Food Systems (3)
SOC 917 Sociology of Inequality, 3 cr. (TBD)
SOC 982 Advanced Quantitative Analysis, 3 cr.
SOC 715 Systematic Sociological Theory, 3 cr.
GEOG 725 Advanced Geographic Information Science: Geographic Modeling, 3 cr.
GEOG 734 GIS and Society, 3 cr.
SOC WRK 705 Individual Behavior and Social Welfare, 3 cr.
ED POL 711 Community Organizing: Collective Action for Social Change: (Subtitled), 3 cr.
KIN 732 Physical Activity and Health Across the Lifespan, 3 cr.

Other electives may be considered

Pre-Dissertation Research (3 cr.)

PH 990 Research and Dissertation, 3cr.

Doctoral Thesis (minimum 9 cr.)
PH 990 Research and Dissertation, 3cr repeatable.

**Residence Requirement**
The student must complete 8 to 12 graduate credits in each of two consecutive semesters, or 6 or more graduate credits in each of three consecutive semesters, exclusive of summer sessions. Residence requirements cannot be met at the master’s level.

**Time Limit**
All degree requirements must be completed within ten years from the date of initial enrollment in the doctoral program.

**PhD Advisory Committee**
The student, in consultation with the Major Professor, will select four additional members to form a PhD Advisory Committee. A minimum of three committee members must be concentration specific program faculty. See the Graduate School [Doctoral Requirements](#) page for more information on the doctoral committee.

**Preliminary Exam Process**
Students in both concentrations for the PhD in Public Health must pass a qualifying exam. The process for each concentration is described below. The qualifying exams must be successfully completed within five years of initial enrollment in the PhD program.

**Concentration in Biostatistics:**
Students must successfully complete a preliminary examination process before formally achieving dissertator status. When the student is sufficiently prepared, a doctoral preliminary examination to determine the student's knowledge and achievement is taken. The exam evaluates the student's general knowledge of mathematical statistics, and general biostatistical and quantitative methods. Students must pass this examination to continue in the program. With permission of the examination committee, the student may repeat this examination once within one year. After successful completion of the qualifying process, the student will concentrate on the development of the dissertation.

**Concentration in CBHP:**
The preliminary exam is designed to assess a student's mastery of knowledge and skills to ensure adequate preparation for individual dissertation research. Students taking the preliminary exam
are expected to demonstrate knowledge, competency and mastery of core public health concepts, issues and content relevant to the CBHP PhD Program. The preliminary exam consists of three sections: an open book integrative review, a closed book exam focusing on a case study, and an oral exam. (Please refer to the CBHP Qualifying Exam Policies and Procedures.) At the discretion of the examining committee, a student who fails the qualifying process may be allowed one additional attempt with all or part of the examination. After successful completion of the qualifying process, the student will concentrate on the development of the dissertation.

**Dissertation Proposal Hearing**

In consultation with his or her primary faculty advisor, the dissertator will develop a dissertation research plan and form a dissertation advisory committee. The composition of the dissertation committee must be in compliance with the rules and regulations of the Graduate School. The dissertator then submits a written dissertation plan to be reviewed and formally approved by the dissertation advisory committee. The research plan must clearly outline the student’s obligation for completing an original piece of work of sufficient quality, which is to be determined by the committee. The review and approval process will include a formal presentation to the committee.

**Dissertation**

Upon approval of the dissertation proposal, students will proceed with an original and significant research investigation under the supervision of their major professor, culminating in a written dissertation. As a final step toward the degree, the student must pass an oral examination in defense of the dissertation.

**Dissertation Defense**

The dissertator must, as the final step toward the degree, pass an oral examination in defense of the dissertation. The dissertation defense will be publically announced and open to the academic community. Once the defense is completed, students will be encouraged to revise their dissertation and submit it for publication.

Once the committee has formally approved the dissertation document and the oral defense, and the Chair of the appropriate program has certified completion of all requirements, the candidate is awarded the PhD in Public Health.
Major Professor as Advisor

The student must have a major professor to advise and supervise the student's studies as specified in Graduate School regulations. Each student will be assigned a Faculty Advisor on the basis of his or her research interests. The Faculty Advisor will typically become the student's mentor. There will be clear guidelines established for switching advisors if a mismatch occurs. The Faculty Advisor plays a critical role in a student's development as a scholar, researcher, and public health professional. Throughout their graduate student career, the Faculty Advisor will assist in the development of an individual course of study. The Faculty Advisor is also responsible for advancing the career goals of the student by supporting community collaborations, publications, presentations, and other professional activities.

The Faculty Advisor will help prepare the student for their preliminary exams and advise the student regarding his or her dissertation. If a student is not ready for the preliminary exam or the dissertation process, the Faculty Advisor will work with the student to help them prepare by addressing academic weaknesses through additional coursework, readings, or research experience. Mentors will often employ their students as research or teaching assistants or help their students find such employment. The program Faculty Advisor serves as the chair of the student's dissertation committee, and the committee as a whole provides advice about both academic and professional development student with a breadth of input. See the Graduate School Doctoral Requirements page for more information on the doctoral committee.

The Zilber SPH administrative office also has staff assigned to advise prospective and current students, related to recruitment, academic progress, and graduation.
Qualifying Exam Policies and Procedures

Introduction

The qualifying examination (QE) (aka, preliminary exam) is designed to assess a student's mastery of knowledge and skills to ensure adequate preparation for individual dissertation research. Students taking the QE are expected to demonstrate knowledge, competency and mastery of core public health concepts, issues and content relevant to CBHP PhD program. They are also expected to demonstrate their ability to design a research project and/or evaluate a public health problem/case study. This document provides general guidance to help prepare students for their qualifying exam.

Eligibility to Sit for the Qualifying Exam (QE)

The QE must be taken either in the semester the student is completing her/his coursework or the following semester. Coursework refers to all core courses, research methods and statistics courses and advanced theory and applications courses, research credits and electives. The student’s advisor should review the coursework in the semester the student is completing his/her coursework, and the advisor should request that the CBHP program leader form an exam committee. The CBHP faculty will assign members to the QE committee. The committee will consist of 3 UWM faculty members including the student’s advisor serving as the chair of the committee. Once the committee is formed, the student must complete the electronic Application for the Doctoral Preliminary Examination, located in the online Doctoral Milestones System (http://www.graduateschool.uwm.edu/students/current/doctoral/). After the student electronically submits the form, CBHP PhD program will be notified to submit its approval. Upon approval, eligibility is validated by the Graduate School and the student will be awarded one semester of “prelim” status which permits the student to maintain full time student status with one or more graduate credits.

Preparing for the Exam Orientation Session:

A mandatory one-hour orientation session will be held each semester (either in February or September) for any students planning to take the exam. During this meeting, a timeline with exact dates will be provided and exam logistics and guidelines will be covered. Students may ask any questions about the exam’s general content and/or preparation; however, specific information about the exact content or structure of a specific semester’s exam will not be revealed.
Disability Accommodations:

Students with acute or chronic physical or mental disability or problems should inform the CBHP program lead PRIOR to the exam so that proper accommodations can be made within the school and/or through University Accessibility Resource Center (http://uwm.edu/arc/getting-started/). The disability or problem should be officially documented by the Student Accessibility Office prior to the exam. Documentation is required to ensure that appropriate accommodations are made. Disabilities cannot be used to appeal the results of a failed exam unless that disability was noted prior to the exam and appropriate accommodations were not made.

The Exam

The exam consists of three sections or parts (open book integrative review, closed book exam focusing on a case study, and oral exam) as described below.

Take-Home Section:

The open-book component of the exam is designed to test whether a student can critically evaluate, synthesize, and integrate a broad base of research and theory pertaining to a self-selected area of public health. Students will be asked to 1) assess the state of knowledge concerning their topic of interest, 2) critically evaluate the strengths and weaknesses of past research and theory, and 3) address the critical issues that research and theory has left unresolved, and 4) propose a conceptual approach and recommend future research that will foster new knowledge. This integrative review paper is expected to be 25-30 double spaced pages in length (approximately 6000-7500 words with 1 inch margins and 12 point Times New Roman font), excluding references, tables, and figures. The format of the paper should follow American Medical Association Manual of Style (http://guides.library.uwm.edu/c.php?g=56454&p=363108).

Students will be required to hand in two (2) hard copies and one (1) electronic copy of their integrative review to the CBHP program lead or a designated proctor of the exam by 12:00 noon on the day it is due. Late exams are not accepted.
The process is as follows:

1. Student submits a topic (500-word abstract) to his/her exam committee. A timeline of submission dates will be provided yearly. A student may work with his or her faculty advisor on the proposal. The topic is expected to be relevant to the student’s desired dissertation topic.

