

STUDENT HANDBOOK

DEPARTMENT OF INFECTIOUS DISEASES AND MICROBIOLOGY GRADUATE PROGRAMS (Version October 2011)

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INTRODUCTION

Students – Welcome to the Department of Infectious Diseases and Microbiology! This **Student Handbook** will be an important resource as you navigate through the components of the graduate program toward your objective of completing your degree. The information provided in this document is meant as a guide and includes specific details about the requirements for completion of your degree. It should be your first source of information regarding your coursework, preliminary and comprehensive examinations, and requirements for graduation. Be sure to always consult this document first when you have a question. Keep in mind that policies may change. The department will make efforts to keep you informed of any changes in requirements, procedures, or policies that arise and that may impact the completion of your degree. Please make every effort to attend information sessions, departmental retreats, and other activities where information will be shared about changes, new initiatives, and opportunities for students.

Faculty – This document is meant to serve as the requirements, policies, and procedures guide for the operations of our graduate program. Please use it as resource while serving as the major advisor for IDM graduate students.

Students & Faculty – Be aware of and adhere to the academic integrity policies of the **University of Pittsburgh**. The complete Guidelines on Academic Integrity are available online at <http://www.provost.pitt.edu/info/acguidelinespdf.pdf>.

ALL IDM STUDENTS ARE BOUND BY THE REGULATIONS BELOW

Academic Integrity:

Students in this course are expected to comply with the University of Pittsburgh's Policy on Academic Integrity. Any student suspected of violating this obligation for any reason during the semester will be required to participate in the procedural process, initiated at the instructor level, as outlined in the University Guidelines on Academic Integrity.

Disabilities:

If you have a disability that requires special testing accommodations or other classroom modifications you need to notify both the instructor and Disability Resources and Services no later than the second week of the term. You may be asked to provide documentation of your disability to determine the appropriateness of accommodations. To notify Disability Resources and Services, call 412-648-7890 (Voice or TTD) to schedule an appointment. The Office is located in 216 William Pitt Union.

Cell Phones, Pagers, and Recording Devices

Please place your cell phone/pager on vibrate. Students are directed to step outside the classroom prior to answering your cell phone or to make any calls. Permission is given to record lectures for personal use only. Permission **is not** granted to post recorded lectures to websites, facebook or other electronic media, or to forward recorded lectures to people not taking as specific GSPH course.

Nondiscrimination

The University of Pittsburgh prohibits discrimination or harassment on the basis of race, color, religion, national origin, ancestry, sex, age, marital status, familial status, sexual orientation, disability, or status as a disabled veteran or a veteran of the Vietnam era.

DOCTOR OF PHILOSOPHY (PhD) PROGRAM

I. LEARNING OBJECTIVES

Upon completion of the PhD degree, the graduate will be able to:

1. Demonstrate knowledge of the molecular biology of hosts and pathogens and how pathogenesis of infectious diseases evolves from the interactions of organisms on a molecular level.
2. Demonstrate comprehensive knowledge of the mechanisms of innate and acquired immunity and the role of immune functions in health and disease.
3. Demonstrate an ability to analyze and interpret data from scientific publications in the field of molecular biology, microbiology, immunology, or infectious diseases.
4. Show an ability to think independently and demonstrate comprehensive knowledge in a specific area of microbiology related to the student's dissertation work.
5. Conduct independent laboratory-based research leading to a first author publication in a professional peer-reviewed journal.
6. Write and defend the merits of a dissertation in a field of their research.

II. SUMMARY OF REQUIREMENTS

A. Courses

1. Department Required Courses

(* = Core course required by GSPH)

(** = Requires appropriate prerequisite course(s) and/or co-requisite course(s) - See Appendix B pg. 42)

Course Number	Course Name	Credits
IDM 2001	Molecular Biology of Microbial Pathogens	3
IDM 2002**	Molecular Virology	2
IDM 2003	Host Response to Microbial Infection	2
IDM 2004	Viral Pathogenesis	2
IDM 2021	Special Studies in Microbiology (6 semesters required)	Varies 1-15
IDM 2023	Microbiology Laboratory	2
IDM 2025	Microbiology Seminar (4 semesters required)	1
IDM 2420**	Experimental Virology	1
BIOST 2041*	Introduction to Statistical Methods I	3
INTBP 2290	Scientific Ethics	1
EPIDEM 2110*	Principles of Epidemiology	3
EPIDEM 2161**	Methods of Infectious Disease Epidemiology	1
MSMVM 3410	Microbial Pathogenesis	2

2. GSPH Required Courses

(* = Core Course required by GSPH)

Course Number	Course Name	Credits
PUBHLT 2011*	Essentials of Public health	3
PUBHLT 2022*	Public Health Grand Rounds (2 semesters required)	0

3. Elective Courses

(** = Requires appropriate prerequisite course(s) and/or co-requisite course(s) - See Appendix B pg. 42)

Six (6) elective credits must be completed. The next page has some suggestions; however, you are strongly encouraged to identify appropriate electives (offered at GSPH or other schools at Pitt) that are most related to your research area.

Advisors and course coordinators can approve other electives.

Course Number	Course Name	Credits	Semester Offered
MSIMM 2210	Comprehensive Immunology	2	Spring
MSIMM 2230**	Experimental Basis of Immunology	2	Spring
MSMVM 3440	Vaccines and Immunity	2	Spring
IDM 2032	Human Diversity and Public Health	2	Fall
IDM 2038	Prevention, Treatment, and Control of Global Infectious Diseases	3	Spring
EPIDEM 2160**	Epidemiology of Infectious Disease	2	Fall
EPIDEM 2180**	Epidemiological Methods	2	Spring
EPIDEM 2260 **	Epidemiological Basis for Disease Control	2	Fall

B. Required Milestone Examinations

1. Doctoral Preliminary Examination

Each student must pass an oral preliminary examination designed to test their ability to analyze and to interpret a scientific paper in the field of molecular biology, microbiology, immunology or infectious diseases, as well as to demonstrate the comprehensive understanding of associated broader concepts. A student must take the examination during the month of June in the first year of study. In the event of a failure, a student may apply to the Chair of the Department for a re-examination. Students who are not permitted to retake the examination or who do not pass the re-examination will be released from the program. **NOTE: According to University policy, students are not permitted to take the examination unless their cumulative GPA is 3.0 or higher.** One week in June is identified during the academic year so faculty and students can block this time off to ensure all exams are scheduled and held in a timely fashion. It is expected that all students will take their exam during this week. See *Examination Requirements* for additional information.

2. Doctoral Comprehensive Examination

Each student must pass a comprehensive examination that will consist of an oral examination covering the selected topic of their research as well as the broader concepts in infectious diseases, immunology, virology, and related areas, as well as research methods in these areas. The exam is held in the month of July at the end of the second year of study with a final grade of pass or fail. In the event of a failure, a student may apply to the Chair of the Department for a re-examination. Students who are not permitted to retake the examination or who do not pass the re-examination will be released from the program. **NOTE: According to University policy, students are not permitted to take the examination unless their cumulative GPA is 3.0 or higher.** One week in July is identified during the academic year so faculty and students can block this time off to ensure all exams are scheduled and held in a timely fashion. It is expected that all students will take their exam during this week. See *Examination Requirements* for additional information.

C. Research

1. Selection of Research Topic and Major Advisor

Each PhD student must choose an area of research and an appropriate faculty advisor prior to the summer term of their first year. To assist in the selection of a research advisor and laboratory, the Department operates a schedule of laboratory rotations during the first year in the graduate program. Faculty members who are able to provide semester long rotations to first year students, and a four

year position for second year doctoral students, give a presentation of their research focus to new students early during the fall semester of the first year.

2. Submission and Approval of Research Proposal

After passing the doctoral comprehensive exam, the student must submit a research proposal to their dissertation committee for approval. Since the comprehensive examination will be held in July, the **first dissertation committee meeting must be held by mid-December**. Upon approval of the research proposal, which will be done at the first committee meeting, the student will continue to work towards completion of the dissertation work. **Please note: Prior to the first committee meeting, students must submit their research proposal to all dissertation committee members two (2) weeks in advance.**

3. Yearly Dissertation Committee Meetings (policy updated August 2007)

It is required that the student present a concise progress report of their research every 12 months for review by the dissertation committee at an official committee meeting. **Please note: Prior to the committee meeting, students must submit their progress report to all dissertation committee members two (2) weeks in advance.**

All students in their second year and above are required to hold a dissertation committee meeting in the fall term (policy updated August 2009). The format is flexible, but should include at minimum a narrative and tables/figures of the research data. A minimum of four dissertation meetings (one/year) are required by the graduate program prior to graduation. However, if the student and/or advisor feel the need to have more than one meeting per year, you are encouraged to schedule additional committee meetings. If a student does not complete their degree program in five (5) years, upon beginning their 6th year of study they will be required to hold dissertation committee meetings every 6 months. In the rare instance that a student enters into a 7th year of study, they will be required to hold dissertation committee meetings every 4 months.

