Epidemiology
PhD Degree Program
Division of Epidemiology and Community Health

2018-2019
STUDENT GUIDEBOOK
Welcome to the University of Minnesota School of Public Health!

All students are responsible for knowing the rules and policies that govern their academic program. To this end, we are providing you with this guidebook which covers your specific academic program requirements. Please refer to it often.

Many Graduate School processes are in transition. Please stay in touch with your Program Coordinator as some paper processes will convert to electronic processes.

In addition, you are responsible for knowing University of Minnesota and School of Public Health policies and procedures that pertain to all students. Links to these policies and procedures can be found by clicking on the “Current Students” link at http://www.sph.umn.edu/current/resources/.

The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation.

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# EPIDEMIOLOGY PHD DEGREE PROGRAM

## 1.1 FALL 2018 PROGRAM CURRICULUM

### 61 Credit Minimum

Required Core Courses: 14-16 credits plus 24 thesis credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Notes</th>
<th>Title</th>
<th>Offered</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PubH 8341</td>
<td></td>
<td>Advanced Epidemiologic Methods: Concepts</td>
<td>Fall</td>
<td>3</td>
</tr>
<tr>
<td>PubH 8342</td>
<td></td>
<td>Advanced Epidemiologic Methods: Applications</td>
<td>Spring</td>
<td>3</td>
</tr>
<tr>
<td>PubH 7401</td>
<td></td>
<td>Fundamentals of Biostatistical Inference</td>
<td>Fall</td>
<td>4</td>
</tr>
<tr>
<td>PubH 6348</td>
<td></td>
<td>Writing Research Grants (A/F only, section 002)</td>
<td>Fall</td>
<td>2</td>
</tr>
<tr>
<td>GRAD 8101 or</td>
<td></td>
<td>Teaching in Higher Education (AVF grade option only) or</td>
<td>8101: Fall/Spring</td>
<td>3;1</td>
</tr>
<tr>
<td>GRAD 8200</td>
<td></td>
<td>Teaching and Learning Topics in Higher Education: Teaching</td>
<td>8200: Fall Only</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>for Learning – An Online Course (A-F grade option only).</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consult with advisor.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PubH 6742</td>
<td></td>
<td>Ethics in Public Health: Research and Policy</td>
<td>Fall, Spring</td>
<td>1</td>
</tr>
<tr>
<td>PubH 8888</td>
<td></td>
<td>Dissertation credits</td>
<td>All terms</td>
<td>24</td>
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</table>

### Clinical/Biological Track: 23 credits minimum

<table>
<thead>
<tr>
<th>Course</th>
<th>Notes</th>
<th>Title</th>
<th>Offered</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Biological Methods/Statistics: 6 credits minimum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PubH 7420 or PubH 6363 are required; at least 3 additional credits are required; choose from list OR prior approval needed to take different course.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PubH 7420 or PubH 6363</td>
<td>Required: Clinical Trials: Design, Implementation, and Analysis, or Design and Analysis of Cluster-Randomized Trials in Epidemiology. Consult with advisor regarding choice.</td>
<td>7420 each Spring; 6363 Spring even years (2018)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PubH 7430</td>
<td></td>
<td>Statistical Methods for Correlated Data</td>
<td>Fall</td>
<td>3</td>
</tr>
<tr>
<td>PubH 7405</td>
<td></td>
<td>Biostatistics: Regression</td>
<td>Fall</td>
<td>4</td>
</tr>
<tr>
<td>PubH 7406</td>
<td></td>
<td>Advanced Regression and Design</td>
<td>Spring</td>
<td>4</td>
</tr>
<tr>
<td>PubH 6915</td>
<td></td>
<td>Nutrition Assessment</td>
<td>Fall</td>
<td>2</td>
</tr>
<tr>
<td>PubH 7445</td>
<td></td>
<td>Statistics for Human Genetics and Molecular Biology</td>
<td>Fall</td>
<td>3</td>
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<tr>
<td>PubH 8141</td>
<td></td>
<td>Doctoral Seminar in Observational Inference</td>
<td>Spring</td>
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<tr>
<td>PubH 8300</td>
<td></td>
<td>Advanced Epidemiologic Methods Workshop</td>
<td>Fall</td>
<td>1</td>
</tr>
<tr>
<td>PubH 8343</td>
<td></td>
<td>Synthesis and Application of Methods in Epidemiologic Research</td>
<td>Fall</td>
<td>4</td>
</tr>
<tr>
<td>PubH 7402</td>
<td></td>
<td>Biostatistical Modeling and Methods (strongly recommended)</td>
<td>Spring</td>
<td>4</td>
</tr>
<tr>
<td>PubH 8804</td>
<td></td>
<td>Advanced Quantitative Methods Seminar</td>
<td>Spring 2018 (even years)</td>
<td>3</td>
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</tbody>
</table>

### Content area courses: 4 credits minimum

Choose from the following courses; can petition substitutes

<table>
<thead>
<tr>
<th>Course</th>
<th>Notes</th>
<th>Title</th>
<th>Offered</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PubH 6386</td>
<td></td>
<td>Public Health Aspects of Cardiovascular Disease (half-term)</td>
<td>Spring</td>
<td>2</td>
</tr>
<tr>
<td>PubH 6387</td>
<td></td>
<td>Cancer Epidemiology</td>
<td>Spring</td>
<td>2</td>
</tr>
<tr>
<td>PubH 6385</td>
<td></td>
<td>Epidemiology and Control of Infectious Diseases</td>
<td>Spring</td>
<td>2</td>
</tr>
<tr>
<td>PubH 6381</td>
<td></td>
<td>Genetics in Public Health</td>
<td>Fall</td>
<td>2</td>
</tr>
<tr>
<td>PubH 6389</td>
<td></td>
<td>Nutritional Epidemiology</td>
<td>Fall</td>
<td>2</td>
</tr>
<tr>
<td>PubH 6140</td>
<td></td>
<td>Occupational and Environmental Epidemiology</td>
<td>Spring</td>
<td>2</td>
</tr>
</tbody>
</table>
Supporting Program/Minor: 13 credits minimum
Chosen in consultation with advisor. Potential supporting program courses include courses from the additional biological methods/statistics courses listed above not used to satisfy the biological methods/statistics requirement, or courses from the following list. Other courses, or minors, can be considered with advisor.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Offered</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PubH 8300</td>
<td>Advanced Epidemiologic Methods Workshop</td>
<td>Fall</td>
<td>1</td>
</tr>
<tr>
<td>PubH 8343</td>
<td>Synthesis and Application of Methods in Epidemiologic Research (strongly recommended)</td>
<td>Fall</td>
<td>4</td>
</tr>
<tr>
<td>PubH 6355</td>
<td>Pathophysiology of Human Disease</td>
<td>Fall</td>
<td>4</td>
</tr>
<tr>
<td>VMed 5180</td>
<td>Ecology of Infectious Diseases</td>
<td>Fall</td>
<td>3</td>
</tr>
<tr>
<td>PubH 6375</td>
<td>Screening for Disease: A Double-Edges Sword</td>
<td>Fall</td>
<td>2</td>
</tr>
<tr>
<td>PubH 6383</td>
<td>Vaccines</td>
<td>Spring</td>
<td>2</td>
</tr>
<tr>
<td>PubH 7405</td>
<td>Biostatistics: Regression</td>
<td>Fall</td>
<td>4</td>
</tr>
<tr>
<td>PubH 7406</td>
<td>Advanced Regression and Design</td>
<td>Spring</td>
<td>4</td>
</tr>
<tr>
<td>PubH 7430</td>
<td>Statistical Methods for Correlated Data</td>
<td>Fall</td>
<td>3</td>
</tr>
<tr>
<td>PubH 7445</td>
<td>Statistics for Human Genetics and Molecular Biology</td>
<td>Fall</td>
<td>3</td>
</tr>
<tr>
<td>PubH 7450</td>
<td>Survival Analysis</td>
<td>Fall</td>
<td>3</td>
</tr>
<tr>
<td>VMed 8090</td>
<td>Epidemiology of Zoonoses (not offered 17-18)</td>
<td>Fall</td>
<td>2</td>
</tr>
</tbody>
</table>

Social/Behavioral Track: 23 credits minimum

<table>
<thead>
<tr>
<th>Course</th>
<th>Notes</th>
<th>Title</th>
<th>Offered</th>
<th>Credits</th>
</tr>
</thead>
</table>
| Behavioral Methods/Statistics: 6 credits minimum
PubH 7420 or PubH 6363 are required; at least 3 additional credits are required; choose from list OR prior approval needed to take different course.

<table>
<thead>
<tr>
<th>Course</th>
<th>Notes</th>
<th>Title</th>
<th>Offered</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PubH 6363 or PubH 7420</td>
<td>Required: Design and Analysis of Cluster-Randomized Trials in Epidemiology1 (strongly recommended for this track) or Clinical Trials: Design, Implementation, and Analysis. Consult with advisor regarding choice.</td>
<td>6363 Spring even years (2018); 7420 each Spring</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PubH 7402</td>
<td>Biostatistical Modeling and Methods</td>
<td>Spring</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PubH 7430</td>
<td>Statistical Methods for Correlated Data</td>
<td>Fall</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PubH 7405</td>
<td>Biostatistics: Regression</td>
<td>Fall</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PubH 7406</td>
<td>Advanced Regression and Design</td>
<td>Spring</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PubH 6915</td>
<td>Nutrition Assessment</td>
<td>Fall</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PubH 8300</td>
<td>Advanced Epidemiologic Methods Workshop</td>
<td>Fall</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PubH 8343</td>
<td>Synthesis and Application of Methods in Epidemiologic Research (strongly recommended)</td>
<td>Fall</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PubH 8804</td>
<td>Advanced Quantitative Methods Seminar</td>
<td>Spring</td>
<td>3</td>
<td></td>
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</table>

Content area courses: 4 credits minimum

<table>
<thead>
<tr>
<th>Course</th>
<th>Notes</th>
<th>Title</th>
<th>Offered</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PubH 6333</td>
<td>Human Behavior I</td>
<td>Fall even years (2018)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PubH 6334</td>
<td>Human Behavior II</td>
<td>Spring odd years (2019)</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Supporting Program/Minor: 13 credits minimum
Chosen in consultation with advisor. Potential supporting program courses include courses from the additional behavioral methods/statistics courses listed above not used to satisfy the behavioral methods/statistics requirement, or from the following list. Other courses, or minors, can be considered with advisor.

<table>
<thead>
<tr>
<th>Course</th>
<th>Notes</th>
<th>Title</th>
<th>Offered</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PubH 6370</td>
<td>Social Epidemiology</td>
<td>Spring 2019/2021</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PubH 7391</td>
<td>Independent Study: Epidemiology</td>
<td>All terms</td>
<td>1-4</td>
<td></td>
</tr>
<tr>
<td>PubH 7392</td>
<td>Readings in Epidemiology</td>
<td>All terms</td>
<td>1-4</td>
<td></td>
</tr>
<tr>
<td>PubH 6381</td>
<td>Genetics in Public Health</td>
<td>Fall</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PubH 6375</td>
<td>Screening for Disease: A Double-Edges Sword</td>
<td>Fall</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>
PubH 6383 | Vaccines | Spring | 2
PubH 6385 | Epidemiology and Control of Infectious Disease | Spring | 2
PubH 6386 | Public Health Aspects of Cardiovascular Disease (half-term) | Spring | 2
PubH 6387 | Cancer Epidemiology | Spring | 2
PubH 6078 | Public Health Policy as a Prevention Strategy | Fall | 2
PubH 6074 | Mass Communication and Public Health | Fall | 3
PubH 6094 | Obesity and Eating Disorder Interventions | Spring | 2
PubH 7405 | Biostatistics: Regression | Fall | 4
PubH 7406 | Advanced Regression and Design | Spring | 4
PubH 8300 | Advanced Epidemiologic Methods Workshop | Fall | 1
PubH 8343 | Synthesis and Application of Methods in Epidemiologic Research (strongly recommended) | Fall | 4

Other details:

- Supporting program credits in either track may be directly applied to the PhD program or can be used to obtain a minor in another graduate program with the approval of the minor program's Director of Graduate Studies.
- Note: the recommended biostatistics core course (PubH 7401) may be replaced by PubH 6450 and 6451 if the student does not enter with adequate quantitative training for PubH 7401. The PhD Credentials Committee will make this decision.
- Students who need a review or background training in basic epidemiological concepts will be asked to take the first year of the core sequence for MPH students (Epi Methods I, PubH 6341 and Epi Methods II, PubH 6342) prior to taking the doctoral series. These courses will not apply to the PhD program.

MD/PhD Student Program Requirements

Requirements for MD/PhD students differ slightly from the standard curriculum. The following are not required of MD/PhD students only:

- The teaching assistant experience (however either Grad 8101 or 8200 is required; the lecture is also required)
- CBE students: in the Content Area portion of the curricula, 2 credits (one course) are required, rather than 4 credits (two courses). In addition, in the Supporting Program/Minor area, 5 credits are required, rather than 13 credits.
- SBE students: in the Content Area portion of the curricula, both courses (Human Behavior I and II) are required. In addition, in the Supporting Program/Minor area, 3 credits are required, rather than 13 credits.

Sample Supporting Program Courses

The following are departments or colleges from which PhD students have taken elective courses—the list is not exhaustive. Exemplary courses are listed to reflect recent course offerings that PhD students have recommended as excellent electives.

- Public Health [PubH] (e.g., PubH 8300 Advanced Epidemiologic Methods Workshop; PubH 8343 Synthesis and Application of Methods in Epidemiologic Research; 7405 Biostatistics: Regression; 7406 Advanced Regression and Design; 7430 Statistical Statistical Methods for Correlated Data; 7435, Latent Variable Models; 7440 Introduction to Bayesian Analysis; 7445 Statistics for Human Genetics and Molecular Biology; 7450 Survival Analysis; 7460 Advanced Statistical Computing; 8140, Validity Concepts in Epidemiologic Research; 8141, Doctoral Seminar in Observational Inference; 8142, Epidemiologic Uncertainty Analysis; 8432 Probability Models for Biostatistics; 8442 Bayesian Decision Theory and Data Analysis; 8452 Advanced Longitudinal Data Analysis; 8462 Advanced Survival Analysis)Veterinary Medicine, Graduate [VMed] (e.g., 8090 Epidemiology of Zoonoses)
- Health Informatics [Hinf]
- Educational Psychology [Epsy] (e.g., 8264, Advanced Multiple Regression Analysis; 8266, Statistical Analysis Using Structural Equation Methods; 8267, Applied Multivariate Analysis; 8268 Hierarchical Linear Modeling in Educational Research)
- Statistics [Stat]
- Philosophy [Phil] (e.g., philosophy of science courses)
- Rhetoric [Rhet] Science writing
- Writing Studies Department (WRIT) (highly recommended: 5051 and 5052 Graduate Research Writing Practice for Non-native Speakers of English)
- Biochemistry (BioC)
- Cell Biology and Neuroanatomy [CBN]
- Molecular, Cellular, Dev Biology and Genetics [MCDG]
- Genetics, Cellular and Developmental Biology [GCD]
- Microbiology [MicB]
- Microbiology, Immunology and Cancer Biology [MIa]
- You might want to consider a minor in Prevention Science (go to: http://www.cehd.umn.edu/icd/PrevSci/) or in Population Studies (go to https://pop.umn.edu/gradstudent-training/popminor)

Competency Areas

Recommended Competency Areas can be found at: https://z.umn.edu/epichcomp1415. Please scroll down the list to find the Epidemiology PhD list.

Sample Schedules for CBE and SBE Tracks for 2018-19

Clinical and Biological Epidemiology (CBE) track

Plan 1: Students in CBE track who earned their Epidemiology MPH at the University of Minnesota or similar institution

<table>
<thead>
<tr>
<th>Possible transfer from Epidemiology MPH</th>
<th>15 cr</th>
</tr>
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<tbody>
<tr>
<td>PubH 6386 PubH Aspects of Cardiovascular Disease (2 cr) [Content area course]</td>
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<tr>
<td>PubH 6387 Cancer Epidemiology (2 cr) [Content area course]</td>
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<tr>
<td>PubH 6742 Ethics in Public Health: Research and Policy (1 cr) [Required]</td>
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<tr>
<td>PubH 6355 Pathophysiology of Human Disease (4 cr) [Supporting program/minor course]</td>
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<tr>
<td>MPH electives (6 cr) [Supporting program/minor courses]</td>
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<tr>
<th>Year 1, Fall [Total cr: 7+]</th>
<th>Year 1, Spring [Total cr: 6]</th>
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<tbody>
<tr>
<td>PubH 8341 Advanced Epidemiologic Methods: Concepts (3 cr)</td>
<td>PubH 8342 Advanced Epidemiologic Methods: Applications (3 cr)</td>
</tr>
<tr>
<td>PubH 7401 Fundamentals of Biostatistics Inference (4 cr)</td>
<td>PubH 7420 Clinical Trials or PubH 6363 Design and Analysis of Cluster-Randomized Trials in Epidemiology (3 cr) OR PubH 6363 (3 cr) (Spring even years)</td>
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<tr>
<td>Supporting program/minor course (recommend 8300 Advanced Epi Methods Workshop 1 cr)</td>
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<tr>
<th>Year 2, Fall [Total cr: 5+]</th>
<th>Year 2, Spring [Total cr: 1+]</th>
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<tbody>
<tr>
<td>PubH 6348 Grant Writing (2 cr)</td>
<td>Remaining supporting program/minor courses</td>
</tr>
<tr>
<td>Biological methods/statistics course (3 cr) (PubH 8343 highly recommended)</td>
<td>Grad 8101 Teaching in Higher Education (3 cr) or Grad 8200 Teaching and Learning Topics in Higher Education: Teaching for Learning (1 cr, online)[Can take any term it is offered]</td>
</tr>
</tbody>
</table>

Students may need more credits to hold a graduate assistantship; they can register for additional courses or PubH 8666, Doctoral Pre-Thesis credits.
Plan 2: Students in CBE track who enter into Epidemiology PhD with a degree in a related field with insufficient epidemiology background (but sufficient biostatistics coursework)

**Possible transfer from related field MPH or MS [15 cr]**

- Supporting program/minor course(s) brought in from master’s level coursework, with approval from Epi PhD Credentials Committee. Some students may be able to also transfer in a master’s level ethics course.