2. The exam committee will review the proposed topic and give the student feedback. When appropriate, the student will be asked to revise and resubmit the topic to the committee. Revision due dates will be provided in the QE timeline.

3. The revised proposed topic will be reviewed by the committee. After approval, a student has four weeks to complete the integrative review. Once approved, a student may not receive input from faculty.

4. After the exam is completed and turned in, the committee will provide a pass/no pass grade based on a majority vote (2/3) of the committee. While this review will likely draw on knowledge gained in coursework, the submitted paper must constitute original work. It should not be recycled text from previously submitted papers. The submitted document must reflect in-depth, critical, and independent thought and analysis of the current state of the science in the selected domain.

In-School Section:
The in-school section will be administered in accordance with the QE timeline. This component is a 5-hour in-school, closed-book written exam designed to test the student's ability to use CBHP knowledge and skills to address public health issues. More specifically, students will be asked to critically evaluate and/or propose a solution to a case study problem. Students are expected to demonstrate their skills in "translational" scholarship, defined as the capacity to integrate public health research and practice, through their analysis of the problem and their capacity to propose creative and practical solution(s). The case study and a series of questions will be provided to the student when they arrive for the exam.

Case study topics may vary across students taking the exam in the same semester. Students should not expect that they will be tested on a case study topic that perfectly matches their area of research interest. Rather, they should prepare to apply their skills in design, measurement, analysis and intervention planning (at multiple levels) to a broad array of public health problems. The in-school section will be held in a designated room on a single day determined by the timeline. Students will be provided with laptops with power cords and a blank removable disk. At the end of the exam, students must bring the removable disk that contains their exam responses.
to the exam proctor’s office. The proctor will print out a copy of the student’s exam and request that the student review the work. It is imperative that students review the hard copy to be certain that all responses are complete and nothing was accidently deleted or left on the laptop hard drive. If the hard copy is complete, the student will hand it to the proctor.

The QE committee will both create the case study question(s) and evaluate student responses. As with the take-home section, the final pass/no pass result will be based on a consensus or majority vote of the committee.

**Oral Presentation & Exam:**
After completing the integrative review and the case study exam, student will meet with their exam committee for a Q&A session. Students will be allowed to have a 15-minute introduction to highlight the most important points covered in their paper and case study analysis. It is important for student to remember that their committee members have read the paper and exam so a review is not necessary. Students should prepare the presentation using Power Point. After the presentation, committee members and other faculty will ask questions. It is expected that the Q&A portion of the exam will last 30 to 40 minutes.

**Examination Results**
Specific Learning Objectives for the Exam are outlined in Appendix (pp 6-7). These objectives can help students develop their exam materials in a manner that demonstrates these objectives and can help make grading more transparent. The exam committee will use the following interpretive statements for evaluating each section of the examination.

- **Pass:** Competent and sound work for a doctoral student. Work at this level shows signs of creativity, is thorough and well-reasoned, and demonstrates independent analysis, clear recognition and good understanding of the salient issues.

- **No pass:** Unacceptable work for a doctoral student; work at this level demonstrates neither a conceptual grasp of salient issues nor an aptitude for scholarly work.

The exam results with overall comments outlining strengths and weaknesses and a final pass/no pass grade will be communicated to the student after completion of his/her oral exam on the day of the oral exam. A more detailed letter may be e-mailed to the student by the chair of the exam committee as deemed necessary. If a student does not pass one or more sections of the exam, he
or she may be allowed one additional attempt at the discretion of the examining committee to re-take the section(s) that not passed within one calendar year. It is expected that the student will meet with his/her faculty advisor to put together a remedial plan. This may include additional coursework, repeating courses, auditing courses, reading assigned articles and/or textbooks, or conducting independent study with faculty members. The timeline for this remedial plan should be within the Graduate School’s requirement that a student should pass the QE within five years of initial enrollment in the doctoral program.

After successful completion of the qualifying process, the student will be admitted to dissertator status and concentrate on the development of the dissertation. Specific requirements, which must be completed before a doctoral student qualifies for dissertator status, are described on the Graduate School [Doctoral Requirements](#) page.

**Appealing Examination Results**

If a student wishes to appeal the results of his/her examination results, he/she must do so in writing to the program lead within 15 days of receiving results. All appeals will be discussed by all CBHP faculty and a decision will be communicated to the student within 2 weeks of receiving the appeal. Please note: if the exam is taken in December, the maximum 30 days of this process may be past the period for registering for spring semester remedial courses so it is important for students to act quickly when filing an appeal in December or January.

If students wish to see a copy of their in-school exam during their appeal process or during their remedial process, they may do so by making an appointment with his/her faculty advisor who will be given a copy and can review their responses with the student in the faculty member’s office. Students may not keep a copy of their in-school exam. It is recommended that students review their response(s) prior to retaking any portion of the QE.
The PhD Program Post-QE

Once a student has passed all sections of the QE, the student and his or her advisor will request the CBHP faculty form a dissertation committee that consists of at least 3 UWM graduate faculty including the advisor as a chair of the committee. The student must then submit an online Application for Doctoral Dissertator Status, located in the online Doctoral Milestones System (http://www.graduateschool.uwm.edu/students/current/doctoral/). Once the student has been admitted to doctoral candidacy, he or she may begin their 6 credits of Dissertation Research. Note that students cannot take regular courses after they are awarded dissertator status. They can only take research credits. Dissertators can take maximum three credits each semester and are considered full time.

CBHP Doctoral Qualifying Examination Learning Objectives:

Upon completion of all the coursework, the CBHP Doctoral candidates are expected to be able to:

1) Apply social and behavioral science theories and methods to the design of public health research;
2) Utilize qualitative and quantitative data analysis methods relevant in the evaluation of public health data;
3) Demonstrate the capacity to communicate with students, researchers, professionals, and community members from a variety of disciplines and perspectives. In line with these general CBHP PhD program competencies, learning objectives of the exam are listed below as a guide for the students in preparation of the exam.

a. Problem Definition:
   • Critically review relevant literature on specific, selected issues and problems
   • Provide an informed and coherent rationale for focusing on selected problems/issues
   • Provide an informed and coherent rationale for selection of target populations and/or groups
   • Identify and evaluate social behavioral factors/determinants (e.g. predisposing, enabling, reinforcing factors) relevant to the selected problems/issues.
   • Identify health risk factors and disease preventive factors pertinent to the target population from the public health point of view
   • Address issues of health disparity between subpopulations and relevant to the selected problems/issues.
   • Examine and evaluate social justice issues pertinent to selected problems/issues.
b. Theory:
- Demonstrate knowledge and understanding of relevant theories of community and behavioral health
- Demonstrate ability to critically and thoroughly review and apply theories relevant to the issues of interest
- Describe a conceptual framework for understanding selected issues/problems, including the definition of major constructs
- Formulate relevant research hypotheses
- Explain how social, cultural, organizational, and institutional systems pertain to selected issues/problems

c. Methods:
i. Study Design
- Develop and describe an plan for testing/evaluating an intervention
- Choose a study design and describe its feasibility, strengths and limitations in a given situation
- Address issues related to the internal and external validity of specific study designs

ii. Quantitative and/or Qualitative Methods:
- Demonstrate in-depth knowledge and understanding of quantitative and/or qualitative approaches to addressing selected problems/issues.
- Evaluate the strengths and weaknesses of quantitative and qualitative data collection methods pertaining to selected issues/problems
- Explain why the chosen methods are appropriate; critically appraise alternative methods

iii. Measurement Issues:
- Describe key variables and explain how they will be measured (e.g., scale development, levels of measure, i.e., nominal, ordinal, interval, ratio, etc.)
- Evaluate alternative measurement strategies and describe strengths and weaknesses of chosen measures
- Address issues of the reliability, validity, sensitivity and specificity of chosen measures
- Explain and justify data collection methods

iv. Analysis Plan:
- Evaluate analytical strategies appropriate to the study design and the characteristics of selected outcomes.
- Explain how the hypotheses will be tested using qualitative and/or quantitative analyses (appropriate to the type of variables and hypothesis)
• Demonstrate knowledge and ability to apply relevant quantitative analytical procedures
• Demonstrate knowledge and ability to apply relevant qualitative analytical procedures

d. Social Justice and Ethical/Professional Issues:
• Demonstrate in-depth understanding of ethical and social justice research issues relevant to marginalized communities
• Explore ethical issues relevant to interventions used (e.g., ignores individual or environmental influences, paternalistic, victim blaming, coercive)
• Identify and address ethical issues regarding research with human subjects
• Demonstrate an understanding of ethical and professional conduct
• Demonstrate ability to apply social justice principles to the design and implementation of research, including intervention research.
• Demonstrate the capacity to communicate with students, researchers, professionals, and community members from a variety of disciplines and perspectives.