4. Fourth Year Seminar (policy instituted August 2008)

As part of the Departmental Research Series and Journal Club, all fourth year PhD students will be required to give a seminar on their work in the spring near the end of the fourth year. The presentation will be evaluated by the faculty in attendance. Attending faculty will be provided an evaluation form prior to the seminar and the Director of the IDM PhD program will compile and review these evaluations and discuss them with the student. The evaluation criteria will include presentation skills, presentation organization, graphics, clarity in word choice and diction, introduction and summary, etc., with emphasis on the presentation. Although input is regularly provided from the student's dissertation committee on the project, experimental design, data, analyses, approaches, and feasibility, it nonetheless is likely that feedback on these aspects of the content might also be provided.

5. Publication of Papers (policy instituted August 2005)

It is required that students have two papers **PUBLISHED** or in **PRESS** at the time of their dissertation defense. One of these papers must be a first author publication. Dissertation committee should monitor student's progress towards paper, so that they can meet this requirement on time.

6. Dissertation Defense

Upon completion of the dissertation work, the student will present his/her work in an open seminar and defend their dissertation in a closed oral examination with their dissertation committee. The defense must be held in the GSPH. The student must work with the IDM Student Services Coordinator at least two months in advance of the anticipated defense date to coordinate the announcement of the defense and the location of a suitable room. It is the student's responsibility to find an appropriate date for the defense, and all efforts should be made to consult the calendars of the Department Chair and Director of IDM Graduate Programs so they are aware of the defense and can attend it. See *Dissertation Requirements* for additional information. Dissertation defense date should be well before the graduation date, so that students have plenty time to correct/edit the dissertation following close door committee meeting.

7. **Additional Policies and Regulations**

The University's policies related to doctoral PhD programs can be found at <http://www.pitt.edu/~graduate/regphd.html>. Students are advised to read this information.

III. **GSPH REGULATIONS FOR PhD STUDENTS**

See [Graduate and Professional Bulletin of the University of Pittsburgh](#) and [GSPH Bulletin](#)

- A. All students must choose their dissertation mentor from the IDM primary and secondary faculty. Only in unusual circumstances may a student petition to have their IDM graduate research project mentored by a non-IDM faculty member. This request will be subject to review and approval by the Director of IDM Graduate Programs and the Department Chair.
- B. Credit requirement: a minimum of 72 credits of graduate study is required for doctoral degrees in the Graduate School of Public Health.
- C. A grade point average of at least a B (GPA = 3.0) and a least a satisfactory (S) must be maintained. **A student with full graduate status is automatically placed on probation whenever their cumulative graduate GPA falls below 3.0.** When a student's QPA falls below 3.0 the student, advisor, program director and department receive notice from the school's Student Performance Committee. If a student has a cumulative GPA below 3.0 for two full consecutive terms, they are likely to be dismissed from the program. Students must have a cumulative GPA of 3.0 or above to be eligible to take the preliminary and comprehensive examinations, and to graduate. A doctoral student receiving a grade lower than B (i.e., 3.0 grade points) in any graduate course will be required to take the course again and achieve a grade of B or higher.
- D. A grade of B or better must be maintained for all school wide core courses required in a student's academic program (see summary of requirements above). If a grade of C is earned the GSPH Educational Policies and Curriculum Committee recommends that the student and advisor meet to discuss the grade and that the student be strongly encouraged to re-take the core course. However, this final decision is up to the advisor and the student. If a grade below a C is earned, that student must repeat the course, according to GSPH policy.
- E. In the preliminary examination, the student must demonstrate an ability to analyze and interpret data as well as breadth and depth of understanding of associated concepts.
- F. In the comprehensive examination, the student must demonstrate mastery of the general field of doctoral study, acquisition of both breadth and depth in the area of specialization within the general fields, and the ability to use the research methods of the discipline. (*Taken from Univ. Regulations Governing Graduate Study at the University of Pittsburgh, Oct. 1991*).
- G. Normally, full-time students enroll for no more than 9-12 credits per term. For those who apply for federal loans, federal regulations require a student to complete the degree within a maximum time frame (no more than 150% of required credits), to have completed (receive the final grade) for at least 67% of the total # of credits attempted at any point in time, and to maintain a satisfactory grade point average. In other words, you cannot accumulate more than 150% of the school required credits, which is translated into 108 credits, before graduation.
- H. At least one-half of the credits earned in a doctoral degree program must be at the graduate level (the 2000 or 3000 series). **No courses below 1000 or from 7000-7999 may be applied toward graduate requirements.**
- I. Doctoral degrees are conferred only to those students who have completed all course requirements with at least a 3.0 GPA, completed a successful dissertation defense, and all other requirements for graduation.
- J. A student who has completed all course requirements for a graduate degree but has not fulfilled other requirements (e.g., writing of a dissertation) is required - if University facilities or faculty time are being used - to register for at least one credit or full-time dissertation research (FTDR) each term, or for a greater number of credits as the school or department considers appropriate.
- K. Full-time doctoral students should complete their degree within five (5) years after admission to the program.

- L. Two hard bound copies of the approved dissertation are required to be submitted, one each to the faculty advisor and the IDM academic office. The finalized electronic dissertation (ETD) must also be submitted to the IDM academic office in addition to the GSPH Office of Student Affairs.

IV. SUGGESTED SEQUENCE OF COURSES

1st Year

Fall Term

Course Number	Course Name	Credits
IDM 2001	Molecular Biology of Microbial Pathogens	3
IDM 2003	Host Response to Microbial Infection	2
IDM 2021	Special Studies in Microbiology (Lab Rotation I)	4
IDM 2023	Microbiology Laboratory	2
IDM 2025	Microbiology Seminar	1
PUBHLT 2022	Public Health Grand Rounds	0
		TOTAL 12

Spring Term

Course Number	Course Name	Credits
IDM 2002	Molecular Virology	2
IDM 2021	Special Studies in Microbiology (Lab Rotation II)	6
IDM 2025	Microbiology Seminar	1
IDM 2420	Experimental Virology	1
MSMVM 3410	Microbial Pathogenesis	2
PUBHLT 2022	Public Health Grand Rounds	0
Elective(s)	See list of recommended electives	1-3
		TOTAL 13-15

Student chooses advisor after completion of two (2) laboratory rotations.

Summer (*Students cannot take more than 6 credits during the summer term, unless approved by their advisor.*)

Course Number	Course Name	Credits
IDM 2021	Special Studies in Microbiology (Research)	2
EPIDEM 2110	Principles of Epidemiology	3
INTBP 2290	Scientific Ethics	1
		TOTAL 6

Doctoral Preliminary Examination in JUNE

2nd Year

Fall

Course Number	Course Name	Credits
IDM 2004	Viral Pathogenesis	2
IDM 2021	Special Studies in Microbiology (Research)	3-8
IDM 2025	Microbiology Seminar	1
BIOST 2041	Introduction to Statistical Methods I	3
Elective(s)	See list of recommended electives	1-6
		TOTAL 10-20

Spring

Course Number	Course Name	Credits
IDM 2021	Special Studies in Microbiology (Research)	9-11
PUBHLT 2011	Essentials of Public Health	3

IDM 2025	Microbiology Seminar	1
EPIDEM 2161	Methods of Infectious Disease Epidemiology	1
Elective(s)	See list of recommended electives	1-3
		TOTAL 15-19

Summer (*Students cannot take more than 6 credits during the summer term, unless approved by their advisor.*)

Course Number	Course Name	Credits
IDM 2021	Special Studies in Microbiology (Research)	3-6
Elective(s)	See list of recommended electives	1-3
		TOTAL 4 - 9

Doctoral Comprehensive Examination in JULY

3rd, 4th, and 5th Years

Fall

Course Number	Course Name	Credits
FTDR 3999	Full-time dissertation study	0
Elective	See list of recommended electives	1-3

Spring

Course Number	Course Name	Credits
FTDR 3999	Full-time dissertation study	0
Elective	See list of recommended electives	1-3

Summer

Course Number	Course Name	Credits
FTDR 3999	Full-time dissertation study	0

Dissertation Defense

V. EXAMINATION REQUIREMENTS

A. Doctoral Preliminary Examination

The purpose of the PhD preliminary examination is to determine the suitability of the student as a candidate for progression to the second year of the PhD program. Each PhD student must pass the preliminary exam in order to continue in the PhD program. **According to University policy, a cumulative GPA above 3.0 is required to be eligible to take this milestone examination.**

Selection and Establishment of the Examination Committee

The PhD preliminary examination is taken towards the end of the first year of study, typically in early June. The committee should be comprised of at least three members. The Chair of the committee must be from the Department of Infectious Diseases and Microbiology. The composition of the committee must represent two GSPH departments, at least half of the committee must hold primary appointments in GSPH, and at least half must be of graduate faculty status (*see Appendix D pg. 44-45*). The dissertation adviser will not be a member of this committee, nor will he/she attend. The faculty coordinator of the PhD preliminary examination will work with the IDM Student Services Coordinator and the Director of IDM Graduate Programs to establish these examination committees. Following the establishment of the committee, the coordinator nominates the committee to the Dean's office with the assistance of the IDM Student Services Coordinator. The committee will conduct the examination within four weeks of the Dean's Office's notification. Students will be notified of their committee members and will be provided further instructions by the examination coordinator.