<table>
<thead>
<tr>
<th>Year 1, Fall [Total cr: 9+]</th>
<th>Year 1, Spring [Total cr: 9]</th>
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<tbody>
<tr>
<td>PubH 6341 Epidemiologic Methods I (3 cr)</td>
<td>PubH 6342 Epidemiologic Methods II (3 cr)</td>
</tr>
<tr>
<td>PubH 7401 Fundamentals of Biostatistics Inference (4 cr)</td>
<td>PubH 7420 Clinical Trials or PubH 6363 Design and Analysis of Cluster-Randomized Trials in Epidemiology (3 cr) or PubH 6363 (3 cr) (Spring even years)</td>
</tr>
<tr>
<td>Content area course (2 cr)</td>
<td>Content area course (2 cr)</td>
</tr>
<tr>
<td>Supporting program/minor course</td>
<td>PubH 6742 Ethics in Public Health: Research and Policy (1 cr)</td>
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<tr>
<th>Year 2, Fall [Total cr: 8]</th>
<th>Year 2, Spring [Total cr: 4+]</th>
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<tbody>
<tr>
<td>PubH 8341 Advanced Epidemiologic Methods: Concepts (3 cr)</td>
<td>PubH 8342 Advanced Epidemiologic Methods: Applications (3 cr)</td>
</tr>
<tr>
<td>PubH 6348 Grant Writing (2 cr)</td>
<td>Grad 8101 Teaching in Higher Education (3 cr) or Grad 8200 Teaching and Learning Topics in Higher Education: Teaching for Learning (1 cr, online) [Can take any term it is offered]</td>
</tr>
<tr>
<td>Biological methods/statistics course (3 cr) (recommend 8300 Advanced Epi Methods Workshop 1 cr)</td>
<td>Remaining supporting program/minor courses</td>
</tr>
</tbody>
</table>

Note: PubH 8343 highly recommended for Fall, Year 3

Note that if the student has an insufficient background in biostatistics, they may be guided by the Credentials Committee to take PubH 6450/6451 instead of PubH 7401.

Social and Behavioral Epidemiology (SBE) track

**Plan 1: Students in SBE track with sufficient epidemiology and biostatistics background**

**Possible transfer from master's degree [15 cr]**

- PubH 6742 Ethics in Public Health: Research and Policy (1 cr) [Required]
- Master's level electives (14 cr) [Transferred as supporting program/minor courses with approval of advisor and PhD Credentials Committee]

<table>
<thead>
<tr>
<th>Year 1, Fall [Total cr: 7]</th>
<th>Year 1, Spring [Total cr: 6]</th>
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<tbody>
<tr>
<td>PubH 8341 Advanced Epidemiologic Methods: Concepts (3 cr)</td>
<td>PubH 6334 Human Behavior II (2 cr) [Offered Spring odd years]</td>
</tr>
<tr>
<td>PubH 7401 Fundamentals of Biostatistics Inference (4 cr)</td>
<td>PubH 8342 Advanced Epidemiologic Methods: Applications (3 cr)</td>
</tr>
<tr>
<td>(Recommend 8300 Advanced Epi Methods Workshop 1 cr)</td>
<td>PubH 7420 Clinical Trials or PubH 6363 Design and Analysis of Cluster-Randomized Trials in Epidemiology (3 cr) OR PubH 6363 (3 cr) (Spring odd years)</td>
</tr>
<tr>
<td>PubH 6333 Human Behavior I (2 cr) [Offered Fall even years 2018, 2020 etc..]</td>
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</tbody>
</table>
### Year 2, Fall [Total cr: 2+]
- PubH 6348 Grant Writing (2 cr)
- Remaining supporting program/minor courses (PubH 8343 highly recommended)

### Year 2, Spring [Total cr: 4+]
- Behavioral methods/statistics course (3 cr)
- Grad 8101 Teaching in Higher Education (3 cr) or Grad 8200 Teaching and Learning Topics in Higher Education: Teaching for Learning (1 cr, online) [Can take any term it is offered]

Students may need more credits to hold a graduate assistantship; they can register for additional courses or PubH 8666, Doctoral Pre-Thesis credits.

#### Plan 2: Students in SBE track with insufficient epidemiology background

<table>
<thead>
<tr>
<th>Possible transfer from master's degree [15 cr]</th>
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<tbody>
<tr>
<td>PubH 6742 Ethics in Public Health: Research and Policy (1 cr) [Required]</td>
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<td>PubH 6341 Epidemiologic Methods I (3 cr)</td>
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<td>PubH 6333 Human Behavior I (2 cr) [Offered Fall even years]</td>
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</tr>
<tr>
<td>PubH 7401 Fundamentals of Biostatistics Inference (4 cr)</td>
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</tr>
<tr>
<td>Note: PubH 8343 highly recommended for Fall, Year 3</td>
<td></td>
</tr>
<tr>
<td>Supporting program/minor courses</td>
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</tr>
</tbody>
</table>

Note that if the student has an insufficient background in biostatistics, they may be guided by the Credentials Committee to take PubH 6450/6451 instead of PubH 7401.

### 1.2 PROGRAM REQUIREMENTS

The following is a summary of program requirements in Epidemiology as approved by the doctoral faculty in Epidemiology.

#### Registration Requirements
All PhD students are required to register every Fall and Spring term to maintain active status until they graduate. Registration in May and Summer terms are not required to keep active status. See section 1.3 for more information.
Core Curriculum/Summary of Credits
The core curriculum for the PhD is required for all epidemiology PhD students. For the remainder of the curriculum, the student’s advisor and the Epidemiology PhD Credentials Committee must approve any course substitutions or waivers as early as possible. Any substitutions/waivers must be approved before submission of the graduate degree program form.

Summary of credits
The credit minimum for the PhD will be a total of 61 credits:

- Required core courses: 14-16 credits
- Clinical/Biological or Social/Behavioral Track courses: 23 credits
- PhD-specific dissertation credits, PubH 8888: 24 credits

Grade Point Average (GPA) Requirements
1. Doctoral students are required to complete their coursework with a minimum GPA of 3.25.
2. Doctoral students are required to earn letter grades of B- or higher in each of the core courses. These courses include: PubH 8341 and 8342 Advanced Epi Methods, PubH 7401 (or 6450/6451 if taking these courses to fulfill biostatistics requirement), PubH 6742, and GRAD 8101. In addition, a B- or higher must be earned in PubH 7420 Clinical Trials or PubH 6363 Cluster-Randomized Trials. Students who earn a grade below B- in these courses are required to repeat that course. Students who cannot earn a B- in two attempts will be terminated from the program.

Transfer of Credits
Epidemiology PhD students may transfer in up to 15 credits from previous graduate-level coursework. The 15 credits can be applied to any curriculum area except for thesis credits. All requests for transfer coursework need to be reviewed and approved by the student’s advisor, and then reviewed and approved by the Epi PhD Credentials Committee. The program coordinator should be consulted at the start of the process. Notes: (i) PubH 8341 and 8342 are required for all Epi PhD students as the core methods courses; (ii) two possible options are: courses and credits may be transferred in, or students may find courses that substitute for required courses.

S-N Credits
Epidemiology PhD students can take up to one-third of course credits S-N (satisfactory/non-satisfactory). Note the one-third limit does include courses that are available only S-N, but does not include dissertation credits. This cannot be petitioned for an exception. Certain courses must be taken for a letter grade; please see #2 in “Grade point average requirements” above.

Role of the Advisor
Requirements are specified to ensure that PhD graduates in Epidemiology have all of the basic skills necessary to move into an academic or research career. The final shape of the program, the nature of additional courses, readings, and the focus on particular subspecialties, are a matter for the student and advisor to determine. They are expected to work as a mentor and apprentice throughout the degree program.

Guidelines for Changing an Advisor
Occasionally, PhD students shift their course of study and focus over their graduate career, but this does not necessarily require a change in advisors. Faculty advisors can facilitate students’ academic development by working directly with the student or by encouraging them to gain experience with other faculty members (e.g., research or teaching assistantships, grant writing opportunities).

Sometimes students work more closely with one (or more) members of their committee than with their advisor. Faculty advisors can also suggest changes in committee membership to accommodate a change in dissertation focus.

Students may change their advisor at any time. But once PhD students have begun work on their dissertation, changing advisors should be limited to circumstances such as personality conflicts, ethical problems, substantial shifts in areas of interest, or the advisor resigning from the University. Students wishing to change graduate advisors should consult with the Director of Graduate Studies (DGS). Likewise, faculty who are considering a change in their role as an advisor should consult with the DGS. Changes in graduate advisors need to be approved by the DGS, and the program coordinator must be notified of the change.

Grant Writing Skills
In addition to completing PubH 6348: Writing Research Grants, it is recommended students participate as a member of a grant writing team for an NIH or comparable grant proposal. It is recommended that students review examples of funded faculty grant applications to prepare for Part B of the Written Preliminary Exam.

Teaching
During their PhD studies, students must serve at least one semester as a teaching assistant (TA). Students are encouraged to consider serving as a TA for one of the Epi courses (i.e., Fundamentals of Epidemiology, Epidemiologic Methods I, II, III). Teaching
in these courses can help students review core concepts prior to taking the written preliminary exam. Students can also fulfill the requirement by being a TA in other courses, including possibly an online course. Any course that is assigned a paid TA by the Division of EpiCH will automatically fulfill the requirement. The TA assignment list for the next academic year is emailed to students when it is officially approved, usually in early Summer. Students can submit a written request to the program coordinator, addressed to the DGS, for approval of other TA opportunities outside the Division. Supporting materials should include a copy of the course syllabus and an outline of the TA's responsibilities and should be submitted prior to the term when the TA occurs.

The expectation is the student will get a paid TA spot. Students on fellowships, training grant positions or who work full-time in a paid position should talk with the program coordinator early in their program to discuss the options to fulfill the TA requirement.

Students also are required to prepare and give a lecture in a scheduled course where students are the primary audience. Seminars, grand rounds, for example, are not acceptable. Approval is needed in advance. This course lecture must be critiqued by at least one Epidemiology doctoral faculty member, and be at least 50 minutes in length. The Epidemiology doctoral faculty member's responsibility is to attend the lecture and send a written critique (via email) of the lecture to the student and to the Epi PhD's program coordinator. The critique should cover the strengths/any weaknesses of the lecture content and presentation; the critique is intended to be constructive and offer suggestions. This requirement is separate from any Teaching Seminar course assignments. Non-native English speaking students should note that they are responsible for passing the SPEAK TEST for non-native English Speaking Teaching Assistants. Please see the program coordinator for this information. The Division's policy regarding payment for the TA English Program's course in Classroom Communication Skills for TAs can be found in section 2.6 of this guidebook.

**EpiCH Division Seminar Attendance**

Epidemiology PhD students are required to sign in and attend at least 12 seminars relevant to epidemiologic or behavioral methods, student's content area, and/or professional development seminars before taking their oral preliminary exam. At least six of the 12 seminars must be EpiCH Division Seminars at which students are required to sign in upon arrival to the seminar. Other seminar opportunities outside of the division can also be sought out by students. Non-EpiCH seminars will be at the discretion of the student and must be relevant to the student's area of study. Students attending seminars outside of EpiCH will need to send the EpiCH Student Services staff an email at epichstu@umn.edu indicating that they attended a seminar, the day, time, location of the seminar and include the name and credentials of the presenter and the presentation title in order for it to count. In addition, the first hour of an Epi PhD student final oral exam—public presentation portion—also meets the requirement (please sign in if attending).

**Examinations**

**Comprehensive Qualifying Examination**

The examination consists of two parts: an epidemiology and biostatistics coursework exam (Part A), and a grant writing exercise (Part B). Students must pass both parts. See section 1.4 for guidelines. See the following section on Milestones and the Role of the Student's Committee.

Students who take PUBH 8341 and 8342 (Fall and Spring) Advanced Epidemiologic Methods courses in their first year are encouraged to take Part A within 12 months of matriculation. If the advisor and Epi PhD Credentials Committee recommend taking Epi Methods I and II prior to, or concurrent with, the Advanced Epidemiologic Methods sequence, students should then plan to take Part A within 24 months of matriculation. Students are encouraged to take Part B within six months of successfully passing Part A.

**Preliminary Oral Examination for Dissertation Proposal**

Students should successfully defend their dissertation plan within six months of successfully completing the Comprehensive Written Examination (Parts A and B). Successful completion of the oral exam makes the student a doctoral candidate. Those who have not achieved doctoral candidacy within five years of matriculating into the program will have a hold put on their registration, making them inactive in the Graduate School. See the following section on Milestones and the Role of the Student's Committee. The oral examination, administered by the student's dissertation committee, focuses on the proposed dissertation design and analysis. Typically, the exam covers practical aspects of the proposal including epidemiologic principles. See section 1.6 for expectations, guidelines, and other details. Note: no dissertation credits may be taken before passing the Preliminary Oral Examination.

Detailed information about the formation of the preliminary oral exam committee is located in section 1.6.

**Final Oral Examination (Dissertation Defense)**

Students make a one-hour public presentation of their dissertation followed by a two-hour closed exam with their committee. It is required that the public presentation be publicized widely and offered in a space large enough to accommodate a seminar audience. It is the student's responsibility to contact the program coordinator at least two weeks prior to the defense so she can send an e-mail announcement to the Epidemiology doctoral faculty and students.

Detailed information about the formation of the final oral exam committee is located in section 1.7.

**Research**

**First-Authored Manuscript for Publication**

During their PhD studies, students must prepare a first-authored manuscript for publication in a peer-reviewed journal. This
The University requires that each graduate student be provided with, minimally, an annual written evaluation of his or her academic progress. All PhD students are required to register for every fall and spring term to maintain their active status. Active status is required for students to be able to register for courses, take exams, submit milestone forms, file for graduation, or otherwise participate in the University community as a student. Students who do not register for a term must fill out a Change of Status/Readmission Application form. This form is available online at https://www.grad.umn.edu/admissions/readmission. The form needs to be completed and a re-admission fee paid. Re-admitted students are required to register during the semester in which they are re-admitted and every subsequent fall and spring semester until they graduate.

The Graduate School has a website dedicated to information for special registration categories (e.g. Grad 999, thesis credits, advanced status, etc.). This page can be accessed at https://onestop.umn.edu/academics/special-registration-categories-graduate-and-professional-students

Grad 999

Grad 999 is a free, zero-credit, non-graded registration mechanism for doctoral students who must register solely to meet the registration requirement. Grad 999 cannot be used to meet registration requirements established by departments/agencies within outside the University (which include, but are not restricted to, registration required to hold an assistantship, maintain legal visa status, etc.).

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**PhD Dissertation**

The process to complete a dissertation is two-fold: students must pass a preliminary oral exam and a final oral exam. Students have two options for the dissertation:

1. A traditional dissertation, which is an in-depth volume describing (a) theoretical background and literature to date, (b) the methods and results of a research project, and (c) a detailed discussion of the strengths, limitations, interpretation and significance of the findings; or
2. A series of publishable papers, with appropriate introductory and concluding sections (see *section 1.8*). Many believe this format enhances a student’s publication record.

All students at the University of Minnesota who conduct any research using human subjects are required to submit their research proposal to the University of Minnesota Institutional Review Board, for approval prior to conducting their study. This procedure is necessary even for students who are doing secondary data analysis.

**Research Administration Experience**

Students should develop experience in research administration during their program. Such experience may be gained through regular participation in project-staff or steering committee meetings, helping to prepare or administer a grant budget, taking an operational role in a sponsored research project, etc.

**Milestones**

The following progress expectations are for students who have completed the coursework:

- Take Part A and B—the Written Preliminary Exam—within 18 to 36 months of matriculation.
- Establish, minimally, the three internal members of their committee and begin meeting with them within one semester after completing written prelims.
- Take prelim orals within six months of successfully completing Parts A and B of the written prelim exam.
- Achieve doctoral candidacy (pass oral prelims) within five years of matriculation. Those who have not achieved doctoral candidacy within five years will have a hold put on their registration, making them inactive. Limited requests for extension with a proposed timeline and approval by the advisor (and co-advisor) will be reviewed by the DGS. If an extension is not granted, or the benchmarks on the timeline are not met after the extension, a registration hold will be made, thus ending the Epidemiology doctoral program for the student. This is a programmatic requirement.
- All requirements for the doctoral degree must be completed and the degree awarded within eight calendar years after initial enrollment to the graduate program. This is a Graduate School requirement.
- Undertake grant writing, research, teaching, training in teaching techniques, and seminar attendance requirements on a schedule agreed upon with the requirements, their advisor and committee.