Tentative Timeline of the CBHP PhD Qualifying Exam (YR 2017)*

CBHP PhD Qualifying Exam Schedule

<table>
<thead>
<tr>
<th>What Happens</th>
<th>When (Week of the Semester) Thursdays*</th>
</tr>
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<tbody>
<tr>
<td>Orientation</td>
<td>1st Week</td>
</tr>
<tr>
<td>Take-home (integrated lit review) topic submission due</td>
<td>3rd Week</td>
</tr>
<tr>
<td>Revise/resubmit topic</td>
<td>5th Week</td>
</tr>
<tr>
<td>The latest topic approval date &amp; start of take-home</td>
<td>7th Week</td>
</tr>
<tr>
<td>Latest take-home due**</td>
<td>11th Week</td>
</tr>
<tr>
<td>In-class exam</td>
<td>13th Week</td>
</tr>
<tr>
<td>Oral exam</td>
<td>15th Week</td>
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</table>

* During the summer, the schedule starts in the first week of May.

**This is the latest possible due date for take-home exam. Each student will have 30 days to complete his/her take-home exam since the time of topic approval.

Dissertation

In consultation with his or her Faculty Advisor, the candidate will develop a dissertation research plan and form a dissertation advisory committee. The composition of the dissertation committee must be in compliance with the rules and regulations of the Graduate School. The candidate then submits a written dissertation plan to be reviewed and formally approved by the dissertation
advisory committee. The research plan must clearly outline the student’s obligation for completing an original piece of work of sufficient quality, which is to be determined by the committee. The review and approval process will include a formal presentation to the committee.

Once the dissertation research and write up has been completed, the candidate submits the original work to the committee for review. In addition, the candidate must orally defend the dissertation document, including the research design, analysis and conclusion. The dissertation defense will be publically announced and open to the academic community. Once the defense is completed, students will be encouraged to revise their dissertation and submit it for publication.

Once the committee has formally approved the dissertation document and the oral defense, and the Chair of the CBHP Program has certified completion of all requirements, the candidate is awarded the PhD in Public Health with a Concentration in Community and Behavioral Health Promotion.
Graduation

The Graduate School administers graduation for all graduate students. To graduate, meet these deadlines:

4. Apply for graduation by the posted deadline for the semester in which the student intends to graduate. Submit the Application for Doctoral Graduation to the Graduate School. Applications do not carry forward; a student must re-apply if s/he did not graduate in the semester anticipated.

5. At least two weeks before the graduation ceremony date: Hold the dissertation defense.

6. Submit the final dissertation by the posted submission deadline Submission to the Graduate School must include:
   - An electronic submission of the thesis through ProQuest ETD Administrator. More information on the submission process found on the UWM ETD Web site.
   - Thesis & Dissertation Approval and Publishing Options Form with an original signature from the student and the major professor.
   - Complete the online Survey of Earned Doctorates

If any of these deadlines are not met, the student must apply and graduate in the next semester. The student will not be required to register for the next semester if the dissertation has been defended, passed, and accepted by the Graduate School before the first day of classes for the next semester. The date of graduation, however, will be the next semester.

If you want your name to appear in the commencement bulletin, be sure that your directory information with the University is not restricted. If you restricted the release of your address, phone number, and other limited information, contact the Department of Enrollment Services Information Center, Mellencamp 274. This should be done by the second week of the semester in which you expect to graduate to ensure that your name will appear in the bulletin.

Removal of the restriction will allow your directory information to be released for all publicity purposes, as well as the commencement booklet.

Graduation ceremonies are held in May and December. August graduates attend the December graduation ceremony.

About one month before graduation, all eligible degree candidates will receive a letter from the Secretary of the University’s office containing the date, location, and time of the ceremony, as well as information on ordering caps and gowns. Any questions about the commencement ceremony should be directed to the Secretary of the University.
Diploma
Diplomas and a copy of an official transcript will be mailed to the address listed on PAWS approximately 8 to 10 weeks after the official degree conferral date. The name on the diploma will be printed exactly as it exists in university records. Changes to the name must be made in Mellencamp 274 at least one month before graduation; a fee will be assessed for name changes requested after diplomas have been ordered.

If there is a hold on the record, it must clear it before these documents will be mail
Section V: The PhD in Epidemiology
Description
The Ph.D. in Epidemiology is the highest degree for epidemiology, preparing graduates for research careers in many settings including academia, non-governmental organizations, and public service at the state, national, and international levels. Students will be trained to conduct independent epidemiologic research in applied and academic settings, with an emphasis on the translation of epidemiologic findings into policies that promote population health, social justice and health equity. Coursework will focus on theory, quantitative and qualitative methods, community-engagement, and the intersection of epidemiologic research and public health policy. Students must complete 66 graduate credits beyond the bachelor’s degree, plus an additional 9 credits dedicated toward dissertation writing and research. Completion of a high quality doctoral dissertation based on original research is a key feature of the academic program. Students’ capacity to complete dissertation research will be supported by a rigorous curriculum designed to bring students to the intellectual forefront of the discipline.

Competencies

1. Integrate knowledge regarding biological, behavioral, cultural, and sociopolitical mechanisms within historical contexts operating at multiple levels of causation to shape hypotheses regarding population health and health equity.
2. Critically evaluate normative dominant theories of the distribution and determinants of health and implications for epidemiologic knowledge production.
3. Apply theories across multiple disciplines to frame and interpret epidemiologic research with attention to relevant policy and practice implications.
4. Critically appraise the scientific literature to identify strengths and limitations of existing methodological approaches in the field of Epidemiology.
5. Design and conduct independent, interdisciplinary epidemiologic research using appropriate qualitative and/or quantitative methods demonstrating knowledge of theory, study design, sources of bias and other limitations to causal inference.
6. Explain the principles and methods of conducting community-engaged epidemiologic research to promote population health and health equity.
7. Engage ethically in interactions with study participants, community and colleagues, conduct of research, analysis of data, reporting of findings, and formulation of policy recommendations.
8. Demonstrate respect for diverse values, beliefs, and cultures and the dignity of individuals and communities in the conduct of research.
9. Communicate epidemiologic concepts, methods and research findings to a range of audiences with attention to ethical, policy, and practice implications including how findings represent and impact study participants and their communities.
10. Translate epidemiologic findings into policy recommendations and advocacy strategies that promote population health and health equity.
Curriculum and Courses

A minimum of 75 credits of coursework beyond the bachelor’s level is needed to earn the degree, at least 32 of which must be earned in residence at UW-Milwaukee -- 66 credits of didactic coursework and 9 credits toward dissertation writing and research.

NOTE: Students may apply previous graduate coursework towards didactic PhD credits, contingent on assessment of course equivalencies, in accordance with UW-Milwaukee policies.

Coursework will include:

- 24 credits - principles of epidemiology, biostatistics, public health policy, and community engagement;
- 12 credits - Ph.D.-level coursework in research ethics, community-engagement, as well as a seminar in current issues in epidemiology that will incorporate leadership training and career development;
- 9 credits - advanced coursework in both theoretical and applied epidemiology;
- 6 credits of subject matter area, or ‘s’ elective coursework;
- 6 credits of coursework in advanced analytic methods;
- 6 credits in advanced policy analysis and translation of epidemiologic findings to policy-interventions; and,
- 3 credits of an elective in an area that aligns with their research interests.

Common Required PhD Courses
PH 702 Introduction to Biostatistics
PH 704 Principles and Methods of Epidemiology

PH 801 Seminar in Public Health Research

Epidemiology Core Required Courses
PH 700 Structures of Inequality and Population Health
PH 705 Principles of Public Health Policy and Administration

PH 758 Social Epidemiology
PH 759 Applied Quantitative Methods for Studying Population Health & Health Disparities

PH 761 Epidemiology Field Methods
PH 763 Epidemiology in Action for Equity
PH 779 Public Health Policymaking and Policy Analysis
PH 804 Advanced Epidemiology
PH 823 Applied Analysis of Binary Outcomes in Public Health Research
PH 864 Research Ethics in Epidemiology & Public Health
PH 870 Epidemiology in Health Policy & Advocacy
PH 904 Survey of Analytic Methods for Epidemiology
PH 960 Core Doctoral Seminar in Epidemiology
PH 990 Research and Dissertation (1-3 cr)

†Required Epidemiology Subject Matter “S”elective (Choose two courses, 6 cr.)
- PH 768 Cancer Epidemiology (3)
- PH 769 Critical Perspectives in Nutritional Epidemiology and Food Systems (3)
- PH 762 Environmental Epidemiology (3)
- PH 868 Epidemiologic Links Between Infectious and Chronic Disease (3)
- PH 865 Critical Methodologies for Health Equity Research, 3 cr.

