EPIDEMIOLOGY PROGRAM

Policies and Procedures:
Accelerated Master of Science and Master of Public Health Degrees

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Section 1: About the Accelerated MS/MPH degree program

The School of Public Health and Health Sciences in conjunction with the graduate Epidemiology Program offers an accelerated master's degree program to eligible undergraduates. The program is rigorous and demanding and is designed to offer high achieving undergraduate students a quick path to a graduate degree. Students in the accelerated master's program are required to earn credits toward a graduate degree during their last year of undergraduate studies, and complete remaining requirements during their final year of graduate study. Students in the accelerated program in epidemiology have the option of pursuing an MPH (with an MPH Project as a culminating experience) or an MS degree (with MS thesis as culminating experience), as described in further detail in this handbook and in the attached forms.

The Accelerated degrees are also described as “4+1”. This refers to classes that are taken concurrent with completing undergraduate studies (the “4” part of the “4+1”) and those taken as a full-time graduate student (the “+1” part of the program). Completion of the program thus requires successful application to the Accelerated Program to begin studies as well as acceptance to the graduate program to complete studies. Further, though the term “4+1” is used here and elsewhere, when tailored to individual student needs, this may be more accurately described otherwise (for example, as “3.5 + 1.5” for students who will complete undergraduate studies in 3.5 years). Talk with undergraduate or graduate advisors if your circumstance varies from the norm and you have questions.

This handbook contains information specific to the Accelerated Master’s Degree programs, as well as some information generally applicable to MS/MPH students in Epidemiology. However, students are encouraged also to consult the complete Epidemiology Student Handbook for graduate students, which includes information on courses, formatting for the thesis / MPH project, financial aid, and more.

Section 2: Admissions

A) Applying to the program

To apply, students are required to submit a completed Accelerated Master’s Degree Program in Epidemiology Application, unofficial transcript, and two letters of recommendation. Applications are due by January 15th of the Junior year and should be submitted as instructed on the application itself (included at the end of this document, and also found at this link).

Letters of recommendation should come from faculty or an internship/work supervisor. In the application, students should indicate whether they intend to pursue the MPH or MS degree (or are undecided).

The Accelerated Master’s Degree Program in Epidemiology is extremely demanding; the compressed time frame for the degree, high overall credit requirement (42 for the MPH and 45 for the MS), and number of courses for the degree – primarily in epidemiology and biostatistics – result in heavy course loads to complete undergraduate work while taking grad-level classes, as well as during the +1 year. Successful applicants should have demonstrated ability to manage the workload, strong quantitative skills, and excellent writing ability.

B) Eligibility

Any Five College undergraduate student may apply to the program. Students must apply in the fall semester of their junior year. Students must be on track to meet the credit requirements for their undergraduate degree to allow timing/schedule space for enrollment in required graduate classes while completing their undergraduate degree (for more, see Suggested Course sequences in section 3C).
C) MPH vs. MS

The MPH is a professional degree that broadly covers aspects of Public Health. MPH programs are sometimes targeted to students with prior public health experience and/or professional degrees, but are generally appropriate for students who are interested in careers in public health practice. The MS degree program focuses more narrowly on research and epidemiology. The MS is appropriate for students who wish to pursue research-based careers or further education in epidemiologic research.

The logistics/timing of the Accelerated Degree Program adds a measure of complexity to the degree programs as taken more conventionally as 2-year graduate degrees. The necessary sequencing (to complete prerequisites as needed) and the number of courses make the MPH degree simpler to complete as an accelerated degree; whereas, the MS is possible, but with great effort and extra attention to logistics. As noted below and later in this document, the MS is particularly well suited to a 3.5+1.5 plan and is more challenging to complete as a 4+1 degree. In the case of both the MPH and MS, students interested in the program or accepted to the program are strongly encouraged to meet with the Program Coordinator or their advisor for course planning.

D) Applying from the Accelerated Degree in Epidemiology program to Graduate School

Students accepted into the Accelerated Degree Program generally apply to Graduate School by February 1st of their senior (“4”) year. Spring applications follow the standard timing and process for graduate school applications except; however, you may apply directly through SPIRE (i.e. you do not need to apply via SOPHAS). Admission to the Accelerated Degree program does not guarantee admission to graduate school; however, the highly selective admissions process followed for the program makes acceptance to the Graduate program likely. Decisions regarding Graduate School applications will be weighed heavily by Accelerated Degree students’ performance in the graduate level coursework required during their senior undergraduate year.