**Annual Review of Graduate Student Progress**

The University requires that each graduate student be provided with, minimally, an annual written evaluation of his or her academic progress. To address this requirement, students will complete a form annually summarizing overall progress toward his or her degree. The form includes a list of classes taken (students provide a recent transcript), progress made on the milestone checklist, comments on progress over the past year, including main accomplishments and/or difficulties encountered, and a brief plan for continued progress for the following year. The review process and review form are standard; the form is e-mailed to doctoral students and their advisors/co-advisors in Fall term.

**1.3 REGISTRATION REQUIREMENTS**

All PhD students are required to register every fall and spring term to maintain their active status. Active status is required for students to be able to register for courses, take exams, submit milestone forms, file for graduation, or otherwise participate in the University community as a student. Students who do not register for a term must fill out a Change of Status/Readmission Application form. This form is available online at https://www.grad.umn.edu/admissions/readmission. The form needs to be completed and a re-admission fee paid. Re-admitted students are required to register during the semester in which they are re-admitted and every subsequent fall and spring semester until they graduate.

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obtain financial aid, or defer loans).

All doctoral students with active student status are eligible to register for Grad 999. The Epi PhD program does not have any restrictions on Grad 999 registration.

PubH 8666: Doctoral Pre-Thesis Credits
These credits are available for doctoral students who have not yet passed their preliminary oral examination but need to be registered. The main difference between Grad 999 and PubH 8666 is (a) the latter can be used to meet requirements of agencies and departments outside the University; (b) only Grad 999 is tuition-free. However, international students should also check with the ISSS office, [http://www.isss.umn.edu/](http://www.isss.umn.edu/). Doctoral pre-thesis credits are not graded.

Note: Registration for doctoral pre-thesis credits cannot be used to meet any degree requirements. These credits are not the same as the required PhD doctoral thesis credits. Registration is limited to a maximum of six credits per term. Also, registration for 8666 is limited to two times (12 credits) without program consent. With program consent, students may register for 8666 up to four times, for a total of 24 credits.

1.4 COMPREHENSIVE EXAMINATION GUIDELINES

Introduction
The Epidemiology Comprehensive Written Examination is a requirement of the Epidemiology PhD degree program. It consists of two parts, "A" and "B" protocols, described in detail below.

Purpose
The Comprehensive Written Examination is a diagnostic tool intended to: (1) indicate to the Epi doctoral faculty whether the student is ready to engage in doctoral research, and (2) provide feedback to the student on his/her knowledge of appropriate methods and analysis.

Content and Structure
Part A is an open-note, open-book proctored exam that covers basic epidemiologic and biostatistical methods. Part A will be offered once per year, after the Spring term ends (May or June). It will be offered in a one-day format. (It will be offered from 9 am - 5 pm on one day). Students will be given five multi-part, similarly difficult questions addressing core epidemiological concepts. Students must answer three of the five questions. Part B is an original research proposal as described, below.

Timing
The Comprehensive Written Examination is taken after completion of most of the required core coursework. Before taking Part A, students must successfully complete PubH 8341 and 8342 and at least PubH 6450 and 6451 or the equivalent.

Before taking Part B, students must complete PubH 6348, Writing Research Grants. Prior to registering for each part, students are required to consult with their advisor to discuss their readiness to take the exam. Parts A and B must both be passed before the student can schedule his/her Preliminary Oral Examination.

Part A is offered once a year, usually in May or June; Part B is available throughout the year. Part B is usually taken after Part A, but Part B can be taken first with the consent of the student’s advisor and the Part B Exam Chair.

Report of Outcome
The outcomes of Parts A and B are reported to the student (and copied to their advisor and DGS) through a personal letter from the PhD Exam Committee Chair. Please be aware of the following:

- A student who does not pass either part of the Preliminary Written Examination on the first attempt is allowed the opportunity to take it one more time.
- For Part B, if the student fails the rewriting of the first topic, s/he may retake the exam one more time with a second topic. Students, who fail the exam on the second attempt, including a rewriting process, will be terminated from the program. To illustrate the most extreme example prior to expulsion would be failure of all of the following: the first topic, rewriting of first topic, second topic, and rewriting of second topic.
- The Exam Committee decisions regarding the pass/fail status of the student are final.
- A student who fails either part of the Preliminary Written Examination on the second attempt is terminated from the program.
Protocol for PART A of the Comprehensive Written Examination

The Part A Exam Committee Chair is responsible for preparing the exam, along with the members of the Exam Committee and the Epidemiology doctoral faculty. The Part A Chair and the program coordinator are responsible for organizing and proctoring the exam. The program coordinator is responsible for the distribution of exam answers to faculty graders, and for reporting the grades back to the Exam Chair. The Part A Chair and program coordinator are responsible for notifying the DGS, the student, and the student’s advisor regarding the student’s results on the exam.

Grading
Grading of the exam follows these policies: Two faculty grade each question; if the scores assigned by the two graders differ by more than 10 points, the Part A chair will assign a third grader for that question. If the scores assigned by three graders differ by more than 15 points, the Chair will direct the graders to discuss the discrepancy and potentially re-score the answer. If agreement cannot be reached, the median score will be taken as the grade for that question.

An average will be calculated for each question answered in Part A, by the Part A Chair and program coordinator.

In order to pass Part A, a student must have an average grade of 80% or higher (over the three answered questions). Students cannot re-write an individual exam question.

The Exam Committee meets to review and approve the results of Part A as soon as they are available. The review is blinded as to both the identity of the student and whether the student is taking the exam for the first or second time. This review provides feedback to the Exam Committee on how the student performed on the exam and ensures that the procedures for grading are followed.

Each student receives a special identification code prior to the start of Part A. No identifying information, with the exception of the code number, is used in the answers. Confidentiality of the student’s identity is important to the process of taking the Preliminary Written Examination and no one except the program coordinator will know the identity of individual students until the grading and the review process are complete.

Study Assistance
Study materials are available to doctoral students during the time they are preparing for the preliminary written examination. These include a list of core principles for the epidemiology and biostatistics courses, a sample exam, and sample questions with exemplary answers. All the materials are available at any time to doctoral students, but the Exam Committee strongly encourages students to work through their own answers to the sample questions prior to reading the exemplary answers. These materials are available from the program coordinator. In addition, Epi doctoral faculty are available to review answers that students write for the sample questions. The Exam Committee asks that all members of the Epi doctoral faculty make themselves available for such review, especially those involved in the core courses.

Protocol for PART B of the Comprehensive Written Examination

Purpose
Part B not only tests required coursework, but also the ability to draw on coursework and other experiences to ask and answer relevant research hypotheses drawn from social, behavioral, clinical or biological epidemiology. It can also help students develop depth of knowledge in one or more substantive areas.

Students are advised to carefully choose an appropriate research question and focus on the epidemiologic methods. The student should identify the problem, outline possible solutions, and justify choice of a solution. It is important that the student demonstrate ability to identify problems and think about them critically.

Overview
The examination is open-book and take-home.

The examination topic must be current and may be drawn from diverse substantive and methodological areas of epidemiology, addressing unanswered and rigorous questions.

Although Part B is modeled after a research proposal, it is intended as an examination rather than a formal grant proposal. Students are expected to demonstrate their competence and understanding through their approach, choice of hypothetical or exact study populations, methods, etc., justifying these decisions through the proposal. The student should not get bogged down in unnecessary detail (e.g., the specifics of an established laboratory assay).

Part B is an examination to determine whether students are prepared to proceed with their dissertation rather than able to write NIH proposals. The Exam Committee focuses on the methodology proposed while bearing in mind the restrictions under which the exam has been prepared, including that certain kinds of deficiencies in the proposal could have been improved if collaboration had been allowed, and if time and page constraints were different.

Sample Part B exams are NOT available for review, but reading proposals written by Epi doctoral faculty members can be good preparation for the exam. Students can approach faculty to ask if they have a proposal that can be shared.
Skills to Be Demonstrated

1. Conceptual
   a. Select a research question to be developed into a proposal.
   b. Review the literature and provide an epidemiologic perspective of the problem.
   c. Provide a rationale for choice of specific research hypothesis or hypotheses.

2. Problem Solving
   a. Propose an appropriate and feasible study design for the research question.
   b. Outline an analysis plan suitable to the study design being proposed and sufficiently detailed to permit a judgment on its methodological adequacy.
   c. Clarify any other epidemiologic methods pertinent to your selected design.
   d. Address any issues related to feasibility and ethics of your proposed design.
   e. Discuss hypothetical outcomes, limitations, their interpretation and public health significance.

3. Writing skills will be considered among the evaluation criteria.

Selection of a Topic

The student will talk with the Part B Exam Chair about the selection of a topic and to be sure the examination rules are clear, and after a period of preparation and consultation, submit a topic to the program coordinator one week prior to the start of the exam. The program coordinator sends the topic to the Part B chair and the student’s advisor(s) along with further instructions. The Part B Chair is charged with approving the exam topic, in consultation with the student’s advisor. The student is under few restrictions prior to turning in the topic. Thus, the student can talk to anyone and can complete the planning and preparation process in any period of time, e.g. two weeks or two months. The topic may be partly known to the student, but not directly related to prior work. The topic should advance the student’s studies and could even serve as the basis of a PhD dissertation. The topic is essentially a list of key words, which could cover, for example, areas such as disease, risk predictors, populations.

Students may not use or base their topic for this exam on previously written papers or proposals, including those written in PubH 6348, Writing Research Grants.

Epi PhD Written Preliminary Examination Part B Consultation Guidelines

Part B is intended to be an original research proposal written by the student, assessing their conceptual, problem-solving and writing skills. This includes proposing an appropriate and feasible study design for the student's research question, and outlining an analysis plan suitable to the study design being proposed.

Students are advised to talk with their advisor and other faculty/staff in the general preparation for the exam and the selection of the Part B topic. Ideas for topics should come from the student. Examples of the types of assistance that faculty members (especially the student's adviser) may provide to students include:

1. Training and mentoring on general principles of epidemiology and statistics;
2. Training and mentoring on general principles related to grant writing and preparation, including organization and writing style;
3. Deciding on general topics. For example, advisors may help students to (a) clarify a proposed research question that appears too ill-defined, (b) simplify a proposed topic that is too complicated to be handled during a 17-day exam period, (c) choose an alternative to a proposed topic for which the significance or level of innovation is doubtful;
4. Additional general education on some specific advanced methodological concept in epidemiology or statistics;
5. Providing copies of their own grants as examples of how to structure proposals. However, the grant proposals provided should not be so similar in content and research design to the student’s proposal that the faculty proposal provides answers to the student’s specific methodological questions.

Faculty and staff and others, including fellow students, colleagues and friends, may not advise students on how to specifically respond to a topic that might be chosen. Examples of activities that are not appropriate in relation to the student's proposed Part B topic would include:

1. Working with the student in advance to develop a specific research design and analysis plan related to the student’s topic;
2. Reviewing and commenting upon written paragraphs or outlines prepared in advance by students;
3. Discussing with the student in advance how to address specific methodological issues related to the student’s topic;
4. Offering specific solutions to student queries pertaining to a topic area and how to address it.

Faculty members should provide any assistance they can to help students to be as prepared as possible in terms of knowledge and skills, but that students are responsible for applying this information to formulate and write their own proposal. It should be remembered that Part B is an exam designed to test the student's knowledge and skills.
As always, Part B Committee chairs are happy to meet with faculty or students to discuss any Part B-related questions or concerns.

**Scheduling and Taking the Examination**

The student must work with the program coordinator to select and coordinate the start date for Part B. Timing of topic selection is important, and students are encouraged to thoroughly familiarize themselves with the topics they are considering before submitting the topic to the Part B Chair. Students are given 17 calendar days to complete the proposal after receiving the assigned topic from the program coordinator. Students may start the exam on any day, as long as the start and end days fall on a workday, and not a University holiday. The exam is turned in by noon on the 18th day.

The Part B Chair and the student’s advisor both need to be available to communicate with each other during the seven days after the student turns in the topic in order to approve the topic. Therefore, students need to get their proposed start date approved at least three weeks in advance of their start date.

Exactly seven calendar days prior to the agreed-upon start date, the student will email the program coordinator the topic. (Note: once the student has turned in the topic, s/he can only discuss the exam with the Part B Chair or the program coordinator; s/he can no longer discuss the exam with anyone else including the advisor.) During the following week, the Part B Chair and the student’s advisor will consult regarding the topic. The Part B Chair will approve the topic and give it to the program coordinator. On the start date, the program coordinator will email the approved topic to the student and the student can begin the exam.

Students have 17 days to write the original proposal. The variables that contribute to whether a start date will work include how much time the student needs to prepare, and the availability of the student’s advisor and the Part B Chair the week after the student turns in his/her topic.

The student will receive an identification code when the topic is assigned. No identifying information except the code number will be used in the body of the paper. While the student is taking the exam, the only people who should know the identity of the student are the program coordinator, the Part B Chair, and the student’s advisor. Other faculty may be included at the discretion of the Part B Chair. Maintaining student confidentiality is necessary for all parts of the Preliminary Written Examination.

During the 17 days of the exam, only written materials may be consulted. Two exceptions are: (1) a reference librarian – this is a legitimate way of facilitating a focused search of the literature on the topic of choice. It is not permissible to ask an expert in the subject matter area to identify key papers or particular references; and (2) brief questions, directed to individuals, involving factual material may be allowed with permission of the Part B Chair. Questions germane to the main hypothesis, study design, or of a similar nature, are not permissible. Proposed questions must be submitted to the Exam Chair, in writing, with the name of the person to be consulted. Any information obtained from the outside source should be appropriately cited in the bibliography (e.g., Personal Communication, Dr. L. Smith, May 21, 1999, National Laboratory for Primate Research, Austin, TX).

Assistance with editing is not permitted. Students whose first language is not English and are concerned about this may choose to note that in the exam. Clarity of expression is a part of the testing process and all PhD students are expected to be able to write well enough to complete the proposal.

The paper must be submitted to the program coordinator by 12:00 p.m. (noon) on the due date, the 18th day. Students are required to register their completed papers in two ways: a one-sided, unbound printed copy, and an electronic word or pdf version, e-mailed to the program coordinator. Late papers will receive an automatic fail.

**Withdraw Exception**

It is recognized that because the length of time to complete the exam is 17 days, an illness or other significant emergency during the exam could have a great effect on the student’s ability to pass the exam. Therefore, a student taking Part B will have one (and only one) opportunity during their PhD career to withdraw at any point during the 17 days of writing the exam.

The following summarizes the major steps associated with the Exam.

<table>
<thead>
<tr>
<th>STEPS</th>
<th>TIMELINE</th>
<th>ALLOWABLE CONSULTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1: The student should begin thinking about potential topics; eventually one topic is selected.</td>
<td>No time limit.</td>
<td>The student will consult his/her advisor and the Part B Chair, and may consult with anyone else. The student works with the program coordinator to set a specific start date; the program coordinator ensures the Part B Chair is available and confirms the dates of the exam.</td>
</tr>
<tr>
<td>Step 2: The student gives the potential topic to the program coordinator.</td>
<td>Exactly one week prior to the scheduled start date of the exam.</td>
<td>After the potential topic is turned in, the student can discuss the topic or exam with only the Part B Chair or the program coordinator.</td>
</tr>
<tr>
<td>Step 3: The student is assigned the topic and begins working on the exam.</td>
<td>The student is given the specific topic exactly one week after turning in the potential topic. The student has exactly 17 days to write and complete the exam</td>
<td>The student can consult/talk with only the Part B Chair or the program coordinator while writing the exam.</td>
</tr>
</tbody>
</table>
Step 4: The exam is turned in. The exam must be turned in by noon on the 18th day of the exam period.

Step 5: The exam is assigned faculty reviewers: one primary and two secondary. The exam is discussed and scored by the committee in a scheduled meeting.

90 and above: Pass with no revision. 80-89: Pass with revision. 79 and below: No pass, either rewrite or second attempt. Written reviews are provided to the student.

### Structure and Organization of the Proposal

The format of the paper should follow the conventional guidelines for a research proposal suitable for peer review. As such it should contain, at a minimum, the following sections. Each section should not exceed the indicated number of pages:

<table>
<thead>
<tr>
<th>SECTION</th>
<th>REQUIREMENTS</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Cover Page</td>
<td>1 page</td>
<td>Exam ID number, topic as given to student, title of Part B, and month/year.</td>
</tr>
<tr>
<td>II. Table of Contents</td>
<td>1-2 pages, double-spaced</td>
<td></td>
</tr>
<tr>
<td>III. Abstract</td>
<td>1-2 pages, double-spaced</td>
<td></td>
</tr>
<tr>
<td>IV. Specific Aims</td>
<td>1-2 pages, double-spaced</td>
<td>List the broad, long-term objectives and describe concisely and realistically what the specific research described in this application is intended to accomplish and any hypotheses to be tested.</td>
</tr>
</tbody>
</table>
| V. Background (including focused literature review) and Significance | 4-8 pages, double-spaced | • Describe the essence of knowledge related to this specific topic. Briefly sketch the background to the present proposal, critically evaluate existing knowledge, and specifically identify the gaps that the project is intended to fill.  
• State concisely the importance of the research described in this application by relating the specific aims to the broad long-term objectives and to health relevance. |
| VI. Research Design and Methods | 12-24 pages, double-spaced | • Describe the research design and the procedures to be used to accomplish the specific aims of the project.  
• Include the means by which the data will be collected, analyzed, and interpreted.  
• Describe any new methodology and its advantage over existing methodologies.  
• Discuss the potential difficulties and limitations of the proposed procedures and alternative approaches to achieve the aims.  
• Provide a tentative sequence or timetable for the investigation.  
• Point out any procedures, situations, or materials that may be hazardous to personnel and the precautions to be exercised. |
| VII. Human Subjects | No page limit, double-spaced | |
| VIII. Selected References | 4 pages, single-spaced; exceptions may be granted | Author, title, journal, year, volume, and pages numbers must be cited in the references. Any unpublished and/or grant applications used as a resource must be referenced. |
| IX. Appendices | No page limit, but should be brief | Optional. Tabular or graphic material only. Information integral to understanding the proposal, such as a conceptual model, should be placed in the main body, not in an appendix. |

Page limitations are based on typed, double-spaced text (except for the Selected References section).