Analytic Methods Electives (Choose 2 courses, 6 cr.; other classes as approved)
- PH712 Probability and Statistical Inference (3)
- PH714 Statistical Genetics and Genetic Epidemiology (3)
- PH715 Applied Categorical Data Analysis (3)
- PH716 Applied Survival Analysis (3)
- PH717 Applied Longitudinal Data Analysis (3)
- PH718 Data Management and Visualization in R (3)
- PH776 Qualitative Approaches in Public Health Policy and Administration (3)
- SOC982 Advanced Quantitative Analysis (3)
- EDPSY823 Structural Equation Modelling (3)
- EDPSY832 Theory of Hierarchical Linear Modelling (3)
- PH729 Survey Research Methods in Public Health (3) -OR- SOC752 Fundamentals of Survey Methodology (3)
- GEOG525 Geographic Information Science (4)

Other Electives (Choose 1 course, 3 cr.; other classes as approved)
PH 727 Program Planning and Implementation in Public Health (3)
PH 728 Program Evaluation in Public Health (3)
PH 774 Violence and Health: Interdisciplinary Theories and Interventions (3)
PH 784 Social and Economic Policy as Health Policy (3)
PH 808 Writing a Federal Grant in the Public Health Sciences (3)
PH 820 Maternal and Child Health Foundations, Policy and Practice (3)
PH 826 Principles of Community Intervention Research (3)
PH 831 Community Engaged and Participatory Research and Practice (3)

**Residency Requirements**
The student must complete 8 to 12 graduate credits in each of two consecutive semesters, or 6 or more graduate credits in each of three consecutive semesters, exclusive of summer sessions. Residence requirements cannot be met at the master’s level.

**Time Limit**
All degree requirements must be completed within ten years from the date of initial enrollment in the doctoral program.

**Major Professor as Advisor**
As specified in Graduate School regulations, each student must have a major professor to advise and supervise his or her studies. During the application process, students will be asked to describe the research areas they are primarily interested in and identify faculty with whom they may potentially have shared research interests. The entering student is assigned an advisor/major professor at admission based on fit and focus. The major professor serves as the student's research mentor and will guide the student in course selection, program planning, and research design. Students may change their advisor/major professor if the fit and focus change over time. Such changes will need approval of the graduate program committee. The major professor must have graduate faculty status.

**Doctoral Preliminary Examination**
A PhD Preliminary Examination to be administered to students before advancement to PhD candidacy (i.e., dissertator) status. The exam will consist of two parts. The first will be an in-class examination that focuses on competencies related to 1) core epidemiologic methods, 2) analytic methods relevant to epidemiologic research, and 3) policy implications of epidemiologic research. The second will be a take-home exam in which students demonstrate competencies related to knowledge of selected epidemiology content in the range of research areas in which students may specialize, such as chronic disease, infectious disease and/or environmental epidemiology. Both portions of the examination serve to assess achievement of competencies.
Dissertator Status
Specific requirements which must be completed before a doctoral student qualifies for dissertator status are described on the Graduate School Doctoral Requirements page.

PhD Advisory Committee
The student, in consultation with the Major Professor, will select four additional members to form a PhD Advisory Committee. A minimum of three committee members must be EPI program faculty. See the Graduate School [Doctoral Requirements](#) page for more information on the doctoral committee.

Dissertation Proposal Hearing
In consultation with his or her primary faculty advisor, students who have achieved candidate status will develop a dissertation research plan and form a dissertation advisory committee. The dissertation research plan should include an abstract, background, outline of specific aims and hypotheses, (articulated as three distinct but related research questions), preliminary findings (if applicable), research methods proposed, public health significance of the proposed research and references. The composition of the dissertation committee must be in compliance with the rules and regulations of the Graduate School. The candidate then submits a written dissertation plan to be reviewed and formally approved by the dissertation advisory committee. The research plan must clearly outline the student’s obligation for completing an original piece of work of sufficient quality, as determined by the committee. The review and approval process for the dissertation research plan will include a formal presentation to the committee.

Dissertation Defense
Upon approval of the dissertation research proposal, students will proceed with an original and significant research investigation under the supervision of their major professor, culminating in a written dissertation. Once the approved dissertation research and write-up has been completed, the candidate will submit the original work to the committee for review. The candidate must also orally defend the dissertation in a publicly announced presentation that is open to the academic community. Once the Chair of the Zilber School has certified completion of all requirements, the candidate will be awarded the PhD in Epidemiology and encouraged to submit it for publication.

Diploma
Diplomas and a copy of an official transcript will be mailed to the address listed on PAWS approximately 8 to 10 weeks after the official degree conferral date. The name on the diploma will be printed exactly as it exists in university records. Changes to the name must be made in
Mellencamp 274 at least one month before graduation; a fee will be assessed for name changes requested after diplomas have been ordered.

If there is a hold on the record, it must clear it before these documents will be mailed.
Section VI: Policies and Procedures
Grading Procedures and Policies
Approved by Graduate Program Committee on 2/25/14

UWM uses a letter grade system that includes "plus" and "minus" grades and is based on a 4.000 scale. For convenience in computing averages, each letter grade carries a specified number of points per credit. The scale of grades and points follows:

<table>
<thead>
<tr>
<th>Grades</th>
<th>Grade Points</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td>4.000</td>
</tr>
<tr>
<td>A-</td>
<td>3.670</td>
</tr>
<tr>
<td>B+</td>
<td>3.330</td>
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<tr>
<td>B</td>
<td>3.000</td>
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<tr>
<td>B-</td>
<td>2.670</td>
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<tr>
<td>C+</td>
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<td>C</td>
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<td>C-</td>
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<td>D+</td>
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<td>D</td>
<td>1.000</td>
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<tr>
<td>D-</td>
<td>0.670</td>
</tr>
<tr>
<td>F</td>
<td>0.000</td>
</tr>
</tbody>
</table>

*Except for English 090/095, Linguistics 096, and Math 090/095. Letter grades are assigned for these courses, although they carry no degree or GPA credit.

Other Reports
- CREDIT = "C-" or above in a credit/no credit course
- NO CREDIT = Below "C-" in a credit/no credit course (course will not appear on the academic record)
- NOT RPTD = Grade was not submitted in time to be reported
- I = Incomplete (see below)
- P = Progress (research and thesis course work still in progress)
- S = Satisfactory (audit and zero-credit courses* only)
- U = Unsatisfactory (zero-credit courses* only)
Grade Point Average (GPA)
Students will take most of their course work on a graded basis. The general quality of class performance is expressed in terms of the grade point average (GPA). The number of grade points earned in a course is computed by multiplying the points for the grade by the number of credits for which the course is offered. For example, if a student earns a B in a three-credit course, he or she would earn nine grade points. GPA is calculated by dividing the total number of grade points earned by the total number of graded credits taken. The highest possible average is 4.000 or an A in every subject.

The grade point average recorded on official UWM transcript is based solely upon credits earned or attempted at UWM. UWM credits taken as audit or credit/no credit do not apply to the UWM GPA.

Grade Reports
Following the completion of a semester, students can view their grades and print a copy of the grade report via PAWS. Students can see their grades as they are posted, but complete grade reports are typically available within two weeks from the last day of final exams.

To check the grade record, follow the steps below:
2. The “Student Center” page will appear.
3. Click “Grades” under the ‘Academic History' section.
4. On 'View My Grades' page, select the term from dropdown menu and click “Change”
5. To print a grade report, click the printer friendly icon on the bottom of the page.
6. To go back to the grade report to select a different term click 'cancel' on the bottom of the printer friendly version of the grade report.

F-Grade Policy
When reporting a grade of ‘F,’ the instructor will also report a number corresponding to the student's “week of last participation” in the course. This is the last week of the term for which there is documented evidence of the student's participation in the course.
"Documented evidence of participation" may include any work or materials received from the student, such as exams, quizzes, projects, homework, etc. Documented evidence of participation might also take the form of an attendance roster (if attendance is taken in class), an annotation by the instructor that the student was observed attending class or otherwise participating in the course on a certain date, etc. Documented evidence of participation may not take the form of simply logging into an online class without active participation.*

The mechanism to report the week of last participation shall be that, when reporting an 'F' grade, the instructor will follow the 'F' with a numeral showing the student's last week of participation, such as, for example, 'F0,' 'F1,' 'F16,' and so on, with 1 equating to the first week of the course, 2 to the second, etc. A student receiving the mark of 'F0' would, therefore, be one who never attended or participated, whereas a student marked 'F16' would have completed the entire term (assuming this was a full-term course during a 16-week semester). For a six-week summer session course, the possible marks would be 'F0' – 'F6' and so on. (See next page for a complete list of possible marks.)