E) Students accepted to graduate school to complete the “+1” part of the “4+1” degrees

Students will be notified regarding decisions about their applications between March and late April normally. Take note: though accepted students will continue with their progress largely as if they were a second-year grad students, they will not be able to register for graduate courses until June 1st as the University admin moves from considering the students as undergraduate students to graduate students. Students accepted to graduate school should contact their advisor to ensure space is held for them in their “+1 courses” until June 1st, when they are able to register. Typically, the EPI 4+1 Program Coordinator holds a meeting each Spring to discuss how to register for Fall classes in the “+1” year. You should also check the EPI 4+1 Moodle page for relevant information.

F) The 3.5 + 1.5 option

Students on track to potentially complete their undergraduate degrees in fewer than 8 semesters may follow a 3.5+1.5 plan, whereby they apply for the accelerated degree program as normal, in October of their junior year, but apply to graduate studies during the fall semester of their senior year for spring admission, one semester earlier than otherwise. As illustrated in a later section of this handbook, the 3.5+1.5 approach provides a great deal more flexibility in course planning for students in the accelerated degree program. However, because it entails 1.5 years of graduate school rather than just 1, there may be financial implications.
Section 3: Courses

A. General information

Proper course sequencing to complete the degree programs as 4+1 degrees is challenging, particularly for the MS degree related to its higher total credit requirement (45 vs. 42 credits for the MPH). The challenges arise due to the following factors: a maximum of 18 credits of courses can be taken as an undergraduate and counted toward the graduate degree; there are a number of courses offered only once per year (or every 2 years for epidemiology electives) and that have prerequisites; and, there are a large number of course that need to be completed. As a result, it is critical to be thoughtful in planning ahead – considering degree requirements and the timing of course offerings. There are a number of approaches that can be considered to complete both undergraduate and graduate studies in 5 years, including:

- taking classes during the summer
- taking classes out of “normal” sequence
- completing undergraduate degree requirements in 3.5 years and making the accelerated degree a “3.5 + 1.5” plan
- favoring the MPH and its 42-credit requirement over the 45 credit MS degree

A few more details regarding the scheduling complications:
1. EPI 630 is a prerequisite for all epidemiology electives, as well as second and third level epidemiology methods classes (i.e., EPI 632, EPI 700, and EPI 737)
2. BIOSTATS 540 is a prerequisite for BIOSTATS 691F, BIOSTATS 640, and EPI 700, and is offered on campus only once per year in the fall semester
3. BIOSTATS 691F must be taken in the spring of the “4” year because it is offered only in the spring semester and it is a prerequisite for EPI 700, which is offered only in the fall
4. The Public Health core courses for Community Health Education (HPP 601) and Health Policy and Management (HPP 620) are only offered once per year in the fall semester. These courses are prerequisites for some other classes in Health Policy and Promotion (HPP)
5. Typically, a total of 3 graduate-level epidemiology electives are offered each year – one in the fall semester and two in the spring semester
6. For students doing an MS Thesis, EPI 700 and EPI 737 are required classes and are offered only once per year in the fall semester. This has trickle-down ramifications for the timing of other classes that are prerequisites for those classes.

As a result of all of these complications, the following page illustrates various sample course sequences to use as guidance. There may be other possible sequences, so these should not be considered to be exhaustive. Questions are likely, so you are strongly encouraged to work with your faculty advisor or others in making your plans. The following table shows all degree requirements, including courses by number and name. Subsequent tables use only course numbers.
### B. Degree requirements