The proposal must be prepared in 14-point Times or Times New Roman, or a similarly sized typeface, with one-inch margins on all four sides, excluding the headers and page numbers. This will be strictly enforced for fairness and consistency. Tables within the Part B must be in 14-point type.

The ability to meet the page limitations is one of the skills evaluated. Graders take page limits seriously and papers that do not meet the page limits will be considered a failure. To assure they meet the required page limits, students should allow extra time for editing and possible re-writing. Students should make use of appendices (limited to non-essential content) and tabular summaries where appropriate in order to save space for prose. (Tables are not required to be double-spaced). If the written material exceeds the page limits, students must weigh the relative importance of the contents and make choices.
Within this framework, the organization and format of the exam paper is left to the student’s discretion. The inclusion of tables and/or free-hand schematics and graphs is encouraged; these can be attached as an appendix, but do not note the information above in point IX: “Information integral to understanding the proposal, such as a conceptual model, should be placed in the main body, not in an appendix.”

**Review and Evaluation**

The Exam Committee explicitly uses the following criteria during their evaluation. Students are encouraged to keep this in mind.

1. **Significance**
   a. Is the rationale strong for addressing the question based on the existing literature?
   b. If the aims of the study are achieved, will scientific knowledge be advanced?
   c. Is the study sound and logical?

2. **Approach**
   a. Are the conceptual framework, design, methods, and analysis adequately developed, and appropriate to the aims of the project? While the selection of the design is not restricted, the graders will evaluate the appropriateness of the design to the project.
   b. Does the proposal describe potential problem areas and consider alternative tactics?

3. **Writing**
   a. Is the proposal written clearly and is it reasonably organized?
   b. Are the questions and methods clearly described? The aims should flow clearly and logically from the background and the design should flow from the aims.

4. **The ethics and feasibility of the research question and the study design are also considered.**

   Innovation and originality are considered in all evaluations. However, in many cases, an original presentation independent of existing grant material will be reviewed more favorably than ancillary hypotheses to an existing grant. If a student’s proposal draws upon existing grants within the Division of Epidemiology and Community Health to address a research hypothesis, then appropriate adaptation to the particular hypothesis and additional innovation are needed to make the proposal adequate. In addition, appropriate citation of the existing grant is required.

A committee consisting of at least four members will be formed to evaluate each proposal. The committee consists of members drawn from the Epidemiology doctoral faculty. [Students are not involved in putting together the committee that reviews their proposal; there is also no correlation between this committee and the committee eventually formed around the student’s dissertation, the Preliminary and Final Oral Exam Committee.] The Part B Chair will select the ad hoc members after the research topic has been identified. Each proposal will be assigned one primary and two secondary reviewers, but each member of the Exam Committee will read each proposal. Primary and secondary reviewers will address the review criteria in their written critiques.

Every attempt will be made to have the committee meet no more than three weeks after submission (two weeks will be the aim) to score the proposal. During the summer months it could take longer to convene a meeting depending on travel schedules of faculty. The Part B chair will contact the student to schedule a “results meeting” to give the student the committee’s score and some general comments.

**Scoring**

Each committee member will assess how well the student has met the criteria and assign a single, global score to the proposal. They are instructed to do so with the clear understanding these proposals are from doctoral students who have been asked to develop a proposal on a topic the student has had, at most, minimal exposure to, and without help from other students or faculty. The committee will evaluate the proposal based solely on the stated criteria (significance, approach, writing, ethics and feasibility). The Part B Chair informs the committee of the student’s proposed topic, the given specific topic, and any contacts/questions by the student during the exam period. Also, the importance of keeping the student’s identity blinded is reiterated to the committee.

A score of 90-100 (Pass with no revision) will be assigned to proposals that have no important weaknesses and are judged especially strong on all of the criteria. A score of 80-89 (Pass with revision) will be assigned to proposals that have no important weaknesses and are judged satisfactory on all of the criteria, and to acceptable proposals that have important but no fatal weaknesses and are judged satisfactory on two of the criteria. A score of 70-79 (Not pass) will be assigned to proposals that have important but no fatal weaknesses and are judged satisfactory on only one of the criteria. A score below 70 (Not pass) will be assigned to a proposal that has one or more fatal weaknesses such that it could not provide a valid answer to the proposed research question even if it were carried out exactly as proposed.

Every effort will be made to reach sufficient consensus so that the range of scores from individual committee members is no more than 15 points. If the range of scores is greater than 15 points, the range will be announced and the Exam Committee will re-score the proposal once. To pass the exam, a student must receive a score of 80 or above from a majority of the committee members. If a student does not pass Part B on the first vote, that result will be announced and the committee will have additional discussion.
and will re-score the proposal. The final result will be based on the second set of scores. The student will be notified of the grade by letter.

On occasion, a committee member might perceive a significant conflict of interest in being a grader. The Part B Chair will work with the committee member to resolve the conflict.

**Pass With No Revision: 90 and above**

Students who receive a score of 90 or above will have passed with no requirement for revisions. Students will be notified of the grade in a letter and will receive the written critiques.

**Pass with Revision: 80 - 89**

Students with a score from 80 - 89 from a majority of the committee on their original submission are required to complete a revision before officially passing the exam. This is the most commonly encountered scenario.

Students are expected to begin the revision within two to three weeks of receiving their grade on the original proposal. Students will have 17 days for the revision. Exceptions (e.g., because of illness) to the start date of the revision will be considered in special circumstances. Students will consult with the program coordinator, who will consult with the Part B Chair, to select the specific revision start date.

The purpose of the revision for a student who has passed the exam is to further the learning experience, not to do further testing of the student. Therefore, during the revision, the Part B Chair will choose, in consultation with the student, the faculty with whom the student can consult. For example, such consultants may include the reviewers, from whom critiques were received, as well as the academic advisor and the Part B Chair. The student may receive substantive advice concerning the revision. The revision will consist of a point-by-point response to the criticisms and clear issues raised in the critiques (no page limit). If the student chooses to disagree with a reviewer’s suggestion, a rationale must be provided.

**Evaluation of the revision**

The mentor will review the point-by-point response. For students with an initial score of 80 - 89 points, re-scoring the proposal is not necessary, i.e., students will not receive a score lower than 80 points after the revision. The response needs to be deemed acceptable by the Exam Chair, who will inform the program coordinator that the student has officially passed. Thus, students with a score of 80 - 89 will pass the exam, but before their pass is officially registered, they must complete the revision process.

**Not Pass: 79 and below**

Students with a score below 80 from a majority of the committee on their original submission will not pass and must either revise/rewrite their original proposal or undertake a second attempt (from the start) in a subsequent Part B exam cycle. If they choose a second attempt, they will write on a different topic. Students should consider the advice of the committee regarding these choices.

If the student chooses to revise/rewrite, they will have 17 days for revision/rewriting. Students are expected to begin the revision/rewriting within two to three weeks of receiving their grade on the original proposal. Exceptions (e.g., because of illness) to the start date will be considered in special circumstances. Students will consult with the program coordinator, who will consult with the Part B Chair, to select the specific start date.

The rules for the revision/rewriting are similar to those for writing the original proposal. During the revision/rewriting period, the student may discuss the revision/rewriting with the reviewers from whom comments were received, as well as the Part B Chair. The student may NOT receive substantive advice concerning the revision/rewriting, nor discuss it with his/her academic advisor nor anyone else. Thus, the student must work alone on the revision/rewriting. Contacts with designated faculty are restricted to clarifications of the written critiques received. The student is expected to use his or her own resources to complete the revised/rewritten exam.

In addition to changes to the main body of the proposal, the revision/rewriting must include an introduction of not more than three pages (single-spaced, 14 point type) that summarizes the substantial additions, deletions, and changes. The introduction must also include responses to the criticisms and issues raised in the critiques. If the student chooses not to incorporate a reviewer’s suggestion, a rationale must be provided. The substantive changes in the revised proposal must be clearly marked by appropriate redlining, bracketing, indenting, or changing of typography. If the changes are so extensive as to include most of the text, the Part B Chair should approve an exception so that changes are not marked. The student should not underline, shade, or italicize changes. Tracked changes would be OK if they are readable; students need to make sure they take their name/initials off tracked changes.

**Evaluation of the revision or new proposal**

The Exam Committee and the initial reviewers will review the revised/rewritten or new proposals. The proposals will be re-scored using the same guidelines used for scoring new proposals. Students who receive a score of 80 or above after the revision/rewriting will pass the exam. Those who do not receive at least 80 points will fail this attempt of the exam. If the student fails the revision/rewriting of the first topic, s/he may retake the exam one more time with a second topic. Students, who fail the exam on the second attempt, including a revision/rewriting process, will be terminated from the program. To illustrate the most extreme example prior to expulsion would be failure of all of the following: the first topic, revision/rewriting of first topic, second topic, and revision/rewriting of second topic.
Summary and recommendations

1. Students should allow time to think and gain perspective before committing themselves to the proposal.

2. The background should be a very concise review of the key epidemiologic factors, and of the most relevant research. This section should summarize the literature that is relevant to the proposal.

3. Students should budget the time spent on various sections of the paper so that an appropriate balance is reflected in the final product. The background should summarize both the current state of knowledge as well as the remaining questions, using these to formulate research questions.

4. A proposed study should not deviate substantially from the research question as stated. A shift in focus may be appropriate for certain questions, but this decision must be supported in the proposal.

5. The topic selected cannot be the student’s current research area prior to the exam; however if the student chooses, research in the area chosen for the exam could continue after the exam, possibly even forming the topic of the PhD dissertation. Thus the Part B exam chair and the advisor jointly try to find a topic not entirely unfamiliar to the student, but that will take much research to flesh out into something innovative. Sometimes the idea is to give a question in a direction the advisor would like the student to go, or that the student has expressed an interest in. This should make the Part B exam process more pertinent to the total scheme of studies for the PhD.

6. Students should not prepare a budget nor be overly concerned about cost issues pertaining to the proposed research. Instead, they should consider the overall feasibility of the proposed research, not just fiscal feasibility. A generally unrealistic proposal will be scored poorly.

7. Typically, there is no pre-determined “right or wrong” response in this type of examination since it tests a combination of substantive and methodological skills, as well as personal choice and decision. Students should share the thinking and criteria that led to their choices of study design, protocol, and/or analysis. This should include the pros and cons of the research question, methodology, sample selection, etc., as well as alternatives considered and why they were not the final choice.

8. Students may refer to a hypothetical population that has characteristics (e.g., exposure levels, number of cases that accrue) similar to populations described in the literature. If desired, the proposed study may be conducted outside the United States, with justification for whatever study population is chosen.

9. Students should document their reasoning in the choice of the hypothesis (es), study design, and measurements. Similarly, the reviewer should be able to see what criteria they used in reviewing the literature and establishing what is known and with what is not yet sufficiently well known in the field.

10. Measurement instruments should be discussed in the proposal. For example, it may be necessary to state that a measure has been previously validated or to note that the investigator will need to validate it, as well as how this is to be done, if pertinent.

11. Research applied to human subjects must consider privacy, informed consent, and ethical safeguards.

12. Consider providing the conceptual model underlying your research; provide accurate power and sample size estimations; describe the identification and recruitment of study population.

In summary, graders look for an awareness and critical understanding of the literature, a grasp of the key theoretical issues, a defensible idea of what to do next, the appropriate methodology for the proposed research, and recognition of the limitations of what is proposed. Throughout the proposal, students should be sure to convey their reasoning and knowledge of epidemiologic concepts above and beyond generic use of terms. Note that a logical, simple question is often the best approach.

1.5 FACULTY

CBE is Clinical and Biological Epidemiology (CBE) track

SBE is Social and Behavioral Epidemiology (SBE) track

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone (612 unless noted)</th>
<th>E-Mail</th>
<th>Track</th>
<th>Research Expertise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bruce Alexander, PhD, MS</td>
<td>625-7934</td>
<td><a href="mailto:balex@umn.edu">balex@umn.edu</a></td>
<td>CBE</td>
<td>Occupational and environmental epidemiology; environmental determinants of injury, cancer, respiratory health, reproductive health; global health; application of biological markers in epidemiological research; exposure models for occupational and environmental epidemiology</td>
</tr>
<tr>
<td>Name</td>
<td>Phone</td>
<td>Email</td>
<td>Department</td>
<td>Research interests</td>
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<tr>
<td>Michele Allen, MD, MS</td>
<td>625-4760</td>
<td><a href="mailto:miallen@umn.edu">miallen@umn.edu</a></td>
<td>SBE</td>
<td>Community-based participatory approaches to developing health promotion and substance use prevention interventions among Latino and other immigrant adolescents and their families; health disparities research; and community-based participatory approaches and methods</td>
</tr>
<tr>
<td>Kristin Anderson, PhD, MPH</td>
<td>626-8568</td>
<td><a href="mailto:ander116@umn.edu">ander116@umn.edu</a></td>
<td>CBE</td>
<td>Cancer etiology; laboratory-based cancer epidemiology; pancreatic cancer; adult solid tumors</td>
</tr>
<tr>
<td>Jason Baker, MD, MS</td>
<td>873-7381</td>
<td><a href="mailto:baker@umn.edu">baker@umn.edu</a></td>
<td>CBE</td>
<td>Studying the consequences of persistent immune depletion, inflammation and coagulation abnormalities for non-AIDS defining outcomes among HIV+ patients. Specifically focusing on mechanisms and treatment strategies targeting aging complications, such as cardiovascular disease, both through pathogenesis oriented studies and multi-center cohorts and trials</td>
</tr>
<tr>
<td>Nicole Basta, PhD, MPhil</td>
<td>625-6616</td>
<td><a href="mailto:nebasta@umn.edu">nebasta@umn.edu</a></td>
<td>CBE</td>
<td>Infectious disease epidemiology; evaluating the impact of vaccines and other interventions; epidemiologic methods; clinical epidemiology; maternal and child health; global health; health disparities; evidence-based public health policy</td>
</tr>
<tr>
<td>Alan P. Bender, DVM, PhD</td>
<td>651-201-5882</td>
<td><a href="mailto:bende020@umn.edu">bende020@umn.edu</a></td>
<td>CBE</td>
<td>Chronic disease surveillance and analytic epidemiology; widely quoted authority on interpretation of cancer cluster statistics and has been PI on many occupational studies at the Department of Health</td>
</tr>
<tr>
<td>Jeff Bender, DVM</td>
<td>625-6203</td>
<td><a href="mailto:bende002@umn.edu">bende002@umn.edu</a></td>
<td>CBE</td>
<td>Antimicrobial resistance; food safety; zoonoses and emerging diseases</td>
</tr>
<tr>
<td>David Boulware, MD, MPH, CTropMed</td>
<td>626-9546</td>
<td><a href="mailto:boulw001@umn.edu">boulw001@umn.edu</a></td>
<td>CBE</td>
<td>Understanding pathogenesis of HIV immune reconstitution inflammatory syndrome (IRIS), an important complication of HIV therapy that has recently emerged with the roll out of antiretroviral therapy in Africa. In particular, translational research through translating the understanding of disease pathogenesis into practical clinical interventions to improve outcomes</td>
</tr>
<tr>
<td>Sonya Brady, PhD</td>
<td>626-4026</td>
<td><a href="mailto:ssbrady@umn.edu">ssbrady@umn.edu</a></td>
<td>SBE</td>
<td>Health risk behavior during adolescence and young adulthood; developmental influences on risk taking; socioeconomic and ethnic disparities in consequences of risk taking; mechanisms linking stressful life circumstances to health risk behavior and factors promoting resiliency; promotion of health protective behavior; public policies affecting adolescent health</td>
</tr>
<tr>
<td>Lin Yee Chen, MB, BS, MS</td>
<td>625-4401</td>
<td><a href="mailto:chenx484@umn.edu">chenx484@umn.edu</a></td>
<td>CBE</td>
<td>The relationship of atrial fibrillation (AF) to outcomes such as stroke, dementia, and sudden cardiac death, and to elucidate underlying mechanisms; the determinants and prognostic significance of subclinical AF and AF burden; novel strategies to prevent AF, reduce AF burden, and prevent AF-related outcomes</td>
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<td>Name</td>
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<tr>
<td>Timothy Church, MS, PhD</td>
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<td>Department</td>
<td>Research Interests</td>
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<td>Social and environmental influences on eating and physical activity behaviors; community-based strategies for eating behavior change; adolescent nutrition and physical activity</td>
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<td>SBE</td>
<td>Family meals; obesity prevention; risk and protective factors in the development of eating disorders and mental health among children and adolescents; family-based health promotion; research methods, psychometrics and instrument development</td>
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<td>Antioxidants, oxidative stress and genetic susceptibility in coronary heart disease; genetic susceptibility and DNA repair in breast and pancreatic cancer; role of micronutrients and flavonoids in aging and disease; bio-markers of dietary intakes</td>
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<td>Social epidemiology; policy evaluation of alcohol, tobacco and illicit drugs</td>
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<td>Online assessment and intervention; mobile assessment and intervention; secondary HIV prevention</td>
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<td>Cardiovascular disease epidemiology; nutritional epidemiology</td>
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<td>SBE</td>
<td>Health disparities; access to care and healthcare equity; complementary and integrative healthcare; health/wellbeing promotion; mental health; survey research; national health survey data (e.g., NHIS, NAMCS, MIDUS)</td>
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<td>Alcohol studies; alcohol policy as a prevention strategy; minority health issues; behavioral epidemiology</td>
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<td>Cardiovascular disease prevention in children with a focus on the identification and treatment of cardiometabolic risk factors</td>
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<td>Identification and warning of disruptions through data fusion and analytics and works to defend our food system through research and education</td>
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<td>Chronic pain management, opioid effectiveness and safety, pain assessment, women’s health</td>
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<td>Infectious diseases, sexually transmitted infections, human papillomavirus (HPV), cervical cancer, cancer screening, vaccines, public health policy, decision and cost-effectiveness modeling</td>
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<td>Stroke epidemiology; quality of stroke care and long term stroke outcomes; interventions to improve stroke outcomes; stroke genetics</td>
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<td>Academic Unit</td>
<td>Research Areas</td>
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<td>Global issues in tobacco reduction; smoking cessation; treatment of medically compromised smokers</td>
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<td>Environmental and behavioral determinants of excess weight gain and obesity during childhood, adolescence and young adulthood</td>
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<td>Cancer prevention and control; cancer epidemiology</td>
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<td>Antibiotic resistance, including methicillin resistant staph aureus; epidemiology of pneumococcal disease and impact of pneumococcal vaccine</td>
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<td>CBE</td>
<td>Clinical and population-based research in pediatric neuroscience, including concussions, epilepsy, neurosurgery, headache, and central nervous system tumors and their associated neurocognitive, emotional and other co-morbidities</td>
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<td>Cardiovascular disease epidemiology and prevention; health behavior; community trials; clinical trials</td>
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<td>Serum vitamin D, sleep disordered breathing, coagulation factors, diet, and venous thromboembolism</td>
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<td>Epidemiologic methods, Bayesian methods, biostatistics, reproductive epidemiology, environmental epidemiology</td>
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<td>Genetic, molecular, and environmental causes of childhood leukemia and hepatoblastoma; how maternal and early life nutrition impact childhood cancer risk and pediatric outcomes among children born by cesarean section</td>
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<td>Health equity; social determinants of health; research integrity and misconduct; sociology; social demography; cardiovascular behavioral health; physical activity promotion; health policy modeling</td>
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<td>Psychosocial stress and stress mechanisms, women’s health, maternal and child health, health disparities, exposure to violence</td>
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<td>Research Interests</td>
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<td>Health policy, organizational change, health behavior during developmental transitions, influence of sports participation on health, social determinants of health, program evaluation, prevention of alcohol-attributable harm, physical activity promotion, obesity prevention, motor vehicle safety.</td>
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<td>Women’s health, etiology of reduced fertility, infertility and later disease, intersection of genital tract infections on reproduction, pregnancy-related morbidity, and epidemiologic methods in studies of fertility</td>
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<td>Disease surveillance, epidemiology, health communications, infectious disease, infectious disease: food-borne, HIV / AIDS, influenza, STDs, policy / politics, public health preparedness, vaccines</td>
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<td>Nutrition and physical activity in the prevention of obesity; type 2 diabetes and cardiovascular disease</td>
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<td>Risk factors for cancer (e.g. obesity, diabetes) and survival after cancer diagnosis, adult solid tumors (colorectal, gastrointestinal, pancreatic, ovarian, lung), biomarkers of inflammation, allergy and immune response</td>
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<td>My work has a special focus on society’s most vulnerable population at risk for violence (especially bullying) and injuries: children, persons with disabilities, agricultural workers, minorities, and rural populations</td>
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<td>LGBT health, HIV prevention research, HIV/AIDS risks, East Africa</td>
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**Simon Rosser, PhD, MPH**
- HIV prevention research; human sexuality; sex offending and religious identity; internet-based research; e-public health