Examination Format

The chair of the examination committee and the student (with the help of the faculty coordination of the preliminary exam if necessary) will select a recently published paper (within one year of the examination) that does not directly pertain to the student's anticipated dissertation work. The student

shall prepare a **critique** of the paper for oral presentation. The exam consists of the oral presentation of the data with figures from the paper along with the **critique** (no more than 30 minutes) followed by a series of questions from the committee members designed to determine if there is a solid understanding of the background of the study, actual data, the potential flaws, the advantages and limitations of techniques involved, and the implications of the results for the field. Additional questions can also be anticipated that seek to probe the student's comprehensive understanding of the broader concepts associated with the paper, from their courses, and of current importance in the field. The committee shall vote pass/fail with a simple majority opinion sufficient for a passing grade. In the event of a failing grade, the student may appeal to the Department Chair to be allowed one re-examination. In the event of a second failing grade, the student will be released from the IDM graduate program.

B. Doctoral Comprehensive Examination

The purpose of the comprehensive examination is to test the student's ability to think independently and demonstrate comprehensive knowledge in the broad area of infectious diseases and related sub-disciplines. This exam will occur in July of the second year of the program. In the comprehensive examination the student will be required to demonstrate comprehensive knowledge in the areas related to infectious diseases, including but not limited to principles and methods in immunology, virology, pathogenesis of infectious diseases, cell biology, and molecular biology. The University of Pittsburgh's regulations on doctoral study can be found at <http://www.pitt.edu/~graduate/regphd.html>, and include the following statement:

"The Comprehensive Examination should be designed to assess the student's mastery of the general field of doctoral study, the student's acquisition of both depth and breadth in the area of specialization within the general field, and the ability to use the research methods of the discipline."

A student who obtains an MS degree in the Department and then enters the PhD program must take the comprehensive examination within one (1) year of matriculation. The comprehensive examination will be administered after the student has completed most of their course work and has decided on the general area of their research and has chosen a major advisor. An informal and instructional meeting will be held approximately three (3) months prior to the scheduled exam date.

Examination Format (policy changed March 2010)

The examination format is structured to consist of two components. In the first component, the student will write a short (seven pages) proposal based on their current research project. This proposal (details below) must be approved by the examination committee prior to holding the oral examination. The second component of the examination is the oral examination which will have two parts, the first being questions related to the proposal and project, and the second being broader comprehensive questions.

At the beginning of an oral examination, and in the absence of the student, the examination committee Chair (or a person designated by them) will briefly address the committee, communicating the ground rules for the examination. Students will then give a 15 minute presentation to introduce his/her research project using his/her medium of choice (i.e. PowerPoint, chalkboard, etc.)

The first hour of the examination will focus on the student's project proposal, including but not limited to the rationale, background, preliminary data, approaches, methods, reasoning, interpretation, and anticipated findings. Then the student will be examined on their comprehensive knowledge of those areas related to infectious diseases and related sub-disciplines.

It will be the panel's task to evaluate the student's comprehensive understanding of overall concepts, details, and methodologies related to their proposal. Additionally the students will be evaluated to

understand the comprehensive knowledge on overall infectious diseases and key sub-disciplines. At the end of the oral examination, the panel will vote in private to pass or fail the student. A simple majority shall prevail. There will be no conditional pass/fail decision. After the panel vote, the panel will immediately notify the student of the decision and the Chair will provide an evaluation of the student's performance. The Chair of the panel will also notify the Coordinator of the Doctoral Comprehensive Examinations of their decision and submit a written critique of the student's performance. Students and their dissertation advisors will be notified of the exam outcome by letter from the Coordinator of the Doctoral Comprehensive Examinations. A "pass" will be warranted when the student demonstrates both breadth and depth in their understanding of aspects of their field as noted above. **A student who fails the comprehensive examination may petition the Department Chair to be allowed to re-take the examination. Should the student fail the re-examination, they will not be allowed to continue in the IDM graduate program.**

Project Proposal

The project proposal will be in the form of a mini-grant application limited to seven (7) pages. The format will follow the instructions for an NIH R21 application. A useful link is the following (page I-22): http://grants1.nih.gov/grants/funding/424/SF424_RR_Guide_General_Adobe_VerB.pdf.

The proposal will consist of the following:

- 1 page with a brief paragraph overview and then a list of the specific aims (2 or 3 aims)
- 6 pages to include
 - A description of the significance of the project and of the anticipated findings
 - A description of the innovation of the studies
 - Preliminary data
 - Research design and methods by specific aim.

The proposal is to represent the student's ideas and original writing, although feedback from advisor is allowed and encouraged. The studies proposed should include the student's current project, but are not limited to what is currently being studied. Experiments and ideas can be explored in this proposal that might not be performed by the student, but which are nonetheless interesting, important, and of sound rationale. During the informational meeting to be held typically in April, advice on writing the proposal will be provided. This proposal is not a dissertation proposal, but could very likely serve as an early version of one.

Re-examinations

In the case of a re-examination, the committee will consist of at least three members. The Chair of the committee must be from the Department of Infectious Diseases and Microbiology. The composition of the committee must represent two (2) University departments, at least half of the committee must hold primary appointments in GSPH, and at least half must be graduate faculty. It is deemed desirable that at least one member from the original panel of examiners also serve on the second panel.

VI. DISSERTATION REQUIREMENTS

A. Doctoral Dissertation

Dissertation Committee

The members of the dissertation committee are selected by the student in conjunction with their faculty advisor. The Graduate School of Public Health and the University of Pittsburgh have established regulations for the composition of the committee. See **Appendix D (pg. 44-45)** for the GSPH regulations governing the composition for the dissertation committee. Once the committee members are selected the student is responsible for notifying the IDM Student Services Coordinator of the proposed committee members. A memo requesting approval of the student's committee is sent to the Assistant Dean for Student Affairs at GSPH. **Committee meetings cannot be held until the committee is approved.** The IDM Student Services Coordinator will notify the student and their

faculty advisor upon approval. The student is responsible for scheduling the committee meetings. If a conference room or audio-visual equipment is needed, the student must contact the IDM Student Services Coordinator in advance of the meeting to reserve the room and/or equipment. Regardless of whether the student requires assistance for the meeting, they must notify the IDM Student Services Coordinator of their meeting date to allow proper keeping of departmental records and to ensure that the appropriate paperwork is completed at the meeting. The primary responsibilities of the dissertation committee are to advise the student in the effective analysis of a research problem and to approve a body of original research of sufficient quality to form the basis for the PhD dissertation.

First Dissertation Committee Meeting - Dissertation Proposal

After passing the doctoral comprehensive exam, the student must submit a research proposal to their dissertation committee for approval. The comprehensive examination is usually held in July, so the **first dissertation committee meeting must be held by mid-December**. This meeting will satisfy the following GSPH graduation milestones: dissertation overview approved, fulfilled research requirements, and admitted to candidacy. Upon approval of the research proposal, the student will continue to work towards completion of the dissertation work. **Please note: Prior to the first committee meeting, students must submit their research proposal to all dissertation committee members two (2) weeks in advance.**

Information to include in proposal:

- A. Project significance and background
- B. Specific aims
- C. Preliminary data
- D. Research methods/design

Proposal Format:

- A. 6-10 pages
- B. Double spaced
- C. Times new roman or Arial
- D. 1" margins

Continuing Dissertation Committee Meetings- Progress Reports

It is required that the student present a concise progress report of their research at least every 12 months for review by the dissertation committee at an official committee meeting. This will be held in the fall semester of each year. **Please note: Prior to the committee meeting, the student must send the progress report to all dissertation committee members two (2) weeks in advance.**

The yearly report will include:

- A. Project Background and Significance
- B. Specific Aims
- C. Updated Results/Data
- D. Research Methods

A minimum of three dissertation meetings are required by the graduate program prior to graduation (once per year). However, if the student and/or advisor feel the need to have more than one meeting per year, you are encouraged to schedule additional committee meetings. If a student does not complete their degree program in five (5) years, upon beginning their 6th year of study, they will be required to hold a minimum of two (2) dissertation committees in that 6th year. In the rare instance that a student enters into a 7th year of study, they will be required to hold a minimum of three (3) dissertation committee meetings in that 7th year.

Dissertation Format

The student's dissertation must provide evidence of original scholarly research of sufficient quality to be published in a leading scientific journal. The student's dissertation committee will authorize the student to begin writing the dissertation. The style and format of the dissertation must conform to the standards set forth by the Graduate Council as shown below.