#### Table 1. Course numbers and names, prerequisites, and the degrees/plans for which they are required

<table>
<thead>
<tr>
<th>Requirement/course</th>
<th>Prerequisites</th>
<th>MPH</th>
<th>Credits</th>
<th>MS</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOSTATS 540 Introduction to Biostatistics</td>
<td>None</td>
<td>X</td>
<td>3 (3)</td>
<td>X</td>
<td>3 (3)</td>
</tr>
<tr>
<td>EPI 630 Principles of Epidemiology</td>
<td>None</td>
<td>X</td>
<td>3 (6)</td>
<td>X</td>
<td>3 (6)</td>
</tr>
<tr>
<td>EPI 600* Research Methods for Epidemiology</td>
<td>None</td>
<td>X</td>
<td>3 (9)</td>
<td>X</td>
<td>3 (9)</td>
</tr>
<tr>
<td>BIOSTAT 640 Intermediate Biostatistics</td>
<td>BIOSTATS 540</td>
<td>X</td>
<td>3 (12)</td>
<td>X</td>
<td>3 (12)</td>
</tr>
<tr>
<td>BIOSTAT 691F Data Management with SAS</td>
<td>EPI 600</td>
<td>X</td>
<td>3 (15)</td>
<td>X</td>
<td>3 (15)</td>
</tr>
<tr>
<td>EHS 565 Environmental Health Practices</td>
<td>None</td>
<td>X</td>
<td>3 (18)</td>
<td></td>
<td>~</td>
</tr>
<tr>
<td>HPP 601 Appl Soc &amp; Beh Theories PH Interventions</td>
<td>None</td>
<td>X</td>
<td>3 (21)</td>
<td></td>
<td>~</td>
</tr>
<tr>
<td>HPP 620 Intro to US Health Care System</td>
<td>None</td>
<td>X</td>
<td>3 (24)</td>
<td></td>
<td>~</td>
</tr>
<tr>
<td>EPI 632 Applied Epidemiology</td>
<td>EPI 630</td>
<td>X</td>
<td>3 (27)</td>
<td>X</td>
<td>3 (18)</td>
</tr>
<tr>
<td>EPI 737 Intermediate Epidemiologic Methods</td>
<td>EPI 630, EPI 632, BIOSTATS 540</td>
<td>~</td>
<td>~</td>
<td>X</td>
<td>3 (21)</td>
</tr>
<tr>
<td>EPI 700 Analysis of Epidemiologic Data</td>
<td>EPI 630, BIOSTATS 540, BIOSTATS 691F</td>
<td>~</td>
<td>~</td>
<td>X</td>
<td>3 (24)</td>
</tr>
<tr>
<td>EPI electives** TBD</td>
<td>EPI 630</td>
<td>3</td>
<td>9 (36)</td>
<td>4</td>
<td>12 (36)</td>
</tr>
<tr>
<td>Other electives** TBD</td>
<td>Varies</td>
<td>~</td>
<td>1</td>
<td>3</td>
<td>3 (39)</td>
</tr>
<tr>
<td>EPI 698 Public Health Practicum</td>
<td>EPI 630, BIOST 540</td>
<td>X</td>
<td>3 (39)</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>EPI 696D Independent Study – MPH Project</td>
<td>EPI 630, BIOST 540</td>
<td>X</td>
<td>3 (42)</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>EPI 699 Master’s Thesis</td>
<td>~</td>
<td>~</td>
<td>X</td>
<td>5</td>
<td>45 (45)</td>
</tr>
</tbody>
</table>

Notes: * EPI 600 is not required if students successfully completed PUBHLTH 413; students will instead take a 3-credit other elective
**See student handbook for coursework that may serve as an EPI ELECTIVE and OTHER ELECTIVE
INFORMATION REGARDING COURSES FOR THE DEGREES

Public Health Core Courses
- EPI 630 Principles of Epidemiology
- BOSTAT 540 Introduction to Biostatistics
- EHS 565 Environmental Health Practices
- HPP 601 Application of Social & Behavioral Theories in Pub Hlth Interventions
- HPP 620 Introduction to the US Health Care System
- EPI 600 Research Methods in Epidemiology

Additional Epidemiology and Biostatistics Courses
- EPI 632 Applied Epidemiology
- EPI 700 Analysis of Epidemiologic Data
- EPI 737 Intermediate Epidemiologic Methods
- BOSTAT 640 Intermediate Biostatistics
- BOSTAT 691F Statistical Computing in SAS