**Justin Ryder, PhD**
- Clinical translational pediatric obesity researcher with 2 primary research focuses: 1) To understand the underlying mechanisms of how obesity effects chronic disease risk, specifically cardiovascular disease and fatty liver disease, in order to improve risk-stratification; 2) To develop and evaluate novel treatments (i.e. pharmacotherapy and surgery) for obese youth in an effort to reduce chronic disease risk (i.e. fatty liver diseases and cardiovascular disease)

**Pamela Schreiner, PhD**
- Cardiovascular disease etiology related to visceral fat accumulation, dyslipidemia, and perimenopause; structural and functional brain MRI; applied statistical methodology; human-animal interaction research

**Kelly Searle, PhD, ScM**
- Infectious diseases, specifically malaria and the conduct of spatial studies

**Nancy Sherwood, PhD**
- Obesity prevention and treatment in children and adults

**Randall Singer, DVM, MPVM, PhD**
- Infectious disease epidemiology; ecologic approach to disease systems

**Jon J. Snyder, PhD, MS**
- Chronic renal disease and especially end-stage renal disease

**Alicen Spaulding, PhD, MPH**
- Infectious disease epidemiology: global health; epidemiologic study design and methods; pediatric critical care outcomes; HIV/AIDS epidemiology; systematic reviews and meta-analyses; clinical epidemiology; epidemiology of antibiotic resistance; pediatric antibiotic stewardship

**Logan Spector, PhD**
- Etiology of childhood cancer: design, conduct; analysis of epidemiologic studies

**Srinand Sreevatsan, DVM, MPH, PhD**
- Interests in ecology, evolution, and epidemiology of infectious agents; uses combination of epidemiological, evolutionary, and molecular tools to address pathogen-host interactions, population genetic structure of microbes, and investigations on molecular mechanisms host adaptation, enhanced transmissibility and virulence

**Lyn Steffen, PhD, MPH, RD**
- Cardiovascular disease epidemiology; nutritional epidemiology; surveillance of cardiovascular disease risk factors

**Steven Stovitz, MD, MS, FACSM**
- Family medicine, sports medicine, adult and pediatric obesity

**Weihong Tang, PhD, MS, MD**
- Cardiovascular disease epidemiology, genetic epidemiology of chronic disease with an emphasis on cardiovascular disease, metabolic syndrome, diabetes, and obesity.
Brent C. Taylor, PhD, MPH | 467-4941 | taylorbc@umn.edu | CBE | Clinical epidemiology, systematic reviews, health care utilization

Bharat Thyagarajan, MD, PhD | 624-1257 | thya0003@umn.edu | CBE | Role of mitochondria in determining breast and colorectal cancer susceptibility. Role of mitochondria in determining outcomes after allogeneic hematopoietic cell transplantation (HCT)

Traci Toomey, PhD, MPH | 626-9070 | toome001@umn.edu | SBE | Policy research; community organizing; prevention of alcohol and tobacco-related problems; intentional and unintentional injury prevention

Beth Virnig, PhD, MPH | 624-4426 | virni001@umn.edu | CBE | Administrative data for cancer surveillance and studies of treatment patterns

Rachel Widome, PhD, MHS | 624-3518 | widome@umn.edu | SBE | Tobacco policy with a special focus on underserved populations, e.g., veterans, military personnel

### 1.6 PRELIMINARY ORAL EXAMINATION GUIDELINES

**Introduction**

A student should take the preliminary oral examination within 6 months after successful completion of the written examination (Parts A and B), and before significant work has been done toward the dissertation. The purpose of the preliminary oral examination is to confirm that the student is ready to begin work on her/his dissertation. It involves two phases: (1) the development of a written proposal of the dissertation; and (2) its oral defense by the student. Two forms must be completed significantly in advance of scheduling the preliminary oral—the Graduate Degree Plan (GDP) form (where the student lists courses taken) and the online form to assign members to the committee. The Graduate Degree Plan form needs to be turned in approximately one semester prior to the preliminary oral; assigning members to the committee needs to be completed at least one month prior to the exam. Students need to contact the program coordinator after passing Part B to discuss these forms. After completing these forms, it is the responsibility of the student to schedule the examination with his/her dissertation committee and notify the Graduate Student Services and Progress (GSSP) office at least one week before the examination. This written notification is made online—please see the Checklist. Also, please see section 1.9 “Human Subjects Research” before starting any dissertation work.

**The Preliminary Oral Exam Committee**

The dissertation committee is selected by the student and the academic advisor (and co-advisor, if applicable), and will be the student’s committee throughout the dissertation development and completion. The committee is composed of at least four members. Three must be from Epidemiology, and one represents a field outside the Epidemiology major. The Preliminary Oral Exam Chair will be the student’s dissertation advisor. This is in contrast to the Final Oral Examination Committee, where neither the advisor (nor co-advisor) can be the Chair. The Final Oral Exam Chair must be a faculty member who has graduated a doctoral student.

**The written proposal**

The student is required to write a proposal that describes the aims and methods of her/his dissertation. The purpose of the written proposal is to provide the student and the committee members with a clear understanding of the nature of the proposed dissertation, its feasibility, and its relevance to the field before significant dissertation work is completed. The preparation of the written proposal is an important process for the student as it creates the opportunity to design the dissertation work and to identify possible problems early in the process. The written proposal is also an efficient way to engage committee members as they assist the student in articulating and meeting the dissertation goals. By preparing a written document—and by conducting a defense of it—the student and her/his committee have a process through which they can agree upon the scope of the final product (i.e., the final dissertation). Thus it is important that the student not have completed significant work on the dissertation before the committee reviews the proposal. The written proposal thus can ensure that the student and the committee members know what product to expect at the final dissertation defense. The exact format of the proposal is at the discretion of the dissertation advisor, the committee and the student. Typically, the following content should be covered:

- The research objectives, typically described as primary and secondary aims.
- A literature review of related research, which will provide a rationale to support the proposed choice of research objectives, study design, population, etc.
- The theoretical model that will guide variable selection and analysis.
- A description of the proposed design and analytic methods, including a discussion of potential shortcomings and how they will be addressed.
- A description of the anticipated major results, reflecting the scientific merit of the proposed research. This description may include “mock tables” (i.e., no data, but rather a list of variables and row/column headings). Preliminary or descriptive data...
may be presented if they are available when the student is preparing the written proposal.

- Possible limitations of the proposed research.
- References. A conventional citation style should be used consistently throughout the text.

The length of the proposal has varied historically, but a range of 30-100 double-spaced pages is typical. The student will review drafts with her/his advisor, as well as other committee members as needed, before submitting the proposal to the full committee. The student’s advisor should give guidance as to when the proposal is sufficiently strong and is ready to defend. The student should not send the final proposal to committee members until the advisor has given approval to do so.

The student should submit the final written dissertation proposal to the full committee at least two weeks before the preliminary oral examination unless other arrangements have been made. The student must give the full committee two week’s advance notice of the date they are going to receive the final proposal. Thus, a date cannot be set with less than one month’s advance.

The preliminary oral examination

The preliminary oral examination, administered by the student’s committee, is not a comprehensive exam. Its purpose is to evaluate the student’s ability to conduct a feasible, cohesive and rigorous dissertation and thus focuses on plans for dissertation design and analysis. The exam varies in terms of its length, but is usually one and a half to two hours. Typically, the student will formally present an outline of her/his proposal and will be asked questions about its purpose, rationale, study design, and potential to advance knowledge. Committee members will examine the practical aspects of the proposed plan and its application of epidemiologic principles in design, analysis, and interpretation. The committee members will vote to pass, pass with reservations, or fail, based on the quality of both the written proposal and the oral defense. Once a student passes the preliminary oral exam, she/he is officially a PhD candidate.

Guidelines regarding “Failure of the Preliminary Oral Examination” are: “Students who fail the examination may be excluded from candidacy for the degree or may be allowed, on unanimous recommendation of the examining committee, to retake the examination, providing the reexamination is conducted by the original preliminary oral examining committee. In no case may the reexamination take place before 10 weeks have passed. No more than one reexamination is allowed.” Specific guidelines are available regarding the circumstance wherein a committee recesses without having determined whether a student has passed the examination.

If you have a committee member that may have to join remotely, please talk to the program coordinator and review the guidelines here: https://policy.umn.edu/education/doctoralperformance-appa (Required Conditions and Best Practices for Remote Participation in Graduate Examinations)

1.7 DISSERTATION AND DEFENSE

Upon successful defense of the written proposal, the student will have agreement from his/her committee regarding the direction and focus of the dissertation, and a clear blueprint from which to continue the dissertation work. In many cases the dissertation will resemble the preliminary written proposal quite closely. However, due to unforeseen circumstances or the natural progression of the research, it is possible the dissertation may differ in scope or content. It is important the student apprise the committee if s/he believes the dissertation will differ significantly from the written proposal presented at the preliminary oral examination.

An acceptable alternative to the traditional dissertation is to write a series of publishable papers on a related theme and combine these with a summary paper reviewing the studies to form the basis of the dissertation. Several issues are involved, including the basic structure of this alternative format, the number of papers, authorship, acceptable journals, and the role of the committee. Such issues are resolved among the advisor, the student, and the committee. Numerous PhD dissertation committees in the Division have considered three first-authored papers to be sufficient. Individuals seeking this alternative approach to the traditional dissertation should present their program plan to their committee members as part of the preliminary oral exam, and the committee members will decide the number of manuscripts and authorship necessary to satisfy requirements.

Students wishing to see examples of completed dissertations can go to the following website: http://conservancy.umn.edu/handle/11299/45272. The collection can be sorted by name, or you can browse the collection by dates, authors, titles, subjects and types. Students can get alum suggestions from the program coordinator.

Published work and the PhD dissertation

The thesis may include materials that have been (or will be) published while the author has been a University graduate student. Students wishing to delay publication of the thesis can refer to the section Thesis Embargo Request. The following items must be completed to include a published work as part of the thesis:

1. A letter (or email) authorizing use of this material must be obtained from the publisher, and a copy must be submitted to GSSP upon completion of the thesis. If permissions are not supplied, ProQuest will not publish copyright materials. In addition, students should be aware that work will be available for open access through the University of Minnesota Digital Conservancy. Please consult publishing agreements to determine what rights were retained. More information is available at http://www.lib.umn.edu/copyright/disstheses

2. If work has not yet been published but there are plans to publish part of the materials, the student’s adviser(s) must notify GSSP
by email of the intention to publish a part of the material; GSSP’s approval is not required.

3. If all or part of the thesis is initially in a format appropriate for submission to a professional journal, the following guidelines apply: The thesis must read as one cohesive document. One set of introductory materials (i.e., dedication, abstract, table of contents) is necessary as well as a suitable introduction, transition sections, a conclusion, and appendices (if applicable) that might not ordinarily be included in the published manuscript. A comprehensive bibliography, not usually permitted by journals, must be included as the last section of the submitted thesis. The research must have been carried out under the direction of University of Minnesota graduate faculty and approved by the adviser for incorporation into the thesis. The student must be listed as the sole author of the thesis. Editorial or substantive contributions with general significance made by others should be acknowledged in the introductory materials; more specific contributions should be acknowledged by footnotes where appropriate. Students whose manuscripts include more than the student’s research must make others’ contribution clear in the thesis. In rare circumstances use of manuscript reprints of the published articles themselves are acceptable if they are satisfactorily and legally reproduced and conform to all the formatting specifications outlined in this document. Reprints must conform to a style consistent with the rest of the thesis document.

Please see http://www.grad.umn.edu/sites/grad.umn.edu/files/grad_content_460854.pdf for more information.

The Final Oral Exam Committee

The final oral exam committee usually is the same as the oral preliminary exam committee. The student and advisor should discuss who should be the chair; the final oral exam chair cannot be the student’s advisor or co-advisor, and the chair must have experience advising doctoral students through a final exam.

When the student and program coordinator submit the Final Oral Exam Committee electronic form together, the student will choose three members from the committee to be “Reviewers” who will ultimately sign a form that clears the student to hold the final oral. Specific rules govern who must be a reviewer, and the program coordinator will help the student select the correct reviewers. This is simply an administrative step the coordinator will help the student complete.

It is typical for the student to meet with individual committee members, as well as with her/his advisor, for advice throughout the dissertation process. Often the committee meets as a whole only twice: once for the preliminary oral examination and once for the final oral examination. However, the committee can meet as often as the student or the committee requires to guide the dissertation process. Students are encouraged to consult and share their progress on the dissertation with all members of the committee well in advance of the final oral examination.

The committee must have at least two weeks notice that the dissertation will be submitted to them by a specific date; it is also required that all committee members will have at least two weeks to read the dissertation before the exam date.

Public presentation and oral thesis defense

All requirements for the doctoral degree must be completed and the degree awarded within eight calendar years after initial enrollment to the graduate program. This is a Graduate School requirement.

The final exam includes first, a seminar open to the public, approximately one hour including questions from the audience, covering the substance of the dissertation. A closed-door meeting of the thesis committee and the student, to last no longer than 2 hours, follows this. A vote of the exam committee is taken before and after the committee discusses the examination. A student passes the exam if no more than one committee member dissents. At this meeting revisions and modifications may be recommended, even if the committee has determined the student has passed the exam. The advisor is responsible for assuring these revisions are made before the dissertation is submitted to the GSSP.

1.8 CHECKLIST FOR COMPLETING DEGREE

<table>
<thead>
<tr>
<th>Steps and Deadlines</th>
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<tr>
<td>1. In the summer before the first term, complete the process to have master’s level coursework applicable to the doctoral program reviewed by the Epi PhD Credentials Committee. This process is administrated by the program coordinator.</td>
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2. Register for courses promptly each term.