On official transcripts, only the mark 'F' will be reflected. The numeral for “week of last participation” will be reflected on internal, unofficial transcripts and grade reports only.

Incomplete Policy

An Incomplete is appropriate only when the following conditions are present:

1. A student does satisfactory work in a substantial fraction of the course requirements prior to grading time and provides the instructor with evidence of potential success in completing the remaining work.

2. Extraordinary circumstances, not related to class performance, such as illness or family emergency, have prevented the student from finishing the course requirements on time. An Incomplete will not be given to enable students to do additional work to improve a grade. It is the student’s responsibility to initiate a request for an Incomplete. If approved, the instructor will indicate the conditions for the removal of the Incomplete, including the dates for submitting all remaining work. The instructor may deny a request for an Incomplete and assign a letter grade based on the work completed at that point.

The student is responsible for seeing that the Incomplete is removed before the agreed deadline and that the instructor has reported the grade to the Graduate School. The instructor may change the I to a letter grade (including an F) or to a PI (Permanent Incomplete) if the student fails to meet the deadline for completion.
Permanent Incomplete
If the instructor does not change the Incomplete to a regular letter grade within one year from
assigning the Incomplete grade, the Incomplete will lapse to a Permanent Incomplete (PI),
whether or not a student is enrolled (A PI is not computed into the grade point average). The PI
symbol subsequently cannot be changed to a regular letter grade. Except in cases where the work
was completed, but the instructor neglected or was unable to file a grade change in time, the "PI"
will remain on the academic record. If a student has received a PI and wants credit for that
course, he or she must register again and complete the designated requirements. A student may
not register for a course for which an I remains on the transcript.

Students may graduate with a PI provided all degree requirements have been met. All
Incompletes must be removed or changed to a PI before a student may graduate.

Grade Changes
Students anticipating a grade change may view their grades in PAWS daily to confirm whether or
not a grade has been changed.

Only instructors assigned to teach a course may award or change grades for that course. The
process is available online.

Repeat Policy
Students must earn a cumulative G.P.A. of 3.0 or better to progress. According to Graduate
School policy, students may repeat a course once in which a grade of less than "B" was earned.
The repeated course may be counted only once toward meeting degree requirements. Both
attempts remain on the student's permanent record and both are counted in the grade point
calculation.

Note that a change in the repeat policy goes into effect Academic Year 2014 – 15. Students who
earned below a B- in required coursework before Fall 2014 must repeat the course in
accordance with the previous repeat policy.
Course Substitution Approval Process
Approved by the Graduate Program Committee 2/10/15
Requests for course substitution of a required class require a Course Equivalency Request Form.

Substitution of a Required/Common Core Course

The process for substituting a required/core course is as follows:

- The requesting student talks to his/her Faculty Advisor, who signs the Course Equivalency Form to recommend approval.
- Submit to Senior Graduate Program Manager the Course Equivalency Form, signed by the Faculty Advisor, along with a course syllabus of the substituted course and a statement asking for the substitution.
- The core course instructor reviews the request. The course instructor will review the syllabus to determine if core competencies have been met. In some cases, the course instructor may choose to schedule an assessment exam with the student petitioner. The requesting student must earn an 85% or better on the exam.
- The MPH Director makes the final determination on equivalency for MPH students, and the PhD program Faculty Lead makes the final determination on equivalency for PhD students. Transfer courses are subject to Graduate School Dean approval.

Substitution of a Required or “S”elective Track Course

The process for substituting a required track course is as follows:

- The requesting student talks to his/her Faculty Advisor, who signs the Course Equivalency Form to recommend approval.
- Submit to Senior Graduate Program Manager the Course Equivalency Form, signed by the Faculty Advisor, along with a course syllabus of the substituted course and a statement asking for the substitution.
- The designated Track Lead reviews the request.
- The MPH Director makes the final determination on equivalency for MPH students, and the PhD program Faculty Lead makes the final determination on equivalency for PhD students. Transfer courses are subject to Graduate School Dean approval.

Substitution of an Elective Course

The Faculty Advisor must approve elective substitutions in writing, copying the Senior Graduate Program Manager, who inserts a copy into the student’s file.
Credit Transfer

Requests for transfer of courses taken outside of UWM or before matriculating into the public health degree program require the Graduate School's Transfer Credit Evaluation Form, in addition to the Course Equivalency Request Form. The requesting student should submit the Transfer Credit Evaluation Form to the Graduate School. They first determine if transfer is possible, and then the student must follow the substitution process for the Zilber SPH to make a recommendation to the Graduate School about the transfer request.

*Completion of courses in the Graduate Certificate in Public Health program does not guarantee approval of substitution or transfer into the MPH program.*

The maximum number of transfer credits allowable is the higher of (a) 12 semester credits or (b) 40% of the total number of credits required for graduation. Continuing Education credits (CEU's) are not eligible for transfer.

To qualify, transferrable coursework must meet the following criteria:
- Graduate level, from an accredited institution.
- Taken within five years of admission to the UWM degree program.
- Not have been used to meet previous degree requirements.
- Grade of B or better (B- is not acceptable).
- Approved by the graduate program unit.

Transfer work may fit into any of the following four categories:
- UWM coursework taken as a Graduate Non-Degree student;
- UWM coursework taken as an Off-Campus Graduate student;
- Graduate-level coursework taken at another college or university; or
- UWM coursework taken while enrolled in a previous UWM graduate degree or certificate program.

**Policy on Credit for Non-Course-Based Prior Work**

The Zilber School of Public Health (Zilber School) does not permit credit for knowledge and skills obtained in past work or life experience. Zilber School does not provide opportunities to obtain credit for courses by taking an exam to demonstrate knowledge and competencies in the area, that is, there is no "testing out" of courses.

**Policy on Credit Transfer (Completed Coursework)**
In certain circumstances, students may obtain credit for courses that count toward required core coursework, track core, or elective courses for their Zilber School degree based on graduate coursework previously taken at UWM or at another accredited university. The Zilber School follows the policies of the UWM Graduate School. In brief, students must apply using the Graduate Transfer Credit Evaluation Form, providing sufficient documentation on the course(s) for a determination to be made by the Graduate School with recommendations from the Zilber School of Public Health.

Zilber School students that have taken a UWM graduate course toward the Graduate Certificate in Public Health or in another course of study must complete the Graduate School’s required Transfer Credit Evaluation Form. If a course was taken prior to the course being offered by the Zilber School, beginning Fall 2011, the Zilber School Graduate Program Committee will recommend to the Graduate School that students receive transfer credits provided that the course meets all Graduate School conditions for transfer.

Any student requesting transfer credit for these courses taken after the beginning of Fall 2011 semester is also required to submit the Graduate Transfer of Credit Evaluation Form as described above, and credit transfer is not guaranteed.

The Graduate School will inform students of the final decision for transfers, and the Zilber SPH Senior Graduate Program Manager will inform students of the final decision on course substitutions and equivalency requests other than transfer classes.
Withdrawal
Withdrawal is the formal termination of a student's complete registration in all courses for the semester. To simply stop attending classes does not constitute a withdrawal. Withdrawals are not accepted by telephone. The student must fill out a withdrawal form or send a letter by certified mail to give notice to the Graduate School of the withdrawal.

The postmark date or the date the withdrawal form is received by the Graduate School becomes the effective date. This date determines the amount of fee/tuition that will be assessed. Check the UWM Web site for withdrawal deadlines and to determine the effect of withdrawal on your fees.

Students may withdraw after the deadline only for reasons other than academic difficulty. The student must first submit a Request for Exception to Graduate Student Services. If the request for withdrawal is for medical reasons, the student must supply documentation from a physician.

Withdrawals will be noted on the transcript. Withdrawals after the fourth week of classes remain on the academic record with the course number and title followed by a W symbol.

Reentry
If a student returns to the public health program after an absence of two or more semesters (excluding summer and UWinteriM sessions), he or she must apply to re-enter. The following are requirements for re-entering students:

- Completion of a semester's coursework within the past five years.
- A cumulative graduate GPA of 3.0 or higher.
- Clearance of academic and administrative holds.
- Being within the time limit for degree completion.
- Approval of the Track Lead.

A $20 processing fee is required for re-entry.
Evaluation of Student Progress
Approved by the Graduate Program Committee, 2/10/15

A. General Procedures

In addition to the informal monitoring of student progress provided by a student’s faculty advisor and instructors, progress and development is regularly evaluated through a formal review process. For PhD and MPH students, each track’s faculty will conduct two student reviews annually. The first review occurs at the end of Fall semester and is intended to make sure students are “on track” for the following semester.