The dissertation will contain:

- A. Title Page
- B. Abstract
- C. Introduction (including related literature review)
- D. Hypothesis
- E. Specific Aims
- F. Materials and Methods
- G. Results
- H. Discussion
- I. Implication to public Health
- J. Literature Cited (follow ASM Journal style)

Note: *Two published or in press papers are required by the IDM graduate program for graduation of PhD students (effective for classes entering fall of 2005 and after), one of which must be a first author publication.*

Typically items D and E are combined into one brief chapter. In case students wish to substitute items F and G with published or submitted manuscripts of their dissertation work, they should use the following format. If the previously published articles are included in the results section, they must be presented in a manner consistent with the remainder of the text and they must generate one contiguous document: i.e., with identical typeface, margins, and consistent sequential numbering of tables, figures, and footnotes. Bibliographic citations should be integrated with those for the rest of the document and presented in the literature cited section. Separate reference sections should be included at the end of each manuscript in the results section. Additional results, not included in the publications can be included as a separate chapter in the results section, although this is not the only way they can be appropriately included in the dissertation. The discussion should include the overall conclusions and implications of the results (published and unpublished). The future direction of the project, based on the results, should also be mentioned and deeply reflected upon in the discussion section.

The dissertation advisor and preferably one member of the dissertation committee will read preliminary drafts of the dissertation and will approve the final copy for submission to the dissertation committee.

The final copy must be submitted to the dissertation committee at least two weeks prior to the dissertation defense date. Noncompliance with this policy could necessitate rescheduling of the defense date.

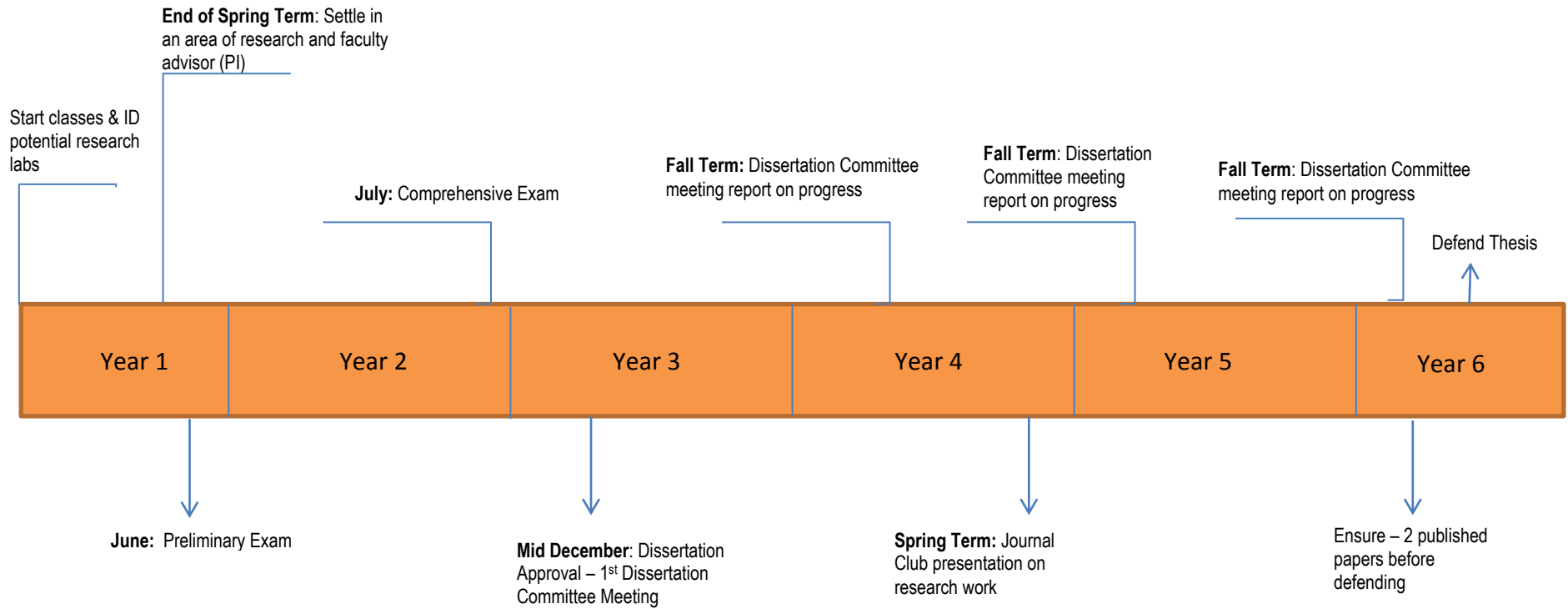
The dissertation defense consists of a formal public seminar on the subject of the dissertation. This is followed by a closed door examination of the student by the dissertation committee members. Approval of the dissertation requires unanimity by the dissertation committee.

Dissertations completed by IDM alumni are available in the IDM library (A438 Crabtree Hall; see IDM Student Services Coordinator for access) and online via the [University of Pittsburgh ETD digital library system](#).

Submission of Dissertation Copies

Students are **required** to submit **two** (2) copies of the approved final bound dissertation; one each to the student's faculty advisor and to the IDM academic office no later than one week after the end of the semester. The finalized electronic dissertation (ETD) must also be submitted to the IDM academic office in addition to the GSPH Office of Student Affairs.

Doctoral Degree Progression



MASTER OF SCIENCE (MS) Program

I. LEARNING OBJECTIVES

Upon completion of the MS degree, the graduate will be able to:

1. Demonstrate knowledge of the molecular biology of hosts and pathogens and how pathogenesis of infectious diseases evolves from the interactions of organisms on a molecular level.
2. Demonstrate knowledge of the mechanisms of innate and acquired immunity and the role of immune functions in health and disease.
3. Demonstrate an ability to analyze and interpret data from scientific publications in the field of molecular biology, microbiology, immunology, or infectious diseases.
4. Show an ability to think independently and demonstrate comprehensive knowledge in a specific area of microbiology related to the student's thesis work.
5. Conduct relatively independent laboratory-based research.

II. SUMMARY OF REQUIREMENTS

A. Courses

1. Department Required Courses

(** = Requires appropriate prerequisite course(s) and/or co-requisite course(s) - See Appendix B pg. 42)

Course Number	Course Name	Credits
IDM 2001	Molecular Biology of Microbial Pathogens	3
IDM 2002**	Molecular Virology	2
IDM 2003	Host Response to Microbial Infection	2
IDM 2021	Special Studies in Microbiology (5 semesters required)	Varies 1-15
IDM 2023	Microbiology Laboratory	2
IDM 2025	Microbiology Seminar (4 semesters required)	1
IDM 2420**	Experimental Virology	1
INTBP 2290	Scientific Ethics	1
EPIDEM 2161**	Methods of Infectious Disease Epidemiology	1

2. GSPH Required Courses (* = Core Course required by GSPH)

Course Number	Course Name	Credits
BIOST 2041*	Introduction to Statistical Methods I	3
EPIDEM 2110*	Principles of Epidemiology	3
PUBHLT 2011*	Essentials of Public Health	3
PUBHLT 2022*	Public Health Grand Rounds (2 semesters required)	0

3. Elective Courses

(** = Requires appropriate prerequisite course(s) and/or co-requisite course(s) - See Appendix B pg. 42)

Three (3) elective credits must be completed. The next page lists some suggestions; however, you are strongly encouraged to identify appropriate electives (offered at GSPH or MMG programs) that are most related to your research area.

Advisors and course coordinators can approve other electives.

Course Number	Course Name	Credits	Semester Offered
MSIMM 2210	Comprehensive Immunology	2	Spring
MSIMM 2230**	Experimental Basis of Immunology	2	Spring
MSMVM 3440	Vaccines and Immunity	2	Spring
IDM 2032	Human Diversity and Public Health	2	Fall
IDM 2038	Prevention, Treatment, and Control of Global Infectious Diseases	3	Spring
EPIDEM 2160**	Epidemiology of Infectious Disease	2	Fall
EPIDEM 2180**	Epidemiological Methods	2	Spring
EPIDEM 2260 **	Epidemiological Basis for Disease Control	2	Fall

B. Required Examination

Master's Comprehensive Examination

Each student must pass a comprehensive examination that will be designed to test the ability of a student to analyze and to interpret data in the fields of molecular biology, microbiology, immunology, and/or infectious diseases. The format for this examination is the same as for the doctoral preliminary examination (*policy instituted July 2006*). A student must take the examination when it is scheduled, which is typically during the month of May during their first year of study. In the event of a failure, a student may apply to the Chair of the Department for a re-examination. Students who are not permitted to retake the examination or who do not pass the re-examination will be released from the program. See *Examination Requirements* for additional information.

C. Research

1. Selection of Research Topic and Major Advisor

After completing two laboratory rotations, students, with input from their first year advisor, must choose an area of research and an appropriate faculty advisor prior to the summer term preceding their second year. Students begin their thesis research with their new faculty advisor during the summer semester following their first year and continuing through their second year of study. To assist in the selection of a research advisor and laboratory, the Department operates a schedule of laboratory rotations during the first year in the graduate program. Faculty members who are able to provide semester long rotations to first year students, and one year positions for second year master's students, give a presentation of their research focus to new students early during the fall semester.