Some courses, or sections of a course, fill up quickly so register when your name appears in the registration queue. The registration queue is available at [http://www.onestop.umn.edu](http://www.onestop.umn.edu). You must be registered by the first day of each term; if not, you will be “inactive” and will have to complete a form (and likely pay a late registration fee) in order to be re-admitted.

**Tips:**
- While most coursework should be completed before the Preliminary Oral Exam, students are permitted to take coursework after it.
- Thesis credits cannot be taken prior to passing Preliminary Oral Exam, no exceptions.
- In any Fall or Spring term, if you don’t register for at least 6 credits (to maintain full-time status), and you need 6 credits for your research assistantship or other financial loan reasons, please see section 1.3 for information about pre-thesis credits, PubH 8666. They are not unlimited however.
- If you have completed all coursework, registered for all thesis credits and have not yet held your final oral, and hold a graduate assistantship, see the program coordinator for a special registration category.

3. Preliminary Written Examination (Parts A and B)

After you successfully pass both parts of the Preliminary Written Exam, the program coordinator will electronically submit a Preliminary Written Exam Report form to the GSSP office confirming you have passed. You also get an email confirming you have passed this milestone.

**Tips:**
- See the detailed preliminary written examination guidelines (section 1.4)
- Part A is definitely offered once a year. Part B can be taken throughout the year. Please note there are times Part B results will take longer to receive: if the student finishes in December or early January, or if the student finishes later in the Summer, they should expect a longer wait to receive results.

4. Graduate Degree Plan form

Complete the **Graduate Degree Plan** (GDP) form after you have passed both parts of the Preliminary Written Exam. You will list all completed and anticipated coursework on the form. Meet with the program coordinator—she will help you complete the form correctly. This form can be filled out online, but is submitted in paper copies with original signatures. The GSSP office states the form should be turned in at least one semester prior to the Preliminary Oral Exam; some latitude is allowed with this deadline, but a minimum of 8 – 10 weeks is required. Download the form from this site: [http://policy.umn.edu/forms/otr/otr198.pdf](http://policy.umn.edu/forms/otr/otr198.pdf)

When the GSSP (Graduate Student Services and Progress) office approves your form, it will show up under MyU as being approved, then GSSP sends an email. The email can take some time; students can monitor the progress of their GDP’s and other forms under the Milestone tab found in Academics in the MyU Portal. The checklist website: [https://onestop.umn.edu/academics/degree-completion-steps](https://onestop.umn.edu/academics/degree-completion-steps)

Scroll down to Graduate Degree Plan (GDP) students, click on Doctoral students, click on Doctor of Philosophy and Doctor of Education and the Degree Completion Steps checklist will pull up.
5. Assign members to preliminary oral exam committee

Work with your advisor(s) to form your committee; early in the process, please consult with the program coordinator to ensure your selection of committee faculty members meets University graduate degree rules. Also, please reference “The Preliminary Oral Exam Committee” in section 1.6 and “The Final Oral Exam Committee” in section 1.7.

The Preliminary Oral Exam Committee form is completed online and sent out for electronic signatures. It is required to meet with the program coordinator—together you will complete and submit the form. It is important to initiate the form in enough time for automated routing for approvals, so please meet with the program coordinator at least six weeks prior to your preliminary oral exam. You will not be allowed to hold your exam until the form has been submitted and approved.

When your committee is approved, GSSP emails you and the program coordinator confirmation and how to schedule your prelim oral in the Graduate School system.

Tips:
- Regarding rules governing faculty eligibility to serve on doctoral preliminary oral and final oral exam committees: consult with the program coordinator early in the process. Overall, flexibility is possible; in some cases, experts outside of the University with or without faculty appointments elsewhere may be able to serve on examining committees in any role except advisor/co-advisor/chair.
- If part of the process includes nominating someone to the Epidemiology doctoral faculty, that process may take 4 – 6 weeks.
- Talk to your committee members to see if any of them are planning to take a semester’s leave or a sabbatical during your projected timeline for your prelim or final oral exam.

6. Scheduling the Preliminary Oral Examination

A month in advance is needed: before you set the exam date, keep in mind students are required to send the final dissertation proposal draft to their full committee at least two weeks prior to the Preliminary Oral Exam and are required to tell them at least two weeks ahead of that date they are sending the final draft. In other words, a month before the exam, the committee has to know the prelim oral date and that they are getting the draft two weeks prior to the exam.

You need to find a two-hour time for all committee members to meet. The exam varies in length, but must be scheduled for two hours. All members must be present. See the program coordinator far in advance if there is an issue with a committee member being present (info at the end of Section 1.6 on remote participation). See section 1.6 for detailed guidelines.

You need to schedule a room to hold the exam—most students schedule a room in the West Bank Office Building (WBOB) Rooms 310 and 410 have TV screens and set-ups to connect your computer.

You officially schedule the Preliminary Oral Exam electronically. Students can do this without meeting with the program coordinator. Schedule the preliminary oral examination online as soon as a date is set, but no later than one week prior to the examination. Please go to this site for information on scheduling, etc.: https://onestop.umn.edu/academics/doctoral-oral-exam-scheduling

How to and tips:
- On the Preliminary Oral Examination Scheduling page, click on the link “To Schedule” and then log in using your Internet ID and password.
- Enter the preliminary oral examination date and click “submit.” (PeopleSoft automatically populates all other required student information fields.)
- The GSSP office checks your record and will e-mail you either that (1) your student record has been reviewed, all requirements are met and your examination is authorized or (2) that you have some outstanding requirements and your examination is not yet authorized. Specifically, they are checking to make sure you have an approved Graduate Degree Plan and an approved preliminary oral exam committee. If you have worked with the program coordinator to complete those steps, there should be no problems.
Once they determine you have completed all eligibility requirements they email you to say: “Your student record has been reviewed for completion of the preliminary oral examination eligibility requirements. All examination requirements have been met and your examination has been authorized. Please come to 160 Williamson Hall to pick up your Preliminary Oral Examination Report form prior to your exam. Be sure to bring a photo ID with you.”

The program coordinator is automatically copied on above-mentioned e-mail messages.

### 7. After successfully passing Preliminary Oral Examination

- After the exam, you need to turn in the original **Preliminary Oral Exam form** directly to the GSSP office within a few days.
- After you turn in the exam form, the GSSP emails you (and the program coordinator) information and related web links about registering for thesis credits, step-by-step degree completion requirements, Graduate School guidelines for formatting, submitting and publishing a dissertation, copyright information, etc. Keep the email for future reference.

### 8. Assign members to doctoral final exam committee

About two months before the final oral exam, students meet with the program coordinator and electronically assign members to the doctoral final exam committee via the **Final Oral Exam Committee** form.

When you and the program coordinator submit the **Final Oral Exam Committee** form together, you will also choose three members from your committee to be "Reviewers" who will ultimately sign a form that clears you to hold your final oral. The form they sign is the **Reviewer’s Report** form; see #12 below for more information. Specific rules govern who must be a reviewer, and the program coordinator will help you select the correct reviewers. This is simply an administrative step that the coordinator will help you with.

**Tips:**
- It is important to initiate this form far enough in advance to allow time for automated routing for approvals. You will not be allowed to hold your final oral until the form has been submitted and approved and a few other steps (outlined below) completed.
- The GSSP will review your committee and reviewer assignments; when your committee is approved, they email you letting you know the committee is approved and send a link to an online checklist that outlines remaining requirements.
- They also send you instructions on how to request a Graduation Packet. If you lose this email that gives you the link, see directly below, step #9.

### 9. Final steps to graduate: Graduation Packet

Request a **Graduation packet** in the final term before you defend (or at least two months before your Final Oral Exam). You can request one at [https://apps.grad.umn.edu/secure/gradpacket/](https://apps.grad.umn.edu/secure/gradpacket/)

Students must complete #8 above (assign members to doctoral final exam committee) to be eligible to get packet.

Read through all graduation instructions carefully, and complete all paperwork by the deadlines. Instructions include information about completing the **Graduate Application for Degree form**, the timing of giving your final dissertation draft to your committee, scheduling your final oral exam with the Graduate School, and submitting the **Reviewer’s Report** form. Consult with the program coordinator as needed.

**Tips:**
- The **Graduate Application for Degree form** must be completed by the first business day of anticipated month of your defense. You can turn the form in earlier, but if you miss the first business day of the month, your degree will not be administratively cleared until the next month. (You can still hold your defense, but your degree will not show up on your transcript until the next month.)
- Included in the packet are instructions about what must be submitted after your final oral exam to successfully graduate, and guidelines for formatting the dissertation and publishing the dissertation with UMI dissertation publishing.
- Doctoral students who submit their dissertations electronically will no longer be required to
submit a paper copy to the Graduate School, or pay the related binding and shipping fees. Additional conveniences include on-line payment of the required publishing fee, and the opportunity to make their dissertations available via the University’s digital Conservancy.

- See “Preparing the Doctoral Dissertation” link at http://www.grad.umn.edu/sites/grad.umn.edu/files/grad_content_460854_0.pdf
- This site is also useful: https://onestop.umn.edu/academics/thesisdissertation-submission-and-formatting

### 10. Final steps to graduate: schedule your Final Oral Examination

Schedule three hours for your Final Oral: the Final Oral Exam includes a one-hour public presentation and followed by a two-hour meeting with your committee.

Similar to the timing of the Prelim Oral Exam, a month in advance is needed. Your committee must have at least two weeks’ notice that your dissertation will be given to them by a specific date. It is also required that all committee members have at least two weeks to read your dissertation before the exam date. In other words, a month before the exam, the committee has to know the exam date and that they are getting the final draft two weeks prior to the exam.

Administrative step: submit your Final Oral Exam date electronically to the GSSP when you have the date of your defense, or no later than one week prior to the exam date. This ensures the GSSP office will review your record, let you know if the Reviewer’s Report form is still outstanding, and finally, email you that you can go to 160 Williamson Hall to pick up your Final Oral Examination Report form prior to your exam. A photo ID is required to pick up the Final Oral Exam Report form.

To initiate this step, go to this website https://onestop.umn.edu/academics/graduate-student-services-and-progress and click on Doctoral oral exam scheduling.

**How to and tips:**
- At this site, click on the link to schedule the exam, and then log in using your Internet and password.
- Next, enter the final oral examination date and click “submit.” Note all other required student information fields are automatically populated via PeopleSoft. The GSSP office will notify you by email regarding any outstanding final oral exam requirements, and how to fulfill those requirements. If you have followed the steps above, there should not be any outstanding issues, usually the only notice is telling the student they still need to turn in the Reviewer’s Report form. When this is completed, you will receive email notice you can hold your final oral examination.

### 11. Final steps to graduate: public announcement

The one-hour final oral exam presentation must be announced to all Epidemiology doctoral faculty and doctoral students. At least two weeks prior to your final oral exam, please send the following information to the program coordinator for the announcement: how you want your name and previous graduate-level degree listed; the day, date and time of the one-hour presentation; the building and room; title of the thesis/talk; an announcement abstract no more than 300 words.

### 12. Final steps to graduate: complete the Reviewer’s Report form

Plan to submit the **Reviewer’s Report** form (a paper form) approximately ten days before your defense. This form is very important because you have to get the three reviewers signatures and return the form to the GSSP office before the final oral. Turning in this form is critical for clearing you to hold your Final Oral exam.

**Tips:**
- Remember, you and the program coordinator selected the three reviewers when you met and completed the e-form to assign the doctoral final exam committee.
- If you have any reviewers who might be out of town right before your final oral, this form can be turned in a little early but the reviewers need to have your final draft in hand in order to sign off on the Reviewer’s form you are ready to defend your thesis.
- Sometimes reviewers are out of town. The GSSP office has very specific rules. No electronic signatures are allowed, and they mean no signatures signed using an
electronic service. It is okay if the form can be scanned, emailed to reviewer, printed by reviewer, signed by reviewer, and scanned back. This means all three signature can be done by this method, one by one. They must be all submitted together at the same time to the GSSP office. If you have questions about what is allowed, they prefer to have students contact them so they can further clarify what a scanned signature is. The Reviewer’s form is normally turned in sometime after you have given your committee the final draft (two weeks prior to the final oral exam) and one week before the final oral exam. If your reviewers are traveling, the form can be turned in as late as the day of the exam. However, before you hold your final oral exam, you must turn in the Reviewer’s Report form and obtain the Final Oral Exam form.

13. After successfully passing Final Oral Examination

After you pass your final oral exam, submit the Final Exam Report form to the GSSP office within a few days of your final oral defense and complete all the steps outlined in the Graduation Packet for successful completion! If you want to delay the release of your dissertation, you can request a temporary hold using a specific form so you don’t delay having your degree administratively cleared. This is outlined in the Graduation Packet material.

1.9 OTHER INFORMATION

Human Subjects Research

All students at the University of Minnesota who conduct any research using human subjects are required to submit their research proposal to the University of Minnesota Institutional Review Board, for approval prior to conducting their study. This procedure is necessary even for students who are doing secondary data analysis.

Criminal Background Check

Certain facilities are required by Minnesota law to submit paperwork for a criminal background check for all personnel with direct, unsupervised client contact. Students who have fieldwork, master's project, or dissertation in such a facility, may be asked by the institution to submit paperwork.

Assistance with Writing

Helpful resources for writing skills are available at the University. The primary resource is the Center for Writing; their email is writing.umn.edu; their website is also http://writing.umn.edu and phone number is 612.626.7579.

Responsible conduct of research and scholarship, and professional ethics

This site (https://research.umn.edu/) introduces graduate students to these very important concepts; to institutional expectations regarding intellectual honesty and integrity; and to the Graduate School’s commitment to provide educational opportunities and resources for students to learn about these topics.

Grant Funding Databases: tips for searching and setting up alerts

Before you begin searching...
Consider how to describe your search, in broad terms.
* What is your area of interest?
* How will the money be used?
* When and where will the research occur?

Internal U of M funding opportunities are listed at http://www.research.umn.edu/advance/funding.html

Recently funded grants
Before you begin, consider searching the databases or lists of recently funded grants from organizations that often fund research in your field.

Some agencies have sophisticated databases of recently funded grants, such as USDA’s CRIS, https://cris.nifa.usda.gov/ while others such as the National Endowment for the Arts, https://www.arts.gov/grants provide simple lists that can be scanned.
SciVal Funding also provides searching of funded grants.

Searching for Current Opportunities
Linking to the grants databases:
- https://www.lib.umn.edu/researchsupport/grants
- from the U Libraries home page, https://www.lib.umn.edu/ and look under Services, Researcher Support, Grant Funding

These databases contain only summaries of the grant opportunities, so be sure to link to the full announcement for details, and always consider consulting with the agency’s program officers.

Pivot (from Community of Science)
- Choose the “Advanced Search” link to start your search
- Select “Keywords” under “More Search Fields,” then “Keywords: browse,” to identify applicable search terms. By using their keywords, you’re selecting specific vocabulary used in the descriptions of the database’s funding opportunities.
- Narrow your search by any of the parameters listed on the left, as you view your results

E-mail alerts:
- On the main page, go to Sign Up in the upper left
- You will be asked for your e-mail (which will serve as your userID) and a password
- If you would like to save searches sign in before you begin searching
- To save a search and receive updates on new opportunities in that area, click on Save Your Query at the top of the page. Select a name, and decide if you want e-mail updates
- Signing in will also allow you to e-mail searches and select opportunities to track

SciVal Funding
- Click on Search in the upper left to start your search in the Advanced Search mode
- Begin with general subject terms
- On the Results screen, narrow by choices in the left column
- If your results are too broad, consider limiting to Keywords or Words in the Abstract

E-mail alerts:
- To create an account, click on Register in the upper right. Your userID will be automatically generated, based on your name, and you will be asked to give yourself a password.
- To save a search, select the Save this Search link and set your parameters
- To view your saved searches and alerts, go to the Saved Searches link in the upper right

Foundation Directory Online
- “Search Grantmakers” allows you to identify groups that offer funding in your field of interest
- Use “Fields of Interest” to search by topics that the foundations cover. Click “view index” under relevant search fields for alphabetical lists of search terms
- Check “Exclude grantmakers not accepting applications” to see only foundations that have a formal application process.
- Click on the title of a foundation to see detailed information, including contact info, types of support, and geographic focus.
- The “Search Grants” tab allows you to identify grants previously awarded by that particular foundation.