The semi-annual review will be conducted in an expedited manner during a regularly scheduled track meeting in January of each year. The focus will be on conveying information about student problems and developing plans for remediation. Because discussion of individual students can be very time consuming, this meeting is best conceptualized as triage; if there is a need for a long discussion about a student, this should be handled by the faculty advisor and track lead in a separate meeting. After the mid-year review meeting, feedback to students in good standing is informally provided through the advisor. Students who are experiencing significant difficulties or who are not making sufficient progress will receive a formal letter (written by the advisor and co-signed by the designated track lead and Chair of the GPC), outlining plans for remediation and setting deadlines.

The second review, which occurs at the end of the Spring semester, is designed to provide all students with concrete feedback in a formal letter. This process occurs during a regularly scheduled track meeting in May of each academic year. Prior to the Spring annual review, students will be asked to fill out a self-evaluation progress report (see Appendix A) and to meet with their advisor to review recent accomplishments (and current problems if there are any to be addressed). In addition, specific goals and plans for the next six months will be discussed (e.g., plans for courses, research, teaching, and field work), including proposed plans for addressing problems.

Each student submits to their faculty advisor an unofficial transcript, which students can obtain via PAWS. As part of the year-end review for all students, the faculty advisor then completes a student progress summary form (Appendix B). This form will help to guide the review process. Prior to the student review meeting, each advisor shares the written summary with his or her student during a feedback meeting.
The advisor sends the completed form to the student via email, and the student has one week to review it and provide feedback. If the student agrees with the written summary, the student will co-sign Appendix B. If a student does not agree with the summary, or perceives inaccuracies in the information upon which it is based, or does not wish to comply with the recommendations/requirements of his or her advisor, he or she may append their own comments to the summary. This process is intended to ensure that communication between the faculty advisor and the student is clear and direct.

B. Academic Action

Academic Probation
Students may be placed on Probation for substandard academic performance and/or substandard professional behavior. When placed on probation, a student will be notified by the Senior Graduate Program Manager. If the student fails to satisfy probation's requirement within one semester of being placed on probation, academic dismissal procedures may be initiated. For more information on probation and dismissal policies, visit http://www.graduateschool.uwm.edu/students/prospective/areas-of-study/ to review UWM's Graduate Bulletin.

Academic Dismissal
Zilber School programs have the right to recommend to the UWM Graduate School that an MPH or PhD student be dismissed in accordance with UWM policies and procedures.

C. Appeals

See the Complaints, Grievances, and Appeals Policy.
Joint Faculty-Student Policy for Student Feedback-Request-Response Process

Overall Statement: In order for graduate level academic programs to run smoothly and effectively, there needs to be a continuous flow of feedback and response between students and faculty. The goal of this timeline and feedback loop is to ensure that exchange process. The first step is for the MPH and PhD students to meet in separate groups to compile feedback. The purpose of this meeting is to help ensure that various perspectives can be heard and that priority issues can be clearly articulated.

Note: This is not the only avenue for students to provide feedback to faculty; rather, this mechanism is intended as an alternative method that promotes transparency between faculty and students. Students are still encouraged to bring comments and issues forward to faculty advisors and other acceptable avenues in an effort to provide more immediate responses.

The second steps (which include several faculty and administrative leaders) is to prepare a response to the students regarding the issues and requests made.

The third step is to conduct a town hall meeting with all students and faculty invited to discuss unresolved issues and the feedback process.

October of Each Year: Students Elect New Leadership

November of Each Year:

1. MPH Students meet as a group to compile feedback/requests to MPH Director (feedback/requests to be collated by elected or designated student representatives)
   i. Students are encouraged to meet and compile feedback individually, but students can request facilitators if needed.
2. PhD Students meet as a groups to compile feedback to be distributes to GPC Chair (feedback/requests to be collated by elected or designated student representatives)
   i. Students are encouraged to meet and compile feedback individually, but students can request facilitators if needed.

December of Each Year:

1. Programs provide response to GPC Chair (to be discussed at GPC)
2. GPC makes recommendation to tracks, MPH Director and Associate Dean
January of Each Year:
  1. MPH Director Provide Response to MPH students regarding requests
  2. GPC provides response to PhD students regarding requests

February of Each Year: Faculty/Student Town Hall Meeting to discuss Response with MPH Students and PhD Students (separately)
  The Town Hall Meeting is intended to allow faculty to share the reasoning behind decisions and actions and allow students to discuss their concerns and make suggestions regarding new and unresolved issues.
Student Complaints, Grievances, and Appeals
Approved by the Faculty Committee 2/3/15

The University of Wisconsin-Milwaukee Zilber School of Public Health is committed to ensuring a fair and respectful process through which students can seek resolution of complaints and/or grievances involving Zilber School representatives (i.e., faculty member, faculty body, or staff member).

Non-Academic Complaints

Zilber SPH seeks to promote a supportive environment that values each member of its collective body and respects the diversity that each member brings. As such, UWM's Zilber SPH does not tolerate harassment, intimidation, or discrimination based on race/ethnicity, sex/gender, sexual orientation, disability, religion, or other protected status designated by UWM (see UWM Discriminatory Conduct Policy #S-47, http://www4.uwm.edu/secu/docs/other/S_47.pdf)

If a student believes s/he has been the subject of discrimination, harassment, or intimidation by a Zilber SPH representative (faculty, staff, administrator), s/he may either ask the Zilber SPH representative to stop the behavior or discuss the matter with the Associate Dean of Academic Affairs, who will direct the student to appropriate resources and/or methods for resolution.

If the student’s complaint pertains to discrimination and harassment, s/he may wish to contact directly:

UWM’s Office of Equity/Diversity Services
Mitchell Hall 359
3203 N. Downer Ave.
(414) 229-5923
diverse@uwm.edu
www4.uwm.edu/eds

If a student continues to experience a nonacademic problem with Zilber SPH representative, has tried to solve it through Zilber SPH procedures, and has been unsuccessful, the student may direct his or her concern to the Office of Student Life. The staff there can help with a full array of student concerns. Student Life staff may refer students to other University offices or persons to help address nonacademic concerns or complaints.

Contact the Office of Student Life directly:
Complaints against someone other than a Zilber SPH representative: If a student believes s/he has been the subject of discrimination, harassment, or intimidation by a UWM faculty, staff or administrator other than a Zilber SPH representative, s/he should follow the same procedures laid out for complaints against Zilber SPH representatives (above).

Academic Grievances
If a student believes s/he has been treated unfairly by a Zilber SPH representative with regard to an academic matter (e.g., grade, evaluation, graduation decision, scholastic standing), Zilber SPH has a progressive three step grievance process: 1) Informal resolution with faculty member/body, 2) Formal grievance addressed to faculty member/body, 3) Formal grievance addressed to Hearing Committee.

1) Informal Resolution with Faculty Member/Body
   Many issues and concerns can be addressed informally. Students may reach a satisfactory resolution by speaking directly with the responsible faculty member/body about the academic issue or concern. Ideally, the grievance process, begins with a meaningful effort by the student to resolve the issue through informal discussion with the responsible faculty member or representative of the faculty body (dissertation committee, qualifying exam committee, etc.).

   If the student is not satisfied with the outcome of the informal process, he or she may seek confidential guidance and consultation from the Senior Graduate Program Manager, MPH Director, or Faculty Chair.

2) Formal Grievance Addressed to Faculty Member/Body
   A student can initiate a Formal Grievance by submitting a written statement to the responsible faculty member/body within 30 working days of the action that prompted the appeal. The written grievance must include:
   - A description of the specific nature of the issue, decision, or behavior
   - The facts underlying the grievance
   - All previous efforts made to address the issue
   - The solution sought
The faculty member/body has 15 days to respond in writing to the student's written grievance. The student should send a copy of the grievance to the Associate Dean of Academic Affairs.

If the student is not satisfied with the outcome of this Formal Grievance process, s/he may proceed with a Formal Grievance to the Hearing Committee within 15 days of receipt of the faculty member/body’s written response.

Formal Grievance Addressed to Hearing Committee
If the student is not satisfied with the outcome of the Formal Grievance Addressed to the Faculty Member/Body, the student may file a Formal Grievance with the Zilber School Graduate Program Committee within 15 working days of receipt of the faculty member/body’s written response to the grievance. The written grievance as addressed to the GPC must include:

- A description of the specific nature of the issue, decision, or behavior
- The facts underlying the grievance
- Evidence of all previous efforts made to address the issue (including the written response from the responsible faculty member/body)
- The solution sought

The GPC will formulate a Grievance Subcommittee to address the issue. If a member of the GPC is the faculty member responsible for the decision or behavior at issue, the faculty chair will appoint a faculty member to replace him or her for the hearing.