Elective Epidemiology Courses
May include the following:
- EHS 600 Molecular Epidemiology
- EPI 633 Communicable Disease Epidemiology
- EPI 634 Nutritional Epidemiology
- EPI 635 Social Epidemiology
- EPI 636 Epidemiological Assessment
- EPI 639 Cancer Epidemiology
- EPI 640 Reproductive Epidemiology
- EPI 680 Epidemiology of Women’s Health
- EPI 690E Environmental Epidemiology
- EPI 690G Genetic Epidemiology
- EPI 697R Research Ethics

Additional epidemiology electives may be offered/added, and students should check SPIRE and/or consult with their advisor. For MPH Students, other epidemiology courses not required for the degree (e.g., EPI 700 and EPI 737) can fill this requirement. For MS students, questions regarding whether other courses fulfill this requirement will be considered on a case by case basis. As guidance, to fill this requirement courses should be clearly in epidemiological methods and without substantial overlap with other coursework.

Other Elective Courses
Graduate level courses offered at UMass (in SPHHS or otherwise) fulfill this requirement. Epidemiology electives also can count toward this requirement. Other examples include, but are not limited to:
- EHS 590TL Developmental Origins of Disease
- HPP 583 Global Health in the Developing World
- HPP 622 Program Evaluation in Health and Human Service Organizations
- HPP 638 Fundamentals of Women’s Health
- BIOL 568 Endocrinology
Practicum, Seminar, MPH Project, MS Thesis

- EPI 698 Practicum (complete in summer, register for credits in fall) – REQUIRED for MPH students
- EPI 696D Independent Study and/or MPH Project – REQUIRED for MPH students
- EPI 699 Thesis – REQUIRED for MS students

Courses not offered on campus at UMass Amherst

A total of 12 credits can be transferred from other sources, combined. Additionally:
  - A maximum of 6 credits may be completed at Worcester (UMass)
  - A maximum of 6 credits may be transferred from other institutions

For credits to be considered for transfer, students must have earned a grade of B or better, and cannot have applied the credits to a previous degree. All requests for transfer credits need to be discussed and approved with your academic advisor, who may request a copy of the syllabus prior to making a final decision. If possible, request for transfer credits should be made prior to registering for the course, to prevent the student investing time and resources in a class that does not meet program criteria. There is no limit to the number of credits that can be taken through UWW, however, students should be aware that these courses incur additional tuition and fees.

Policy for independent studies

Independent studies are offered at the discretion of faculty. Independent studies can be taken for 1 – 3 credits, in accordance with the number of contact hours associated with each level of credit. Working together, students and faculty should prepare a contract with expectations clearly specified. Independent study is generally taken toward satisfying the “Epidemiology Elective” or “Other Elective” and should be noted as such in tracking forms. A maximum of 3 credits of independent study is generally allowed toward requirements for MS/MPH, but 6 credits may be permitted in some circumstances – talk with your advisor as necessary.

Seminar attendance

Attendance at the regular Epidemiology Seminar Series is strongly encouraged for all students and may be required for some classes, including: EPI 630; EPI 632; EPI 696D; and, EPI 699; Course instructors of those classes will provide relevant details.
C. Sample course sequences

### MPH 4+1 degree, including EPI 600

<table>
<thead>
<tr>
<th>Courses</th>
<th>Senior, Fall</th>
<th>Senior, Spring</th>
<th>Summer</th>
<th>MPH, Fall</th>
<th>MPH, Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPI 600 EPI 630</td>
<td>EPI 632 BOSTAT 540</td>
<td>EPI 632 BOSTAT 691F</td>
<td>Complete practicum; register for EPI 698 in Fall</td>
<td>EHS 565 HPP 601 EPI elective (#1) EPI 698 (practicum)</td>
<td>EPI elective (#2) EPI elective (#3) EPI 696D (project)</td>
</tr>
<tr>
<td>BOSTAT 540</td>
<td>BIOSTAT 640</td>
<td>BIOSTAT 691F</td>
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<tr>
<td></td>
<td>Complete practicum; register for EPI 698 in Fall</td>
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</tbody>
</table>

| Credits         | 9/9           | 9/18           | 0/18   | 15/33     | 9/42        |