Grants.gov
Grants.gov allows users to not only apply for grants, but also to search for opportunities.
- Go to “Search Grants” then “Advanced Search”
- Search by free text terms and consider limits by agency or other parameters

E-mail alerts:
- From the main page, select “Grant e-mail alerts” on the left, then “Notices based on advanced criteria” to set up an alert based on broad topic or agency

Contact us if you need assistance or have any additional questions:
- Kirsten Clark, Wilson Library: clark881@umn.edu, 612-626-7520
- Julie Kelly, Magrath Library: jkelly@umn.edu, 612-624-4781
- Jody Kempf, Walter Library: j-kemp@umn.edu, 612-626-1676
University Libraries, https://www.lib.umn.edu
Office of the Vice President for Research
2. Division of Epidemiology and Community Health (EpiCH)

2.1 Welcome

Epidemiology and Community Health is one of four Divisions that make up the School of Public Health at the University of Minnesota. The Division of Epidemiology and Community Health is home to six majors in the School of Public Health:

- Clinical Research MS
- Community Health Promotion MPH
- Epidemiology MPH
- Epidemiology PhD
- Maternal and Child Health MPH
- Public Health Nutrition MPH

The Division Head is Dr. Dianne Neumark-Sztainer

EpiCH Student Services (ESS):
- Kathryn Schwartz-Eckhardt: Director of Epidemiology and Community Health Student Services – Primary contact for prospective students, and curriculum development in master's and PhD level programs
- Christine Vu: Admissions Coordinator – Primary contact for prospective students in master's and PhD level programs
- Shelley Cooksey, Student Advising Manager– Primary contact for current students in master's and PhD level programs
- Marlin Farley, Student Advising Coordinator– Primary contact for prospective students in master's and PhD level programs
- Laurie Zurbey: Academic Support Coordinator – course scheduling, data management, staff support

E-Mail: .......... epichstu@umn.edu
Phone .............. 612-626-8802
Fax ................. 612-624-0315
Campus Mail:.... WBOB, #300, Delivery Code 7525
US Mail ........... 1300 South Second Street, Suite 300, Minneapolis, MN 55454

2.2 The West Bank Office Building (WBOB)

The offices are located in the West Bank Office Building (WBOB) at 1300 South 2nd Street in Minneapolis. Students can find directions to WBOB at http://www1.umn.edu/twincities/maps/WBOB/.

Forms
We have PDF versions of forms at http://www.isph.umn.edu/epich/current-student-forms-and-policies/. Microsoft Word documents of all the forms are also available upon request. Contact the EpiCH Student Services Staff at epichstu@umn.edu to obtain the Word documents via e-mail.

Evening and Weekend Access
Division graduate students who do not have a paid appointment in the Division can have access to the student computer lab and student mailboxes after work hours and on weekends. Students obtain access by filling out a form to have their UCard programmed for access to the third and fourth floors of WBOB. Students are given the option to sign up for building access at Orientation. After orientation, contact the EPICH Student Services staff for information at epichstu@umn.edu.

NOTE: There is approximately a one-week turnaround time to get a student’s UCard programmed, so please plan accordingly.

Computer Lab
The Division computer lab in WBOB includes several PC's available for student use. The computer lab is located in the student lounge in room 466. The general policy for use of these computers is that they are for Division graduate students for work pertaining to their degree program. All of the computers have SAS and two of them have STATA. Printers are available.

Copier and Fax Access
The Division does not allow copy machines or fax machines to be used for personal use. Personal copies can be made for a cost at various locations throughout campus. Unfortunately, there is not a copier for use in WBOB.
2.3 Division Communication with Students

The Division communicates information to students in the following ways:

- **E-mail**: Students are expected to check their U of M email regularly. Communication between the Division and students regarding changes in programmatic requirements or announcements, as well as advisor, faculty, and student-to-student contacts is usually through e-mail. If you do not register for courses for two full academic years you will lose access to your e-mail account and will need to contact the Technology Helpline to restore your access. Alumni maintain lifetime access to their University e-mail account as long as the account is accessed on a regular basis.

- **My U Portal**: This is a form of communication and information exchange within the University. Students are expected to check their portal regularly. Access to the portal is available at [https://www.myu.umn.edu/](https://www.myu.umn.edu/).

- **Weekly SPHere**: A weekly electronic publication for students. This publication contains important deadline reminders as well as updates on students and faculty research and activities.

- **Division Newsletter**: The Division administrative staff produces a more extensive monthly newsletter titled EpiCHNews. EpiCHNews is available on the Epi web site at [http://www.isph.umn.edu/epich/](http://www.isph.umn.edu/epich/).

- **University News**: The University of Minnesota student newspaper is called The Daily and is available campus-wide.

2.4 Seminars

The Division of Epidemiology and Community Health sponsors scientific seminars between September and June to exchange ideas and research findings pertinent to the field. Because the Division has a large faculty, staff and student body, the seminar provides a forum for exchange of information among people who may not otherwise meet or work together. All faculty and students are strongly encouraged to attend regularly.

Division faculty members and other scientific staff are asked to present at least one seminar every two years. Each year, the seminar brings in about 10 scientists from outside the Division.

Notices are posted in the Division's third floor reception area as well as sent out electronically. Most seminars are held 10:00-11:00 a.m., Fridays, in Room 364 of WBOB. Seminars by visiting scientists may be at other times. Students can check the EpiCH Web site for seminar information by going to [http://www.isph.umn.edu/epich/](http://www.isph.umn.edu/epich/)

2.5 Academic Credit for Independent or Directed Coursework

Independent and directed coursework can be taken to fulfill elective credits and can take many forms depending upon the student's interests and needs. All independent/directed coursework needs the support of a Division of EpiCH faculty member who agrees to serve as an "instructor/advisor" for the independent or directed course. The expectation is that the student has something specific to propose prior to approaching a faculty member.

To fulfill the course requirements, the student and instructor should agree on the type, scope, and length of a final academic "product" whether it is a paper(s), an annotated bibliography, curriculum, training modules, media piece(s), etc. It is expected that the faculty member and student will meet regularly during the term.

It is very unusual for students to take more than four credits total of independent or directed coursework (over and above any credits earned for the Applied Practice Experience (APEx) or Integrated Learning Experience (ILE)/thesis requirement). Students are expected to fulfill the majority of their elective credits through regularly-scheduled courses.

Examples of Independent and Directed Coursework

1. Students interested in a theory, an evaluation method, or a skill not covered in depth in a specific course could arrange for an independent study course with a faculty member knowledgeable in that area and/or willing to work with the student.

2. The student wants to attend a conference, workshop, or mini-course, but there is no academic credit involved. The student must find a faculty member willing to work with the student to develop academic work over and above the actual event to fulfill some elective credits. This must be arranged ahead of time, not after the event has occurred.

Additional comments
Arranging an independent/directed course depends upon the student putting together an academically rigorous proposal and finding a faculty member to serve as an instructor. The faculty instructor does not have to be the student's academic advisor or Integrated Learning Experience (ILE) advisor. The instructor must be a member of the major associated with the course number; see below.

The student should also receive prior approval from the EPICH Student Services staff to count the independent/directed work as an elective course.

Choosing Course Numbers
Independent study, directed study, and readings courses are available within the Division of Epidemiology and Community Health. The student and instructor should agree on the course number/title that most closely matches the work being proposed. Course options are:

- PubH 7091 Independent Study: Community Health Promotion (only CHP faculty can serve as instructor)
- PubH 7391 Independent Study: Epidemiology (only Epi MPH or Epi PhD faculty can serve as instructor)
- PubH 7392 Readings in Epidemiology (only Epi MPH or Epi PhD faculty can serve as instructor)
- PubH 7691 Independent Study: Maternal and Child Health (only MCH faculty can serve as instructor)
- PubH 7991 Independent Study: Public Health Nutrition (only PHN faculty can serve as instructor)
- PubH 8392 Readings in Clinical Research (only Clinical Res. graduate faculty can serve as instructor)
- PubH 8393 Directed Study: Clinical Research (only Clinical Res. graduate faculty can serve as instructor)

**NOTE:** Other majors in the School of Public Health may have independent/directed coursework opportunities in their areas. Check with the Divisions of Environmental Health Sciences, Health Policy Management, and/or Biostatistics. You could also do an independent/directed course with another graduate-level program. Remember that the EPICH Student Services staff has to approve it as an elective.

Procedures
1. Student meets with the faculty member to discuss the requirements for the independent/directed course.
2. Student fills out an *Independent/Directed Study Contract* form outlining the requirements for the course and has the form signed by their academic advisor and Independent/Directed Study instructor. This information is vital to receive proper credit for this course (i.e., a grade). The instructor needs to agree to work with the student and both need to agree on the requirements. The form can be downloaded from the web at [http://www.isph.umn.edu/epich/current-student-forms-and-policies/](http://www.isph.umn.edu/epich/current-student-forms-and-policies/).
3. Student gives the completed/signed *Independent/Directed Study Contract* to the EPICH Student Services staff. Once the completed form is received you will be sent registration information.
4. At the end of the semester, the instructor assigns a final grade. The grade will then be entered on the official transcript. It is the student’s responsibility to make sure that all requirements are completed so a grade can be submitted.

### 2.6 Division Resources and Policies

**Incomplete Grades**
For MPH students, all required courses (with the exception of Applied Practice Experience (APEX), internship, or Integrated Learning Experience (ILE)/thesis credits) must be completed during the term of registration. Students must complete all course requirements by the end of the registered term so that faculty can submit a grade by the appropriate due date. A grade of incomplete "I" shall be assigned at the discretion of the instructor when, due to extraordinary circumstances, the student was prevented from completing the work of the course on time. The assignment of an incomplete grade requires an electronic contract between the instructor and student specifying a deadline by which the student will complete the course requirements. In no event may the written agreement allow a period of longer than one year to complete the course requirements. If the requirements of the contract are not met by the contract deadline a final grade will be submitted based on the work submitted to date. Applied Practice Experience (APEX), internship, and Integrated Learning Experience (ILE) projects that are not completed by the end of the term of graduation will receive a grade of "K" indicating "work in progress."

PhD Students only: The symbol "I" may be assigned by an instructor to indicate “incomplete,” in accordance with the
provisions announced in class at the beginning of the semester and outlined on the course syllabus, when in the instructor’s opinion there is a reasonable expectation that the student can successfully complete the work of the course. An “I” remains on the transcript until the instructor replaces it with a final A-F or S-N grade. Course instructors are encouraged to establish a time limit for the removal of incomplete grades.

Six Credit Minimum Exemption
The University of Minnesota has a policy that students must register for a minimum of six credits in order to hold a Graduate Assistant position. The policy states that "exemption from [this requirement] is determined on a semester by semester basis" and that "eligibility criteria are to be determined by each graduate program...these criteria will be well publicized and administered equitably among all Graduate Assistants in the program."

The Division Training Committee (DTC) approved the following policy: "Students will almost always be granted a one semester exemption so they can finish their work toward the end of their degree program, but must petition the DTC for more than one semester's exemption and this would be given under only extraordinary, extenuating circumstances. Extending coursework in order to remain a graduate assistant will not be sufficient reason." Students who wish to request an exemption should contact Kathryn Schwartz-Eckhardt. It may take several weeks for this request to be reviewed so please submit your request at least one month prior to the start of the term.

Graduate Assistants who wish to be exempt from FICA withholding must register for at least three credits per term (one credit for PhD candidates working on a dissertation).

Sitting in on a Class
Students are not permitted to attend a class for which they are not registered. This means that if you are unable to register for a class before it begins for any reason you may not attend the class.

Support for Student Travel (effective 5/2017)
1. The Division will provide up to $600 per student in a 12 month period [a maximum of $3,200 available for all students during the fiscal year] for travel to a scientific meeting under the following conditions:
   ▪ The student is currently enrolled in the Epi PhD/MS/MPH, CHP MPH, MCH MPH, PubMed Nutr MPH, or Clinical Research MS program and must be the presenter of the paper or poster. The student has been enrolled in their program as least one term at the time of the conference; the work was done during the time the student was in their program.
   ▪ The meeting can be local, regional, national or international but must have relevance to the student's field of study.
   ▪ There are no other sources of support specifically allocated for such travel. For example, whenever a training grant provides funds for travel for its fellows, those fellows will not be eligible for travel support under this policy. However, students whose work was supported by a research grant with no funds specifically for student travel will be eligible for travel support under this policy. Principal Investigators are encouraged to provide support for student travel from their grants since their grants benefit as well as the students.

2. All requests for travel support must be in writing. The request should be addressed to the Chair of the Division Training Committee and given to Kathryn Schwartz-Eckhardt, who will process the request. The request should include:
   ▪ The dates, location and purpose of the meeting and describe the student’s role. A link to information about the conference should also be included.
   ▪ A copy of the abstract and letter of acceptance must be attached to the request. In addition, a letter from a member of the Division’s faculty indicating that he/she is familiar with the student’s work, judges it to be of good quality, and supports the student’s request. The faculty letter should also provide any necessary clarifications on the student’s role to ensure that the role of the student in the presentation is clear. The student must be the primary author. If the student is not also the first author, we need a reason why the student is presenting.
   ▪ The request must be made in advance of the scientific meeting. Since the DTC only meets once per month, it is suggested that complete requests be submitted at least six weeks prior to the scientific meeting.
   ▪ A summary of the travel expenses (cost of air fare, hotel price, registration fees, etc.).
   ▪ Students need to include information about any other sources of funding they have applied for, even if the funds have not been awarded yet, including SPH Student Senate funds.

3. Allocations under this policy will of course be subject to the availability of funds for this purpose.
Payment for TA English Program
If a nonnative English-speaking Division student is required by their degree program to fulfill a teaching assistantship position (i.e. Epidemiology PhD students), the Division will pay one-half the cost of instruction the first time the student takes the course (the University's Office of Academic Affairs pays the other half). Students not passing the exam must pay the costs of any additional instruction.

SAS Access
Students can purchase the SAS program for a fee if it is necessary for them to complete research. Additional information on ordering the software is available at http://it.umn.edu/sas-sas-inc. Please note that all of the computers in the student computer lab (466 WBOB) have SAS.

J.B. Hawley Student Research Award
The Division has established the J.B. Hawley Student Research Award, a small grant mechanism to support research projects. This is a wonderful opportunity for students and post-doctoral fellows to obtain funds for their research, gain experience in grant proposal writing, and receive faculty feedback on their ideas. During the academic year, we will have two separate award categories. The standard award is open to all students and post-doctoral fellows; the doctoral award is only open to doctoral students in Epidemiology. We anticipate two rounds of requests for proposals (one per semester). The chair of the Research Awards Committee will distribute detailed e-mail solicitations for applications.

STANDARD AWARD

Who May Apply?
Students currently enrolled in degree programs in Epidemiology, Community Health Promotion, Maternal and Child Health, Clinical Research, or Public Health Nutrition or post-doctoral fellows in Epidemiology. Proposed projects do not have to be thesis or Integrated Learning Experience (ILE) projects, and may be for any research that involves the applicant (e.g., evaluation of a program for an Applied Practice Experience (APEx)). Those who have received previous funding from a Hawley Award will not be eligible for further support until they have submitted the required one-page report for their prior award (see below).

How Much?
$3,500 maximum, including fringe benefits when applicable. PhD students may request a maximum of $7,500 to support thesis research.

How Can It Be Used?
The award may be used to support research activities including supplies and equipment. It cannot be used for stipends or salary support for the applicant.

Please note that before making any expenditure with the award (i.e., ordering, purchasing, hiring, or contracting for services) the applicant must meet with accounting personnel in the Division to ensure that procedures are followed.

How Long?
Normally projects are funded for one year.

DOCTORAL AWARD

Who May Apply?
Students currently enrolled in the doctoral program in Epidemiology. Proposed projects do not have to be thesis projects, and may be for any research that involves the applicant. Those who have received previous funding from a Hawley award will not be eligible for further support until they have submitted the required one-page report for their prior award (see below).

How Much?
$7,500 maximum, including fringe benefits when applicable.

How Can It Be Used?
The award may be used to support research activities including supplies and equipment. It cannot be used for stipends or salary support for the applicant.

Please note that before making any expenditure with the award (i.e., ordering, purchasing, hiring, or contracting for services) the applicant must meet with accounting personnel in the Division to ensure that procedures are followed.
How Long?
Normally projects are funded for one year.

What is the Format for the Proposal?

1. Cover Letter
   Please indicate in the letter whether the project will help support an Integrated Learning Experience (ILE), master’s thesis, PhD thesis, or Applied Practice Experience (APEx).

2. Face Page (1 page)
   a. Title
   b. Investigator information, including name, address, telephone, and e-mail address
   c. Your degree program
   d. Collaborating investigators (faculty, staff, students), if any

3. Research Proposal (4 pages maximum; font: 12-point Times or larger)
   a. Background and Significance (1 page maximum):
      Describe the background and justification for the study and state the research questions/hypotheses.
   b. Research Methods (2 pages maximum):
      Describe the study design and detailed methods. Be sure to include information on each of the following issues (and others, as appropriate):
      • Study population
      • Sample selection and recruitment
      • Measurements
      • Data analysis plan (required for both quantitative and qualitative research)
      • Timeline
      • Sample size (justified by formal statistical calculations or other means)
   c. Human Subjects (no page limit):
      All proposals must address protection of human subjects and have the project approved by the University of Minnesota's Institutional Review Board (IRB) prior to receiving funds. However, a project will be reviewed by the Research Awards Committee prior to receiving final IRB approval.
   d. References (no page limit):
      Citations for articles referenced in the background and significance and research methods portions of the proposal should be listed after the Human Subjects section of the proposal.

4. Detailed Budget (2 page maximum):
   The proposed budget should include precise amounts requested in various categories (e.g., postage, supplies, printing, personnel, etc.). Provide a brief justification for the amount requested in each category and state why these funds are needed to conduct the proposed research. The budget should clearly itemize and justify expenditures. If the request is part of a larger project, the proportion to be supported by this award and the rationale and need for this funding mechanism, should be specified clearly.

   The following items are NOT allowed: stipends or salary for the applicant, computer purchase, publication costs (e.g., page charges, reprints), and presentation costs (e.g., travel to a conference, conference fee).

5. Letter of Endorsement from Faculty Advisor (1 page):
   A primary or adjunct faculty member in the Division of Epidemiology and Community Health must provide a brief letter to accompany the proposal, specifically endorsing the applicant’s request. First, applicants must discuss their proposals with the faculty advisor, who must review the proposal before it is submitted. Then, the faculty advisor’s letter of funding endorsement must state that the faculty member has read and provided input on the proposal. The faculty member must also indicate his/her opinion of the quality and importance of the research.