In the event that any of the members of the body hearing the Step 3 appeal were involved in rendering the Step 2 decision being appealed, they must be replaced for the purpose of hearing the Step 3 appeal. Substitute members will be chosen by the Faculty Chair. If the Graduate Program Committee’s decision or behavior is the basis for the grievance, the faculty chair should appoint an ad hoc committee to handle the appeal. The student will receive written notification of the outcome of the Step 2 appeal.

The Grievance Subcommittee has 30 days to respond with its determination in writing to the student’s written grievance.

3) If the Step 3 decision is negative, the student may, within 10 working days from the date of notification of that decision, appeal to the Dean of the Graduate School. The student must provide information on the reason for the appeal, substantial evidence in support of the appeal, and the solution sought, and send this in writing, with a copy sent to the Zilber SPH Associate Dean of Academic Affairs.
Academic grievances against a UWM faculty or staff other than a Zilber SPH representative: If a student believes s/he has been treated unfairly by someone other than a Zilber School representative with regard to an academic matter (e.g., grade, evaluation), s/he should follow steps outlined in the UWM Graduate School policy, outlined at [http://www.graduateschool.uwm.edu/students/policies/appeals-and-exceptions/](http://www.graduateschool.uwm.edu/students/policies/appeals-and-exceptions/).
Code of Conduct
Approved by the Graduate Program Committee 11/25/2014

Preamble
The University of Wisconsin - Milwaukee Zilber School of Public Health (Zilber School) is committed to fostering integrity and ethics among all of its members: students, faculty, staff, and administrators. Such an environment is built upon the honorable and ethical conduct of all Zilber School members in all contexts - academic, research, and professional. Zilber School expects its members to value the ethical principles underlying this Code, to conduct themselves in accordance with the Code, and to take action against any suspected breach of the Code.

Values and Beliefs
As public health scholars, researchers, and practitioners and as members of the UWM community, we understand that:

1. Ethics are fundamental to all academic and professional activities.
2. Ethical behavior is crucial to maintaining the credibility and perceived value of our scholarship in the minds of our colleagues and the general public.
3. Academic and Professional Integrity means honesty concerning all aspects of public health work and studies.

Academic Conduct
Zilber School expects its members to be honest in their academic performance. Academic misconduct includes, but is not limited to, the following dishonest or inappropriate behavior:

- Cheating, including:
  1. Submitting material that is not yours as part of your course performance, such as copying from another student’s exam or allowing a student to copy from your exam
  2. Using information or devices that are not allowed by the faculty, such as using formulas or data from a computer program, or using unauthorized materials from a take-home exam
  3. Obtaining and using unauthorized material, such as a copy of an examination before it is given
  4. Fabricating information, such as data for a lab report
  5. Violating procedures prescribed to protect the integrity of an assignment, test, or other evaluation
  6. Collaborating with others on assignments without the faculty's consent
  7. Cooperating with or helping another student to cheat
8. Other forms of dishonest behavior, such as having another person take an examination in your place, altering exam answers and requesting the exam be regarded, or communicating with any person during an exam other than the exam proctor or faculty

- Plagiarism, including:
  1. Directly quoting the works of others without using quotation marks or indented format to identify them
  2. Using sources of information (published or unpublished) without identifying them
  3. Paraphrasing materials or ideas of others without identifying sources

Allegations of academic misconduct will follow the procedures adopted by the UWM Graduate School (see, Academic Misconduct Procedures, UWM Faculty# 1686, UWS Ch. 14 at: http://www4.uwm.edu/acad_aff/policy/misconduct_flowchart.pdf).

Disciplinary actions will follow the procedures adopted by the UWM Graduate School (see, Student Academic Disciplinary Procedures, UWM Faculty# 1686, UWS, Ch. 14 at: http://www4.uwm.edu/acad__aff/policy/uws_14facdoc_1686.pdf)

Research Conduct
Zilber School expects its members to promote integrity in all research endeavors. Research Misconduct includes, but is not limited to, the following dishonest or inappropriate behavior:

- Fabrication: Making up data or results and recording or reporting them
- Falsification: Manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record
- Plagiarism: The appropriation of another person’s ideas, processes, results, or words without giving appropriate credit
- Violations of requirements for the protection of human or animal subjects, including the protocols governing the use and disclosure of Protected Health Information (PHI) under the Health Insurance Portability and Accountability Act of 1996 (HIPAA).

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1 UWM Graduate School, Academic Misconduct
http://www.graduateschool.uwm.edu/students/policies/appeals-exceptions/academic-misconduct/

2 UWM’s HIPAA Overview for Researchers at https://www4.uwm.edu/legal/hipaa/overviews/researchers/index.cfm
But does NOT include:
  - Unintentional error
  - Honest differences in the interpretation or judgment about data

Allegations of research misconduct will follow the policy adopted by the UWM Graduate School (see, Research Misconduct Policy, UWM Faculty #1793, at: http://www4.uwm.edu/secu/policies/saap/upload/S45-5.pdf).

Research Integrity: Students are encouraged to participate in UWM’s "Research Integrity Professional Development Series."

Professional Conduct
In addition to the academic code of conduct, public health students are expected to demonstrate a high level of professionalism and professional integrity. This includes:
  • showing respect for a diversity of opinions, perspectives and culture
  • maintaining honesty and integrity in all professional endeavors
  • collaborating with other students and with community members when appropriate
  • behaving in a respectful and considerate manner with colleagues, peers, supervisors, research participants and community collaborators.

Professional Misconduct includes, but is not limited to, the following inappropriate behavior:
  • Behaving toward peers, staff, faculty, collaborators in a manner that is threatening, intimidating, harassing or overtly disrespectful.
  • Violating the Federal Education Rights and Privacy Act (FERPA). This might include (1): posting education records (e.g. grades) using a student’s name, student ID number or any portion of the social security number violates FERPA; (2) leaving graded exams or papers in a public space for students to pick up.
  • Violating the rights of Human Subjects. This might include: (1) disclosing of identifying information for subjects who have participated in research; (2) the improper handling of data stored on personal or UWM computers; (3) not informing the UWM IRB research activities conducted while a student at UWM. Other offenses as identified by UWM’s Dean of Student Life (see Non-Academic Review offenses at http://www4.uwm.edu/osl/dean/nonacademic.cfm).

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3 UWM Graduate School, Research Misconduct http://uw.edu/graduateschool/misconduct-policies/  
4 http://uw.edu/graduateschool/academic-integrity/
Professional Appearance
All public health students shall convey a positive, professional appearance as shown by their adherence of dress-code policies at their fieldwork sites and special events in order to represent the Zilber SPH and UWM in a dignified manner. Appearance includes a person’s dress, hygiene, and appropriate etiquette for the environment.
Appendix A: Course Equivalency Request Form (Approved 2/10/15)

Directions for Student:
1. Fill out Part One of the form (above the first solid black line).
2. Attach a current course syllabus.
3. Write and attach an official letter of request. (1) Plainly state why you want credit for a course that is not in the curriculum. (2) Address how your desired course meets the requirement category for which you are requesting equivalency.
4. Obtain your Faculty Advisor signature and recommendation to approve the request.
5. Return to 5th Floor Reception or email a copy to cubberL2@uwm.edu.

Directions for Faculty Advisor:
1. The student is responsible for filling out Part One of the form, attaching a syllabus for the requested course, and writing a rationale to count the alternative class.
2. Fill out Part Two, the area designated for Faculty Advisor approval and recommendation.