2. Submission and Approval of Research Proposal

Students must submit a research proposal to their thesis committee for approval within five (5) months after passing the comprehensive examination. The research proposal should follow the guidelines described in the section on "*Examination Requirements*." Following the approval by the committee, the proposal will be submitted to the MS Program Director. Upon approval of the research proposal, which is to specifically occur at the first committee meeting, the student will continue to work towards completion of the thesis work. It is required that during this time, the student present a concise progress report of their research at least once during the second year of study, typically as part of a thesis committee meeting. The format is flexible but must include a narrative and tables/figures of the research findings. **Please note: Prior to the first committee meeting, students must submit their research proposal to all thesis committee members two (2) weeks in advance.**

3. Presentation of Thesis and Defense

The students will present their work in an open seminar and defend their thesis in a closed oral examination with their thesis committee. **Please note: Prior to the defense, students must submit their thesis to all thesis committee members two (2) weeks in advance.** See *Thesis Requirements* for additional information.

III. GSPH REGULATIONS FOR MS STUDENTS

See [Graduate and Professional Bulletin of the University of Pittsburgh](#) and [GSPH Bulletin](#)

- A. All students should choose their thesis advisor from the IDM primary and secondary faculty. In unusual circumstances may a student petition to have their IDM graduate research project mentored by a non-IDM faculty member. This request will be subject to review and approval by the Director of IDM Graduate Programs and the Department Chair. In such a case the student will be required to identify a co-advisor from amongst the IDM primary faculty.
- B. Credit requirement: a minimum of 36 credits of graduate study is required for masters of science degrees in the Graduate School of Public Health.
- C. A grade point average of at least a B (GPA = 3.0) and a satisfactory (S) must be maintained. **A student with full graduate status is automatically placed on probation whenever their cumulative graduate GPA falls below 3.0.** When a student's GPA falls below 3.0 the student, advisor, and department receive notice from the school's Performance Committee. If a student has a cumulative GPA below 3.0 for two consecutive terms, they may be dismissed from the program. Students must have a cumulative GPA of 3.0 or above to be eligible to take the preliminary and comprehensive examinations, and to graduate.
- D. A grade of B or better must be maintained for all school wide core courses required in a student's academic program (see summary of requirements above). If a grade of C is earned the GSPH Educational Policies and Curriculum Committee recommends that the student and advisor meet to discuss the grade and that the student be strongly encouraged to re-take the core course. However, this final decision is up to the advisor and the student. If a grade below a C is earned, that student must repeat the course. (GSPH policy).
- E. In addition to the requirements for regular students, provisional students must fulfill the other requirements of admission by the end of the first or second term of study at which time they will be re-evaluated and either accepted as a regular student or dismissed from the program.
- F. Successful completion of the master's comprehensive examination is required.
- G. Normally, full-time students enroll for no more than 9-12 credits per term. For those who apply for federal loans, federal regulations require a student to complete the degree within a maximum time frame (no more than 150% of required credits), to have completed (receive the final grade) for at least 67% of the total # of credits attempted at any point in time, and to maintain a satisfactory grade point average. In other words, you cannot accumulate more than 150% of the school required credits, which is translated into 54 credits, before graduation.
- H. Students are required to be at the graduate level (the 2000 or 3000 series). **No courses below 1000 or from 7000-7999 may be applied toward graduate requirements.**
- I. Master's degrees are conferred only to those students who have completed all course requirements with at least a 3.0 GPA and have completed a successful thesis defense.
- J. A student who has completed all course requirements for a graduate degree but has not fulfilled other requirements (e.g., writing of a thesis) is required - if University facilities or faculty time are being used - to register for at least one credit each term, or for a greater number of credits as the school or department considers appropriate.
- K. Full-time students are expected to complete their degree within two (2) years after admission to the program. It is recommended that part-time students complete their degree within 3-4 years after admission to the program. (University policy stipulates that "*All requirements for MA and MS degrees must be completed within a period of four consecutive calendar years from the student's initial registration for graduate study; all requirements for professional master's degrees, in five years.*")
- L. Two hard bound copies of the approved thesis are required to be submitted, one each to the faculty advisor and the IDM academic office. The finalized electronic dissertation (ETD) must also be submitted to the IDM academic office in addition to the GSPH Office of Student Affairs.

IV. SUGGESTED SEQUENCE OF COURSES

1st year

Fall

Course Number	Course Name	Credits
IDM 2001	Molecular Biology of Microbial Pathogens	3
IDM 2003	Host Response to Microbial Infection	2
IDM 2021	Special Studies in Microbiology (Lab Rotation I)	2
IDM 2023	Microbiology Laboratory	2
IDM 2025	Microbiology Seminar	1
EPIDEM 2110	Principles of Epidemiology	3
PUBHLT 2022	Public Health Grand Rounds	0
		TOTAL 13

Spring

Course Number	Course Name	Credits
IDM 2002	Molecular Virology	2
IDM 2021	Special Studies in Microbiology (Lab Rotation II)	2
IDM 2025	Microbiology Seminar	1
EPIDEM 2161	Methods of Infectious Disease Epidemiology	1
IDM 2420	Experimental Virology	1
PUBHLT 2011	Essentials of Public Health	3
PUBHLT 2022	Public Health Grand Rounds	0
		TOTAL 10

Student chooses advisor after completion of 2 lab rotations.

Summer

Course Number	Course Name	Credits
IDM 2021	Special Studies in Microbiology (Thesis Research)	2
INTBP 2290	Scientific Ethics	1
		TOTAL 3

Master's Comprehensive Examination

2nd Year

Fall

Course Number	Course Name	Credits
IDM 2021	Special Studies in Microbiology (Thesis Research)	4
IDM 2025	Microbiology Seminar	1
BIOST 2041	Introduction to Statistical Methods I	3
Elective(s)	See list of recommended electives	2-3
		TOTAL 10-11

Spring

Course Number	Course Name	Credits
IDM 2021	Special Studies in Microbiology (Thesis Research)	7
IDM 2025	Microbiology Seminar	1
Elective(s)	See list of recommended electives	2-3
		TOTAL 10-11

Thesis Defense

Summer

Course Number	Course Name	Credits
IDM 2021	Special Studies in Microbiology (Thesis Research)	1
		TOTAL 1

V. EXAMINATION REQUIREMENTS

Master's Comprehensive Examination

Description of the Examination

The purpose of the comprehensive examination is to test the student's knowledge and thinking skills in areas related to their didactic program of studies. The following is excerpted from the University's "Regulations Pertaining to Master's Degrees" (<http://www.pitt.edu/~graduate/regtoc.html>):

"Comprehensive Examination. MA or MS degrees are conferred only upon those students who, in one or more comprehensive examination or the equivalent, show that they have mastered the general field of their graduate study".

The format of the master's comprehensive examination is the presentation and **critique** of a recently published paper to a faculty examination committee. The MS program director will select a group of papers for the examinations in a given year and assign them to the individual students. The papers will have been published recently (within one year of the examination) and will not directly pertain to the student's anticipated thesis work. The exam will be divided into two sections. The first hour will be spent primarily on the selected paper. The student shall prepare a critique of the paper for oral presentation. The exam consists of the oral presentation of the data with figures from the paper along with a **critique** (no longer than 30 minutes) followed by a series of questions from the committee members designed to determine if there is a solid understanding of the background of the study, actual data, the potential flaws, the advantages and limitations of techniques involved, and the implications of the results for the field. The second hour will be spent asking more comprehensive questions. Any subject area from the paper that is related to the classes taken by the students can be included in this part of the comprehensive exam. The committee shall vote pass/fail with a simple majority sufficient for a passing grade. In the event of a failing grade, the student may appeal to the Department Chair to be allowed one re-examination. In the event of a second failing grade, the student will be released from the IDM graduate program.

Governance of the Examination Committee

The comprehensive examination is taken at the end of the first academic year, typically in May. It is anticipated that one week in late May will be identified for this examination with enough advance notice for faculty and students to plan accordingly. A faculty coordinator (typically the MS program Director) selects the examination committee members, including the Chairs. The Chair of the examination committee must be from the Department of Infectious Diseases and Microbiology. The remainder of the committee must represent two University departments. At least half of the committee must be from the Graduate School of Public Health and half must have graduate faculty status (see *Appendix D pg. 44-45*). The Chair of the examination committee selects the paper for the examination in consultation with the committee members. The committee conducts the examination within four weeks after distribution of the paper to the student.