*Credits shown as semester/cumulative

### MPH 4+1 degree, waiving EPI 600 given prior successful completion of PUBHLTH 413

<table>
<thead>
<tr>
<th>Courses</th>
<th>Senior, Fall</th>
<th>Senior, Spring</th>
<th>Summer</th>
<th>MPH, Fall</th>
<th>MPH, Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPI 630 EHS 565</td>
<td>EPI 632 BOSTAT 540</td>
<td>EPI 632 BOSTAT 691F</td>
<td>Complete practicum; register for EPI 698 in Fall</td>
<td>EHS 565 or HPP 601 EPI elective (#1) EPI 698 (practicum)</td>
<td>EPI elective (#2) EPI elective (#3) EPI 696D (project) Other elective</td>
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<tr>
<td>or HPP 601</td>
<td>BIOSTAT 640</td>
<td>BIOSTAT 691F</td>
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</table>

| Credits         | 9/9           | 9/18           | 0/18   | 12/30     | 12/42       |

*Credits shown as semester/cumulative

### MS 4+1 degree, including EPI 600

<table>
<thead>
<tr>
<th>Courses</th>
<th>Senior, Fall</th>
<th>Senior, Spring</th>
<th>Summer</th>
<th>MS, Fall</th>
<th>MS, Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPI 600 EPI 630</td>
<td>EPI 632 BOSTAT 540</td>
<td>EPI 632 BOSTAT 691F</td>
<td>EPI 700 EPI 737 EPI Elective (#1) EPI Elective (#2) EPI 699 (2 credits) SPHHS 600 (1 credit)</td>
<td>EPI elective (#3) EPI elective (#4) EPI 699 (3 credits) Other elective</td>
<td></td>
</tr>
<tr>
<td>BOSTAT 540</td>
<td>BIOSTAT 640</td>
<td>BIOSTAT 691F</td>
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</tbody>
</table>

| Credits         | 9/9           | 9/18           | 0/18   | 15/33     | 12/45      |

**Credits shown as semester/cumulative

### MS 4+1 degree, waiving EPI 600 given prior successful completion of PUBHLTH 413

<table>
<thead>
<tr>
<th>Courses</th>
<th>Senior, Fall</th>
<th>Senior, Spring</th>
<th>Summer</th>
<th>MS, Fall</th>
<th>MS, Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPI 632 EPI 630</td>
<td>EPI 632 BOSTAT 540</td>
<td>EPI 632 BOSTAT 691F</td>
<td>EPI 700 EPI 737 EPI Elective (#1) EPI Elective (#2) EPI 699 (2 credits) SPHHS 600 (1 credit)</td>
<td>EPI elective (#3) EPI elective (#4) EPI 699 (3 credits) Other elective</td>
<td></td>
</tr>
<tr>
<td>BOSTAT 540</td>
<td>BIOSTAT 640</td>
<td>BIOSTAT 691F</td>
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</tr>
</tbody>
</table>

| Credits         | 9/9           | 9/18           | 0/18   | 15/33     | 12/45      |

**Credits shown as semester/cumulative

Students may wish to enroll in graduate courses offered through UWW over the summer in order to lighten their course load during the “+1” year. Typically, the following courses are offered during the UWW summer sessions: EPI 632 (Applied Epi), EPI 634 (Nutritional Epi), EPI 638 (Fundamentals of Women’s Health), as
well as other EHS and HPP courses. While this is not required, many students find that taking summer courses is helpful, especially those who are in the MS program and will complete a thesis during their “+1” year.

Often 4+1 students have sufficient credits to complete their undergraduate degree during the fall semester of their “4” year. In these cases, students essentially follow a “3.5+1.5” program and can take additional graduate courses during their first spring semester. Please contact the EPI 4+1 Program Coordinator and your academic advisor if you are interested in pursuing this option.
Section 4: Links / additional information

All 4+1 students are automatically enrolled in the EPI 4+1 Program Moodle Page. Please refer to this page frequently, as it includes important information about courses, advising, and graduation requirements.

Information and documentation on the Epidemiology Accelerated Degree Program is available on our website.

MPH Tracking Form

MS Tracking Form

Epidemiology MPH Practicum Student Handbook

More information regarding the graduate program including about financial aid, travel funding, the MS thesis and MPH project, relevant forms, and more, is available in the Epidemiology Graduate Student Handbook.