Further Directions:
1. This process must be followed by MPH students requesting official course transfer and by MPH students who want to count in the Plan of Study a course that is not listed in the curriculum.
2. The Faculty Advisor can approve electives not listed in the curriculum without further oversight.
3. If requesting equivalency for a “S”elective class, the Faculty Advisor’s recommendation is forwarded to the Track Lead for consideration.
4. If requesting equivalency for a required course (Common Core or Track Core), the Faculty Advisor’s recommendation is forwarded to the typical Faculty Instructor of that specific course.
5. In addition to the course instructor, the MPH Director must sign off on equivalencies for all required MPH courses.
6. A PhD student’s Faculty Advisor can approve prior graduate coursework to count toward the Plan of Study. The Residency Rule states that at least 50% of credits counted toward the degree must be earned in doctoral standing at UWM. The Faculty Advisor can choose to follow this equivalency process; course transfer is not required by the Graduate School. The Graduate School will not process a PhD student’s transfer request. This is an internal (School) process.
7. The Graduate Program Manager emails the student and Faculty Advisor a copy of the form after decisions are made and files the original documentation in the student file.
8. The MPH student is responsible to follow up with the Graduate School for official course transfer. The School includes a copy of the equivalency documentation from the student file.
MPH Course Equivalency Form: Part One, to be filled out by the student

Requested by: ____________________________________   _____-_____-_____

Student Name      Student ID Number

Circle Program:   MPH Cert

Date Submitted:_____________ Semester/Year of course enrollment: ___________________

Approval Requested For: _____________________________________________________

Course Title

College or University Where You Completed Course     (If already completed) List Grade

Desired Equivalency For: _____________________________________________________

UWM Course Title - OR - Category (i.e. “Built Environment "S"Elective” or “Methods “S"Elective”)

Part Two, to be filled out by the Faculty Advisor

Faculty Advisor (Print Name)       Faculty Advisor (Signature)

Recommend approval: ☐ Yes ☐ No

Comments:

Part Three, routed by the Senior Graduate Program Manager

Course Instructor - or - Track Lead (Circle One)

Print Name       Signature

Recommend approval: ☐ Yes ☐ No

Comments:

MPH Director (only necessary for required MPH courses)

Print Name       Signature

Approved: ☐ Yes ☐ No

Comments:
PhD Course Equivalency Form: Part One, to be filled out by the student

Requested by: ________________________________

Student Name

_________ - ________

Student ID Number

Circle Program:   Biostats PhD   CBHP PhD   EHS PhD   EPI PhD

Date Submitted:_____________ Semester/Year of course enrollment: ________________

Approval Requested For: _____________________________________________________

Course Title

_____________________________________________________

College or University Where You Completed Course (If already completed) List Grade

Desired Equivalency For: _____________________________________________________

UWM Course Title - OR - Category (i.e. “Built Environment "S"Elective” or “Methods "S"Elective”)

Part Two: To be filled out by Course Instructor-or-Track Lead (circle one) Date:_____________

Instructor Name (Print Name)       Signature

Recommend approval: ☐ Yes ☐ No

_______ percentage of course equivalency

Comments:

Part Three, submit to Faculty Advisor
Date:_____________

Print Name (Faculty Advisor)        Signature

Final approval: ☐ Yes ☐ No

Comments: If Instructor did not recommend course equivalency and Advisor chooses to overrule the decision, please provide a plan to meet the missing course objectives:

Part Four, submit to Graduate Program Manager Date:_____________

Print Name (Graduate Program manager)        Signature
Appendix B: Common UWM Forms and Links to Access Forms

Request for Exception Form

When a student requests an exception to any university rule, a Request for Exception form is required. The student must attach an explanation of why the exception should be granted. Access the form here:

http://uwm.edu/graduateschool/wp-content/themes/uwmwebid-graduateschool/media/exception-request.pdf

Registration Change Form

Classes or credits changed, added, swapped, or dropped after the published deadlines require a Registration Change Form. Use it to obtain permission to override prerequisites or closed courses, too. Access the form here:

https://www4.uwm.edu/des/upload/registration_change_form.pdf

Transfer Credit Evaluation Form

Students requesting transfer of courses must submit the Transfer Credit Evaluation Form. This form is necessary in addition to the Equivalency Form, which is an internal Zilber SPH form. Access the form here:

http://uwm.edu/graduateschool/wp-content/themes/uwmwebid-graduateschool/media/transfer-credit-evaluation-form.pdf

Links to all Graduate School forms can be found here:

http://uwm.edu/graduateschool/forms-downloads/
Appendix C: Directions to Run Unofficial Transcripts

Directions for obtaining your unofficial UWM transcript from PAWS. You must have Adobe Reader. You can download this free program from www.adobe.com.

1. Go to www.paws.uwm.edu
2. Enter your ePanther username and password (your ePanther username is the first part of your UWM e-mail and the password is the same you use to access your e-mail account)
3. Click “Sign In”
4. Under “Student Center” the first box is “Academics”. In the drop down menu entitled “other academic…” select “Transcript: View Unofficial” and click the yellow circle button marked “>>”
5. For “Transcript Type”, select “Graduate Campus Copy” and for “Output Destination Type”, select “E-mail”. Click “Submit Transcript Request”.
6. Go to outlook.office365.com
7. Enter your ePanther username and password, click “Log In”
8. A PDF copy of your unofficial transcript will be e-mailed to you. Click the e-mail and select “Download”.

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Appendix D: Travel Support Request

Funding through this program is intended for students who are presenting scholarly and creative work at professional conferences and exhibitions. You will generally receive a decision on your application within ten (10) business days.

Section I: Graduate Student Information

Name: _________________________________________________________________

Street Address: __________________________________________________________

City, State, and Zip Code: ___________________________________________________

Email Address: ___________________________________________________________

Student ID Number: _______________________________________________________

Graduate Program: _________________________________________________________

Advisor/Mentor: ___________________________________________________________

Section II: Destination Information

Event Name: _____________________________________________________________

Event City: ______________________________________________________________

Event State (if in U.S.)/Country: _______________________________________________

Event Dates: _____________________________________________________________

Title of your presentation/poster/exhibition: Date Accepted: __________

_______________________________________________________________________

Please provide a URL of the conference schedule listing your presentation/poster/exhibition if available:

_______________________________________________________________________

If a URL is not available, please attach a document (e.g. conference program) or email confirming your participation and submit with this application.

☐ Invited ☐ Contributed
Section III: Travel Details and Estimated Expenses
Please provide anticipated logistical details about your travel.

Transportation Method(s) (plane, bus, personal vehicle, rental car, etc.): _________________

If car, approximately how many total miles driven: _________________________________

Other—Specify method and estimated cost: ______________________________________

Please provide estimated monetary details about your travel. For reimbursable expense guidelines please review the UWM Pocket Travel Guide, available online at: http://www4.uwm.edu/bfs/forms/travel/upload/Pocket-Travel-Guide.pdf

Estimated Lodging Cost: ____________________________________________________

Specify Desired Roommate: __________________________________________________

Estimated Cost of Meals: ____________________________________________________

Registration Fee: __________________________________________________________

Ticket cost (air, train, bus): __________________________________________________

Other: _________________________________________________________________

Total Estimated Cost: _______________________________________________________

Will you be receiving other financial support for this activity? Circle: YES NO

If yes, please provide the following information:

Amount: ___________________________________________________________________

Sources (e.g. department name): ______________________________________________

By submitting this application, I certify that the information provided is accurate to the best of my knowledge. I understand that I will be asked to submit receipts if I am selected as an award recipient.
Graduate Student Signature: ________________________________ Date: _____________

Dean’s Approval: ________________________________ Date: ______________

Funded Amount: $____________
Doctoral Time-line

Semester 1

Establish Major Professor and begin taking courses
EHS-64 Credits past B.A. plus 37 approved hours in residence
Biostats- 60 Credits past B.A. plus 30 approved hours in residence
CBHP- 69 Credits past B.A plus 57 hours @ least 35 approved hours in residence
EPI- 66 Credits pas B.A. plus 33 approved hours in residence

After Prelims

Apply for Dissertator Status through Milestones
Submit proposal hearing form through Milestones
Apply for > 3 research credits a semester going forward.
Research Credits Needed:
- EHS- 6 @ Dissertator Status
- Biostats- 9 @ doctoral status
- CBHP- 3 @ pre dissertator status, 9 @ doctoral thesis
- EPI- 9 @ dissertator status

Defense Semester

Register for at least 1 credit
Defense Process:
1. Apply for graduation
2. Submit draft to committee well in advance
3. Set a defense date
5. Defend at least two weeks prior to graduation ceremony
6. Finalize revisions with Major Professor
7. Deliver warrant to Grad School within ten days of defense.

Semester 2

EHS- Take qualifying Exams

Semester before Prelims

Establish a Committee

Semester of Prelims

Within the first 2 weeks of the semester, apply for prelim exams through Milestones program.
Take Prelims.

Faculty Responsibilities

Prelim
1. Approves and schedules prelim exams.
2. Major Professor unlocks prelim exam applications in Milestones.
3. Major Professor approves Committee in Milestones.
4. Major Professor enters exam scores.
5. Grad Rep receives email to approve exam scores.
6. Major Professor, Grad Rep and Committee Members can amend the prelim checklist.

Dissertation
2. Major Professor approves hearing application.
3. Grad Rep receives email to approve the hearing application.
4. Major Professor, Grad Rep and Committee Members can amend the summary checklist.
5. Major Professor and Grad Rep are prompted by email to verify Dissertator Status.
6. Grad Rep receives Warrant of Defense, which Major Professor signs and provides copy to graduate program manager and graduate school.