VI. THESIS REQUIREMENTS

Master's (MS) Thesis

Thesis Committee

The members of the thesis committee are selected by the student in conjunction with their faculty advisor. The Graduate School of Public Health and the University of Pittsburgh have established regulations for the composition of the committee. See **Appendix D** (pg. 44-45) for the GSPH regulations governing the composition for the MS thesis committee. Once the committee members are identified the student is responsible for notifying the IDM Student Services Coordinator of the committee members. A memo requesting approval of the student's committee is sent to the Assistant

Dean for Student Affairs. **Committee meetings cannot be held until the committee is approved.** The IDM Student Services Coordinator will notify the student and their faculty advisor upon approval. The student is responsible for scheduling the committee meetings. If a conference room or audio-visual equipment is needed, the student must contact the IDM Student Services Coordinator in advance of the meeting to reserve the room and/or equipment. Regardless of whether the student requires assistance for the meeting, they are to notify the IDM Student Services Coordinator of their meeting date to allow for keeping of departmental records, and to ensure that the appropriate paperwork is completed at the meeting. The first thesis committee meeting is to be held within **five (5) months** of passing the MS comprehensive examination. **Please note: Prior to committee meetings, students must submit their research proposal/progress report to all thesis committee members two (2) weeks in advance.**

Thesis Format

The format will include a narrative and tables/figures of the research and will be similar in format to that of a traditional doctoral dissertation. A student must be registered for at least one credit during the term in which they are graduating. A student who has an inactive status must be readmitted and registered for three credits in order to graduate.

The student's thesis must provide evidence of original scholarly research. The student's thesis committee will meet at the time the student's research is nearing completion and will authorize the student to begin writing the thesis. At this time, students should make certain that all required courses (**total of minimum 30 credits**) have been taken. This can be verified by the IDM Student Services Coordinator. The style and format of the thesis must conform to the standards set forth by the Graduate Council as shown below. The thesis will contain:

- A. Title Page
- B. Abstract
- C. Introduction (related literature review)
- D. Statement of the Project
- E. Specific Aims
- F. Materials and Methods
- G. Results
- H. Discussion
- I. Literature Cited (follow ASM Journal style)

Students could substitute items F and G with published articles or articles that have been submitted for publication of their thesis work. In that case, exhaustive literature review in the Introduction may not be necessary, although a sufficiently complete introduction of the research objectives and background are still necessary. Additional results not included in the publications can be included as a separate chapter in the results section, although this is not the only way they can be appropriately included in the thesis. The discussion should include the overall conclusions and implications of the results (published and unpublished). The future direction of the project, based on the results, should also be mentioned in the discussion section.

Theses completed by IDM alumni are available in the IDM library (A438 Crabtree Hall-see IDM Student Services Coordinator for access) and online via the [University of Pittsburgh ETD digital library system](#).

Thesis Presentation and Defense

Upon completion of the thesis work, the students will present their work in a seminar and defend their dissertation in an oral examination. The student is responsible for scheduling the presentation and defense of their master's thesis. **The student is required to submit their thesis to the committee at least two weeks prior to the defense date to allow ample time for the committee to review the thesis.** Noncompliance with this rule could necessitate rescheduling of the defense date.

Submission of Thesis Copies

Students are **required** to submit **two** (2) copies of the approved final bound thesis; one each to the student's faculty advisor and to the IDM academic office, no later than one week after the end of the semester. The finalized electronic thesis (ETD) must also be submitted to the IDM academic office in addition to the GSPH Office of Student Affairs.

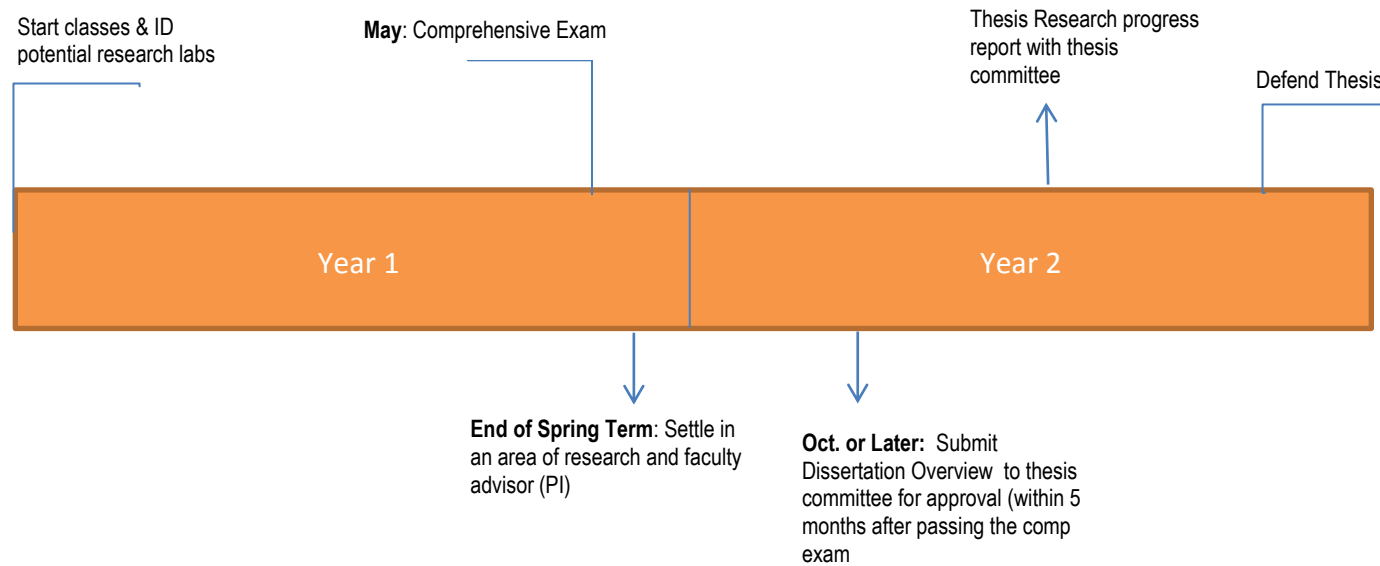
VII. SPECIAL NOTE TO PART-TIME STUDENTS

It is recommended that part-time students complete their degree within 3-4 years after admission to the program. Part-time students must be enrolled for a total of 6 credits each semester to maintain part-time status. You cannot take the required courses as suggested, so you must work with the MS Program Director to organize the sequence of classes and to approve your thesis work. The student and the MS Director should also work to identify the student's co-mentor to act as IDM faculty advisor if their major advisor is a non-IDM faculty.

Comprehensive Exam for Part-Time Students

Students should complete 26 credits before they take the comprehensive exam. To ensure you took the correct courses to prepare you for the exam, consult your advisor and/or the MS program Director.

Master of Science Degree Progression



MASTER OF PUBLIC HEALTH (MPH) PROGRAM

The MPH program in IDM is based upon a blended academic model of science and practice that fosters scientific discovery shaped by a mission to improve the health of the public. *Public health practice* is the strategic, organized, interdisciplinary application of knowledge, skills, and actions necessary to perform public health core functions and to conduct essential public health services for the improvement of the health status of populations.

Applied scholarly public health practice is the cornerstone to conducting practice-based research and gaining new knowledge and evidence to develop effective community-based prevention and intervention programs and policies. This approach to public health education fosters leadership for the future of public health leadership, practice, and research in infectious diseases. The MPH program is designed to meet a national and international demand, which has reached critical proportions, for a trained workforce in infectious diseases including emerging infections.

The MPH program provides students with opportunities for essential hands-on experience to augment classroom instruction. The program aims to education students on the infectious disease characteristics, factors and issues which influence practice, research, services, and policies on a local, national and global level. The MPH program aims to teach the student to become public health professionals capable of meeting the current and future infectious disease public health demands. This is accomplished through a commitment to self-directed, lifelong learning and the mastery of:

1. Core public health competencies;
2. Critical thinking skills;
3. Interdisciplinary approaches to problem solving;
4. Application of broad-based quantitative and qualitative skills;
5. Multidisciplinary and collaborative strategies;
6. Communications and organizational skills;
7. Leadership skills for public health

The Master of Public Health Program in the IDM offers the student an opportunity to participate in an educational program that offers knowledge, skills, and experience within two distinct concentrations of study:

Option #1: Infectious Disease Management, Intervention and Community Practice

Option #2: Infectious Disease Pathogenesis, Eradication and Laboratory Practice

Concentration: Infectious Disease Management, Intervention and Community Practice

I. LEARNING OBJECTIVES

Upon completion of the MPH degree, the graduate will be able to:

1. Demonstrate knowledge, skills and competency in the assessment, intervention, and evaluation of public health services and related policies in infectious diseases.
2. Demonstrate knowledge and skills in the design of community, individual, organizational, and systems interventions for the prevention and control of infectious diseases.
3. Demonstrate knowledge of clinical, behavioral, epidemiological, ethical aspects of global infectious disease prevention and treatment interventions for health services, organizations, institutions, communities, and governments.
4. Demonstrate skills and competency necessary to critically evaluate scientific evidence and relevant information to make evidenced-based public health recommendations for planning, structure, intervention, and research of programs, interventions and systems.
5. Demonstrate knowledge of public health and theoretical frameworks required to work effectively in a multidisciplinary and international public health settings.