6. Appendices, if needed (no page limit)

**Submission**
Submit your proposal to the Chair of the Research Awards Committee, Division of Epidemiology and Community Health, Suite 300, 1300 South Second Street, Minneapolis, MN 55454-1015
Review Process
All applications will be reviewed by the Division of Epidemiology and Community Health Research Awards Committee, which includes faculty members representing the major fields. Each proposal will be evaluated according to its scientific and technical merits and public health implications. The most important criteria are (1) importance of the area, (2) quality of proposed research, (3) investigator’s experience and resources to accomplish the project, and (4) relevance to public health.

If you have questions regarding preparation of a proposal, please contact the Chair of the Research Awards Committee. Information regarding the status of human subjects (IRB) applications must be provided to the Committee. Award funds will not be released until Division of Epidemiology and Community Health accounts administration has received notification of Human Subjects Committee approval.

Final Report
A one-page report to the Research Awards Committee on progress and outcome is due on the one-year anniversary date of the award.

Martinson–Luepker Student Travel Award
The Martinson–Luepker Student Travel Award will support Division of Epidemiology and Community Health students pursuing an international Applied Practice Experience (APEX) placement in fulfillment of curriculum requirements for an Applied Practice Experience (APEX) or Integrated Learning experience (ILE) project. Funds will be provided to help support the cost of air fare to the international location. Students may request up to $1500 U.S. Students must apply for this award. As part of this application, students should fully describe their proposed Applied Practice Experience (APEX) project, including location, populations to be worked with and proposed program activities. The application form can be obtained from EPICH Student Services staff epichstu@umn.edu.

Division of Epidemiology and Community Health Student Support Policies

Doctoral Student Support Policy, for those matriculating Fall 2003 or later
1. Students can be accepted to the program with varying levels of support including no guaranteed support, guaranteed support for the initial year, or support for multiple years.
2. Support levels will be set at the level of an NIH Pre-Doctoral Fellow or, if not an NIH Fellow, not more than 50% RA/TA position. This means that those who accept a pre-doctoral fellowship may not also accept an RA or TA position in the Division. Scholarship or block grant awards are not included.
3. Students on fellowships perform their TA requirement as part of the fellowship, with terms to be negotiated with the training director.
4. Requests may be made to the DGS for levels of RA/TA support up to 75% for students who have passed their preliminary examinations and are working on their thesis. These requests are required to show that such additional work does not delay the thesis defense and graduation.
5. Physicians who are licensed to practice medicine in the United States will have an RA/TA stipend set at the doctoral level. Those who are not licensed to practice will be paid at the Masters level RA/TA position stipend.
6. There is no limit on the number of years of support; however, adequate progress toward degree completion is required for continued support.
7. Students may increase support to 75% during the Summer term.
8. This policy only applies to positions held within the Division. For example, a student with a 50% research assistantship in the Division would also be able to hold a 25% research assistantship in the Medical School.

Approved 7/1/03, revised 06/08

Doctoral students matriculating prior to Fall 2003 should see the EpiCH Student Services staff to discuss their student support policy.

Master’s Student Support Policy
No one may hold a graduate assistantship of more than 50% (75% in the Summer) in the Division of Epidemiology and Community Health. Adopted 12/17/03, and applies to students matriculating Fall 2004 and after. This policy only applies to positions held within the Division. For example, a student with a 50% research assistantship in the Division would also be able to hold a 25% position in Medical School because that is not in the Division.
Policy for Graduate Assistant Pay Scale for Post-Baccalaureate Professional Students
Post-baccalaureate professional students in doctoral-level programs (e.g., dental, medical, law, veterinary students) who have completed two years of their professional studies will be paid at the rate of those who have completed a master’s degree. Those who have not completed the first two years will be paid at the rate of those whose highest degree is a bachelor’s degree. This policy is effective beginning Spring semester, 2004. Adopted 12/17/03.

Requesting Letters of Support - 10 Tips for Students
The following tips may help you get a positive—and productive—response when you request a letter of support from a faculty member for a fellowship, an internship, a scholarship, graduate school admission, or a professional position.

1. **FIRST CONTACT: E-MAIL IS OK.** Make the e-mail brief. Mention the opportunity for which you are applying, the deadline, what you are requesting, and what you are willing to send for further information (e.g., CV, bullet points, a draft letter). If there is a chance the faculty member will not remember you, mention where you have met.

2. **THINK AHEAD.** Many faculty members in Epich have 10 or more advisees, so they may not be able to respond immediately to student requests. If they receive a request with short notice, they may not be able to respond positively, so contact them well ahead of deadlines so they can schedule your request.

   **Deadlines:** Clearly convey the deadline for the materials you are requesting. It is also fine to re-contact the faculty member a week before the deadline as a gentle reminder. Such contact should include, in addition to the reminder about the deadline, your reiteration that you are happy to provide additional information about yourself, or the opportunity and details about where and how to submit the reference (in case the original contact information was misplaced).

3. **REQUEST LETTERS FROM PEOPLE WHO KNOW YOU.** A letter from someone who does not know you well may not be a strong letter, as the lack of familiarity is usually reflected in the text. Many requests for references also require individuals to specifically indicate how well they know an applicant. Reviewers may not give much weight to a referral from someone who does not know the applicant well—and they may wonder why the applicant did not select someone who knows her/him well. For example, they could think that either the applicant does not know anyone well OR everyone who knows the applicant well would write a lousy letter—both imagined scenarios are bad.

   **Try to gauge if the person can write a “good” letter for you.** A strategy is to ask this question directly: don’t ask “will you write a letter for me?” Instead, ask “will you write a supportive letter for me?” A hard life lesson is that some faculty members may be unable to strongly recommend you, and it is best to find that out—and respect it—before you agree that the person will write a letter. Most faculty members will reveal any hesitation they have and it is important to listen to it and accept it. A tentative, or a poor, letter can have a strong negative impact on an application.

4. **IF YOU CONTACT SOMEONE WHO DOES NOT KNOW YOU WELL, BE PROFESSIONAL.** An exception to item #3 is when you have to ask Program Directors or Division Heads for letters of support because their support is required by the applicant organization. If you don’t know such people well, and must request a favor, use his/her last, rather than first, name (i.e., Dr. Smith instead of Judy) when you make your first approach. In Epich, you will likely be told to use his/her first name, but your professionalism will be noted and appreciated.

5. **DON’T ASSUME THAT FACULTY MEMBERS KNOW ANYTHING ABOUT THE APPLICANT ORGANIZATION.** There are hundreds of fellowships, scholarships, etc. for which faculty members are asked to write letters. Faculty members have little or no connection with many organizations beyond writing letters for students. They often receive what, to them, are garbled messages, with acronyms instead of full organization names, and find them incomprehensible. Don’t rely on acronyms or assume any knowledge about the opportunity for which you are applying, even if it is at the SPH or UMN.

   **To inform faculty members,** it is fine to e-mail them URLs and PDFs about the applicant organization, but also include a 1-page synthesis of relevant information. You are asking the faculty member to volunteer time: don’t ask him/her to also go to a website and/or open multi-page PDFs. Those materials can be optional—your one-pager should be all your letter writer needs, along with your CV and some guidance about the text of the letter.

6. **DON’T ASSUME FACULTY MEMBERS KNOW YOU WELL ENOUGH TO WRITE A GREAT LETTER OR THAT THEY HAVE TIME FOR A 1-HOUR INTERVIEW TO PREPARE FOR THE LETTER.** A great strategy is to offer to provide bullet points about your qualities, eligibility, and interest in the opportunity that can be used by the faculty member to frame the letter. You may even offer to write a draft letter. You are in the **best** position to draft a successful letter and it is not uncommon to provide such help for letters of reference.

7. **MAKE SURE FACULTY MEMBERS HAVE CONTACT INFORMATION.** Clearly indicate where the letter or rating sheet should be sent! One of the most common—and frustrating—mistakes made by students is to omit this information, resulting in unnecessary contacts, delays, and poor impressions.
8. MAKE SURE YOU ARE ELIGIBLE FOR THE OPPORTUNITY AND THAT YOU INTEND TO APPLY BEFORE YOU ASK FOR A LETTER. Unfortunately, it is common for faculty members to write letters, only to be told by students that they found out they were ineligible or decided not to apply after all.

9. MAKE SURE THE MATERIALS YOU PROVIDE DO NOT HAVE TYPOS AND GRAMMATICAL ERRORS. The written word is influential: we often base our impressions about someone’s intellectual qualities on the quality of his/her writing. While this may not be fair, it is what academics (and others) do. You are asking for a laudatory letter of reference, so make sure that your CV, 1-pager, bullet points/draft letter, are clearly and properly written.

10. THANK THE FACULTY MEMBER FOR WRITING THE LETTER AND FOLLOW-UP. It is surprisingly common for students to not thank a faculty member after an application is complete and even less common for students to let faculty members know if they received the scholarships, fellowships, internships, jobs, etc. for which they applied. Faculty members commit time to letters of reference because they want students to succeed—they are rewarded with thanks and updates.

Division of Epidemiology and Community Health Websites

EpiCH website .......................................................... http://www.sph.umn.edu/academics/divisions/epich/
EpiCH Student Guidebook and Forms .......... www.isph.umn.edu/epich/current-student-forms-and-policies/
Course syllabi .......................................................... http://www.sph.umn.edu/academics/syllabi/
EpiCH faculty information ........................................... http://sph.umn.edu/faculty1/ech/
EpiCH seminar .......................................................... http://www.isph.umn.edu/epich/
EpiCH telephone directory ........................................... http://www.isph.umn.edu/epich/faculty-staff-directory/

2.7 Division Advising Information

Team approach to Advising at the Master’s level
At the master’s level students are advised by a team which includes their academic advisor, staff from the EpiCH Student Services office, an APEX advisor, and the Program Director for their major. The role of the academic advisor is to advise students on things like their career goals and objectives, provide advice for securing an Applied Practice Experience (APEX), and help students with their initial Integrated Learning Experience (ILE) planning. The role of the EPICH Student Services staff is to assist students with course planning, petitions, and to provide general procedural advice. The role of the APEX advisor is to guide the student in the learning agreement process and to help determine appropriate competencies that will be met as well as what products will be acceptable for that placement. The Program Director will meet with students as a group to discuss issues related to the entire major and is also available to assist students with any issues they might be having with the program.

Guidelines for Faculty/Student Interactions
Faculty members often develop close working relationships with students, especially advisees. Often a relationship is formed that provides benefits to both the faculty member and the student. Faculty should be cognizant of the power differential in these types of relationships and set appropriate boundaries. Although faculty members may not intend that a request of a student be an obligation, they should be aware that such requests might place a student in a difficult position. Some students are intimidated by faculty members and may not feel free to decline such requests. Since faculty/student interactions often are situations that are ambiguous, included below are examples to help you think through a variety of situations that you may encounter:

- **A faculty member asking you to drive them somewhere, including the airport, home, or main campus.** Such a request does not fall under a student’s duties. A situation when this may be acceptable is when the student has the same destination.
- **A faculty member asking you to work extra hours or late hours.** Students should be expected to work the hours for which they are paid. Students may volunteer to work extra hours to gain more experience (e.g. grant writing), gain authorship on a paper or help meet a deadline – but should not be expected to work these extra hours.
- **Your advisor asking you to housesit, take care of your children or pets, or help you move.** While some students may not mind house sitting, taking care of children or pets, or helping someone move, others may only agree to do these jobs because they feel obligated or worry that saying no will somehow affect their relationships with faculty
members. To avoid problematic situations, a faculty member may post a flyer requesting a sitter or mover for pay without the faculty member's name attached to the request – ensuring that respondents really want the job.

Faculty members who are uncertain about the appropriateness of requests they have for students should consult with the DTC Chair. Students should talk with their Program Director, DGS, or EpiCH Student Services staff if they have concerns about the appropriateness of requests from faculty members.

The University of Minnesota's Board of Regents policy on Nepotism and Consensual Relationships (including student and faculty relationships) can be found at [http://regents.umn.edu/sites/regents.umn.edu/files/policies/Nepotism%26Personal.pdf](http://regents.umn.edu/sites/regents.umn.edu/files/policies/Nepotism%26Personal.pdf).

**Confidentiality**

Student records—including materials related to advisees—are protected under Federal Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99; 1974) and the Student Data Privacy Act. Student information should be secure—not left in an unlocked location. If advisors have a concern about a particular student, only EPICHSASS staff, appropriate Program Director/DGS, or DTC Chair should discuss the situation and have access to records. Any confidential information shared by a student with a faculty member must remain confidential—whether the student approaches you as an advisor, instructor, Program Director, DGS, or DTC Chair. Talking about individual students in hallways and other public areas should be avoided.

If a faculty member feels he/she must consult with another faculty member about a student, consider talking about the issue without providing the name of the individual student. If the student’s name must be shared, tell the student ahead of time that you intend to talk with the Program Director (or other appropriate person) about the issue in question. Some issues, such as sexual harassment, are governed by law and require faculty members to report the problem to the Division Head. In these situations, explain to the student that you are required to report the incident/problem.

**Sexual Harassment Policy**

In the Division of Epidemiology and Community Health we take harassment and sexual misconduct very seriously. We have all completed the sexual harassment training and therefore we want to let you know that:

- As a University employee, we are required to share information that we learn about possible sexual misconduct with the campus Title IX office that addresses these concerns. This allows a Title IX staff member to reach out to those who have experienced sexual misconduct to provide information about the personal support resources and options for investigation that they can choose to access.

- You are welcome to talk with our staff about concerns related to sexual misconduct. You can also or alternately choose to talk with a confidential resource; the University offers victim-advocacy support professionals, health services professionals and counselors that will not share information that they learn about sexual misconduct.

**Guidelines for Changing Advisors**

**Master’s Students**

At the master’s level, students may change academic advisors if they have serious personality or other conflicts with their assigned advisor. In that case, they should discuss their reasons and their preferences for a different advisor with the program director or the EpiCH Student Services staff. The change will be finalized at the discretion of the program director.

**PhD Students**

Many PhD students shift their courses of study and focus over their graduate careers, but doing so does not necessarily require a change in advisors. Faculty advisors can facilitate students’ academic development, by working directly with them or by encouraging them to gain experience with other faculty members (e.g., through research or teaching assistantships or grant-writing opportunities). Sometimes students work more closely with one (or more) members of their committees than with their advisors. Faculty advisors can also suggest changes in committee membership to accommodate a change in dissertation focus.

Once PhD students have begun work on their dissertation, changing advisors should be rare, and limited to circumstances of personality conflicts, major ethical problems, or substantial shifts in areas of interest. Students wishing to change graduate advisors should consult with the Director of Graduate Studies (DGS). Likewise, faculty who are considering a change in their role as an advisor should consult with the DGS. Changes in graduate advisors should be approved by the DGS and forwarded to the EpiCH Student Services staff who will file the change with the Graduate School.

**Guide to Mission, Definitions and Expectations of Advising**
Mission Statement
The School of Public Health strives to provide advising that promotes collaboration among students, staff and faculty to enhance students’ academic and professional development in the field of public health. The School’s goal is educational and experiential excellence that prepares students for successful careers improving the health of populations.

Defining Advising
The School of Public Health is committed to creating and sustaining high quality advising in the following four areas:

1. Administrative Advising: advising on course planning and scheduling, policies, procedures and benchmarks/milestones of the degree program/major, SPH, and the University.

2. Academic Advising: general guidance on topics related to program/major including, but not limited to program focus (may include identifying appropriate course work options), Integrated Learning Experience (ILE) project selection and career planning.

3. Applied Practice Experience (APEx) /Internship/Practicum Advising: specific and targeted advising for Applied Practice Experience (APEx) /internship/practicum development, placement and completion.

4. Integrated Learning Experience (ILE)/Thesis/Plan A&B/Dissertation Advising: specific and targeted direction on the Integrated Learning Experience project or a PhD dissertation including, but not limited to development, completion and in some cases publication.

Advising Expectations for Students
SPH students are expected to:

- Regularly read and respond to University email (ideally once per day); email is the official mode of communication at the University of Minnesota
- Review program objectives and educational documents at least once per semester, (i.e. Student Guidebook, etc.), or when directed by EPICH Student Services staff or Program Director/DGS; students are responsible for knowing the requirements of the degree program
- Actively contribute to a welcoming and supportive SPH climate
- Initiate meetings with advisor(s) at least once per semester; regularly communicate with faculty advisor(s) and/or EPICH Student Services staff about program progress
- Respond to inquiries from faculty or staff in a timely manner (ideally within 5 – 7 business days)
- Behave in a professional and courteous manner; fulfill educational and advising commitments, such as appointments, project deadlines, etc.

Advising Expectations for Faculty
Faculty advisors are expected to:

- Refer advisee to EPICH Student Services staff for course planning/scheduling, policy and procedural information
- Review program objectives and educational documents at least on an annual basis, (i.e. Student Guidebook, etc.), or when directed by EPICH Student Services staff or Program Director/DGS
- Actively contribute to a welcoming and supportive SPH climate
- Initiate meetings with advisee at least once per semester; regularly communicate with students on program progress
- Respond to student inquiries in a timely manner (ideally within 5 – 7 business days)
- Provide reasonable office hours and/or appointments and be generally available to student inquiries; communicate with students about extended absences or travel
- Serve as a model and example of respectful behavior
- Provide referrals to school and university resources when appropriate (e.g. Student Mental Health Services)