II. SUMMARY OF COURSE REQUIREMENTS

1. Department Required Courses

(# = requires Departmental consent – See Appendix C for instructions pg. 43)

Course Number	Course Name	Credits
IDM 2007#	Public Health Communicable Disease Practicum	3
IDM 2008	Public Health Education Methods	2
IDM 2021	Special Studies (thesis/essay writing)	4
IDM 2032	Human Diversity and Public Health	2
IDM 2034	Control and Prevention of HIV/AIDS	2
IDM 2038	Prevention, Treatment, and Control of Global Infectious Diseases	3
HPM 2135#	Health Policy	2

2. GSPH Required Courses

(* = Core Course required by GSPH)

(** = Requires appropriate prerequisite course(s) and/or co-requisite course(s) – See Appendix B pg. 42)

Course Number	Course Name	Credits
BCHS 2509*	Social and Behavioral Sciences and Public Health	3
BIOST 2011*	Principles of Statistical Reasoning	3
EOH 2013*	Environmental Health and Disease	3
EPIDEM 2110*	Principles of Epidemiology	3
HPM 2001*	Introduction to Leadership, Management and Policy for Public Health	3
PUBHLT 2014*	Overview of Public Health	1
PUBHLT 2015*	Public Health Biology	2
PUBHLT 2016**	Capstone: Problem Solving in Public Health	2
PUBHLT 2022*	Public Health Grand Rounds (2 semesters required)	0

3. Elective Courses

(* = Core Course required by GSPH)

(** = Requires appropriate prerequisite course(s) and/or co-requisite course(s) – See Appendix B pg. 42)

(# = requires Departmental consent – See Appendix C for instructions pg. 43)

Three (3) elective credits must be completed. The next page has some suggestions; however you are strongly encouraged to identify appropriate electives that are most related to your research area. These electives can be chosen from graduate course offered in any school within the University upon approval of your advisor, the Program Director and the course coordinator.

Course Number	Course Name	Credits	Semester Offered
BCHS 2504#	Overview Health Communication	3	Fall/Spring
BCHS 2525	Introduction to Applied Research	3	Fall/Spring
BCHS 2558	Health Program Evaluation	3	Fall
BCHS 2563*	Community Health Assessment	3	Fall/Spring
BCHS 2579	Introduction to Public Health Emergency Preparedness	3	Fall
BIOST 2062#	Clinical Trials: Methods & Practice	3	Spring
HPM 2064	Health Policy Analysis	2	Spring
HUGEN 2041#	Bioethics	3	Fall
PUBHLT 2018	Overview of LGBT Health Disparities	2	Fall
PUBHLT 2020**	Advanced Topics in LGBT Research	3	Spring

III. CURRICULUM

The program is designed to prepare public health professionals who can define, assess, and develop interventions for individuals, program agencies, and communities regarding interventions, program development, and research of communicable diseases. These public health professionals aim to address critical public health issues in urban, rural, medically underserved areas, and international settings. The program prepares public health professionals to serve specific populations and communities through community capacity building, education, leadership, facilitation, evaluation, and clinical care in settings, such as public health state and government agencies, community health institutional settings, community based organizations, NGOs, hospitals, and specific agencies and programs dealing with infectious diseases. The program utilizes a conceptual framework which incorporates epidemiology, prevention, clinical treatment, psychosocial, and environment within the context of public health.

Each student is expected to attain knowledge and skill in the following areas:

- Epidemiology of communicable diseases in the US and worldwide;
- Communicable disease laboratory diagnosis and monitoring;
- Characteristics of communicable diseases including signs, symptoms and treatments;
- Theoretical models for behavior change;
- Individual, social, and community disease control and treatment;
- International models for communicable disease control and treatment;
- Approaches and interventions for specific populations (women, minorities, incarcerated)
- Educational approaches and interventions;
- Psychosocial factors influencing individual and community behavior;
- Development and implementation of culturally appropriate programs;
- Policy development, analysis, and advocacy;
- Collection, analysis, and interpretation of relevant data;
- Evaluation of individual and community focused interventions.

IV. SUGGESTED SEQUENCE OF COURSES

1st Year

Fall

Course Number	Course Name	Credits
BIOST 2011	Principles of Statistical Reasoning	3
BIOST 2011	Principles of Statistical Reasoning Lab	0
EPIDEM 2110	Principles of Epidemiology	3
IDM 2008	Public Health Education Methods	2
PUBHLT 2014	Public Health Overview & Discussion	1
PUBHLT 2015	Public Health Biology	2
PUBHLT 2022	Public Health Grand Rounds	0
	TOTAL	11

Spring

Course Number	Course Name	Credits
BCHS 2509	Social & Behavioral Sciences and Public Health	3
EOH 2013	Environmental Health and Disease	3
IDM 2034	Control and Prevention of HIV/AIDS	2
PUBHLT 2022	Public Health Grand Rounds	0
IDM 2038	Prevention, Treatment, and Control of Global Infectious Diseases	3
	TOTAL	11

2nd Year

Fall

Course Number	Course Name	Credits
HPM 2135	Health Policy	2
IDM 2032	Human Diversity & Public Health	2
IDM 2007	Public Health Communicable Disease Practicum	3
IDM 2021	Special Studies (Thesis/Essay)	2-4
Elective	Elective	1-3
	TOTAL	10-14

Spring

Course Number	Course Name	Credits
HPM 2001	Introduction to Leadership, Management and Policy for Public Health	3
IDM 2021	Special Studies (Thesis/Essay)	2-4
PUBHLT 2016	Capstone: Problem Solving in Public Health	2
Elective	Electives	1-3
	TOTAL	8-12

Concentration: Infectious Disease Pathogenesis, Eradication and Laboratory Practice

I. LEARNING OBJECTIVES

Upon completion of the MPH degree, the graduate will be able to:

1. Demonstrate increased knowledge in infectious disease pathogenesis and application to public health prevention and control.
2. Demonstrate knowledge of host response mechanism and application to domestic and global infectious diseases
3. Contribute to the development and research with novel or enhanced prevention, treatment, eradication programs
4. Demonstrate skills in basic laboratory methods and data analyses for application to public health infectious disease programs
5. Demonstrate the skills in the development of structure and operations for infectious disease laboratories to support surveillance, prevention and treatment.

II. SUMMARY OF COURSE REQUIREMENTS

1. Department Required Courses

(** = Requires appropriate prerequisite course(s) and/or co-requisite course(s) – See Appendix B pg. 42)

Course Number	Course Name	Credits
BIOST 2042**	Introduction to Statistical Methods II	3
BIOST 2093**	Data Management and Analysis	2
EPIDEM 2160**	Epidemiology of Infectious Diseases	2
EPIDEM 2180**	Epidemiological Methods I	2
IDM 2003	Host Response to Microbial Infections	2
IDM 2021	Special Studies (thesis/essay writing)	3
IDM 2025	Microbiology Seminar	1
IDM 2038	Prevention, Treatment, and Control of Global Infectious Diseases	3

2. GSPH Required Courses

(* = Core Course required by GSPH)

(** = Requires appropriate prerequisite course(s) and/or co-requisite course(s) – See Appendix B pg. 42)

(# = requires Departmental consent – See Appendix C for instructions pg. 43)

Course Number	Course Name	Credits
BIOST 2041*	Introduction to Statistical Methods I	3
BCHS 2509*	Social and Behavioral Sciences and Public Health	3
EOH 2013*	Environmental Health and Disease	3
EPIDEM 2110*	Principles of Epidemiology	3
HPM 2001*	Introduction to Leadership, Management and Policy for Public Health	3
IDM 2007#	Practicum	3
PUBHLT 2014*	Overview of Public Health	1
PUBHLT 2015*	Public Health Biology	2
PUBHLT 2016**	Capstone: Problem Solving in Public Health	2
PUBHLT 2022*	Public Health Grand Rounds (2 semesters required)	0

3. Elective Courses

(** = Requires appropriate prerequisite course(s) and/or co-requisite course(s) – See Appendix B pg. 42)

Three (3) elective credits must be completed. Below are some suggestions; however you are strongly encouraged to identify appropriate electives that are most related to your research area. These electives can be chosen from graduate course offered in any school within the University upon approval of your advisor, the Program Director and the course coordinator.

Course Number	Course Name	Credits	Semester Offered
BCHS 2520	Theories Health Behavior & Health Education	3	Fall/Spring
BIOST 2016**	Sampling Design & Analysis	3	Spring
EPIDEM 2181**	Design of Clinical Trials	2	Fall
EPIDEM 2260**	Epidemiological Basis for Disease Control	2	Fall
IDM 2004	Viral Pathogenesis	2	Fall
IDM 2008	Public Health Education Methods	2	Fall
IDM 2022	Special Topics	1-3	Fall/Summer
IDM 2034	Control and Prevention of HIV/AIDS	2	Spring
PUBHLT 2018	Overview of LGBT Health Disparities	2	Fall
PUBHLT 2020**	Advanced Topics in LGBT Research	3	Spring

III. CURRICULUM

The MPH concentration in Infectious Disease Pathogenesis, Eradication and Laboratory Practice is designed to prepare public health professionals with skills in many areas, including immunology, microbiology, parasitology, and epidemiology and data analysis, to address critical problems in the prevention, control and eradication of infectious diseases both globally and within the USA. Students who graduate with this MPH concentration will have gained expertise in infectious disease pathogenesis and epidemiology, and also their relationship to the control of infectious diseases, and will have the skills appropriate for careers within local and state health departments, federal agencies or global organizations conducting infectious disease surveillance and control programs. This MPH concentration utilizes a conceptual framework that brings together pathogen biology, immunology, and epidemiology within the broader framework of public health.

Each student is expected to demonstrate knowledge and expertise in the following areas:

- Biology of bacterial, viral, protozoan and metazoan pathogens
- Host response to infectious agents
- Ways of manipulating the host response by vaccination
- Epidemiology of infectious disease spread
- Acquisition and analysis of laboratory and community data on infectious pathogens
- Human behavioral practices and their effects on the spread of infectious diseases
- Current best practices and remaining challenges in the eradication of infectious diseases

IV. SUGGESTED SEQUENCE OF COURSES

1st Year

Fall

Course Number	Course Name	Credits
BIOST 2041	Introduction to Statistical Methods I	3
BIOST 2093	Data Management & Analysis	2
EPIDEM 2110	Principles of Epidemiology	3
PUBHLT 2014	Public Health Overview & Discussion	1
PUBHLT 2015	Public Health Biology	2
PUBHLT 2022	Public Health Grand Rounds	0
		TOTAL 11

Spring

Course Number	Course Name	Credits
BIOST 2042	Introduction to Statistical Methods II	3
EOH 2013	Environmental Health and Disease	3
EPIDEM 2180	Epidemiological Methods I	2
HPM 2001	Introduction to Leadership, Management and Policy for Public Health	3
IDM 2038	Prevention, Treatment, and Control of Global Infectious Diseases	3
PUBHLT 2022	Public Health Grand Rounds	0
		TOTAL 14

2nd Year

Fall

Course Number	Course Name	Credits
EPIDEM 2160	Epidemiology of Infectious Diseases	2
IDM 2003	Host Response to Microbial Infections	2
IDM 2021	Special Studies (Thesis/Essay)	2-4
IDM 2025	Microbiology Seminar	1
Elective	Elective 1 of 1	2-3
		TOTAL 9-12

Spring

Course Number	Course Name	Credits
BCHS 2509	Social & Behavioral Sciences and Public Health	3
IDM 2007	Public Health Communicable Disease Practicum	3
IDM 2021	Special Studies (Thesis/Essay)	2-4
PUBHLT 2016	Capstone: Problem Solving in Public Health	2
		TOTAL 10-12

V. SUMMARY OF EXPECTATIONS FOR ALL MPH STUDENTS

A. Academic Monitoring and Advising

During the first semester of the program, each student will be assigned an academic advisor who will guide the student in curriculum requirements, thesis/essay requirements, and other academic issues

1. Establish relationship with advisor

- Seek out an advisor that has experience, research, or service activities that are consistent with student career goals Schedule ongoing meetings with advisor
 - Four sessions during first year
 - Monthly sessions in second year
- Take advantage of regularly scheduled office hours of the advisor
- Any change in the selected concentration of study within the MPH program must be approved within the first semester of study in collaboration and approval of:
 - Academic advisor
 - Director of the MPH Program

2. Academic progress

- It is the student's responsibility to schedule an appointment with their advisory during the beginning of the academic year; schedule appointment with adviser in advance
- It is the student's responsibility to have a copy of the current program outline, course sequencing, and offerings for their particular program of study.
- It is the student responsibility to complete the registration forms and get advisor signature in a timely manner.
- It is the responsibility of the student to keep their advisor informed of any issues that may impede their progress;
- Communicate through advanced scheduled appointment and emails
- It is the responsibility of the student to monitor his or her University of Pittsburgh academic transcript. Each semester, the student should obtain a copy of their transcript from the Registrar to assure that all credits for course completed have been properly recorded.

3. Required Participation in Scheduled Academic Events

- Each academic year, all MPH students are required to present a poster or oral presentation on their research or practice at the Spring Public Health Form.
- Students are required to attend annual departmental fall retreat.
- Students are required to participate in formal meetings scheduled with faculty for academic communication.

B. Practicum Requirements

MPH students are required to engage in a public health focused practicum. The practicum is a structured and educationally supervised assignment at an approved practice, research, service, or policy site with an experienced professional. It is aimed at providing a means to identify and apply a theoretical frameworks and skills discussed and demonstrated in the classroom with application to experiences to which the student is assigned in the communicable disease/behavioral health field.

This activity provides the student with hands-on experiences with community, research, clinical or organizational settings to learn new skills, approaches to public health issues, laboratory administration, leadership, public health capacity building, advocacy, and other public health skills and competencies. The assignments and choice of site are based upon recommendations by the faculty advisor and career goals of the student.

The selection of the practicum focus and site should be jointly agreed upon by the student and IDM faculty advisor and approved by the MPH Director. Students may choose placements that enhance their ability to complete the thesis/essay. Students are expected to develop their own specific, measurable goals for the practicum and provide ongoing and final reports of their activities. Separate evaluation of the student will be obtained from the practicum mentor.

1. **Practicum Site:** The student has primary responsibility for identifying potential practicum sites in collaboration with their academic advisor who will officially approve the practicum site in writing.
 - Schedule appointment with advisor to discuss
 - Prepare outline of idea, concept on forms
 - The student will prepare 1-2 page summary for his/her advisor of the proposed practicum site and potential educational goals of the field placement
 - Must be completed four weeks in advance of the practicum start date
 - The student and advisor will discuss the possible options and reach a decision concerning the placement
 - Contact between the agency preceptor, the student, and the faculty advisor is arranged through a formal process.
2. **Progress:** The student has responsibility to provide status reports to the advisor on the practicum progress and to submit final report of practicum to advisor
 - Provide, in written form, a self-evaluation/report of the field placement
 - Deliver forms to the agency preceptor to be completed and returned via mail to the faculty advisor, input from advisor on thesis committee and obtain approvals
 - Submit proper documentation to the IDM Faculty Advisor and MPH Program Director
 - Submit a written report of his/her activities during the field placement both to the placement preceptor and to the advisor.
 - Nonparticipation and unexcused absences within the placement agency will result in the student failing the practicum.
 - Written letter of thanks should be sent to the practicum mentor with a copy to the IDM Faculty Advisor and MPH Program Director within 2 weeks after the practicum ends.
3. **Process:** Overall direction for the student for the practicum will be provided by the IDM faculty advisor. While in the field, the students will be provided with mentoring by experienced clinicians, administrators, scientists, researchers, and other conducting public health services, research and practice related to infectious diseases.
 - By mid-second term, the student with the approval of the IDM faculty advisor and the representative of the practicum site will have successfully negotiated placement for the student including the identification of a practicum mentor.
 - A practicum can be arranged and occur anytime after the first semester of study.
 - A written educational plan which includes goals, objectives, activities, time line, and reading list is developed and include articles related to the agency or practicum setting.
 - Students are expected to follow the policies of both the University of Pittsburgh at all times.
 - Students are expected to follow policies of the placement site.
 - Professional behavior and attire are expected during placement at practicum site.
 - The agency preceptor shall meet with the faculty advisor before the placement is approved and at least once during the placement.
 - A final written report by the student, the agency practicum mentor's evaluation and the student's self-evaluation will be submitted to the IDM faculty advisor and MPH Program Director one week before the end of the term.
 - A copy of the student's self-evaluation will also be sent to the agency practicum mentor.
 - It is permissible for the student to accept a stipend from the agency if available. However, it is not required in order for an agency to be approved.
 - The practicum will be graded as credit/no credit basis.

C. Essay/Thesis Requirements

Completing a thesis or essay is required for the completion of this program of study. After the student's first term, the student will choose a thesis/essay chairperson who will serve as chairperson of the student's thesis or essay committee. This individual may or may not be the student's IDM faculty advisor. The student in conjunction with the thesis/essay chairpersons in collaboration with their IDM faculty advisor will decide the composition of a Thesis/Essay Committee which meets with the following requirements:

1. **Topic:** The topic of this scholarly work must be in the field of infectious diseases related to any clinical, behavioral, laboratory, environmental, policy, or systems aspects of infectious diseases as they apply to individuals, programs, institutions, or systems in both domestic and international settings. The standard of excellence for either of these documents is the same and must demonstrate the ability to reason, based on scientific evidence and to draw appropriate conclusions. The essay/thesis must meet appropriate academic standards and be written in a scholarly manner.

The topics for essays/thesis are varied and should be based upon the past experience, both academic and professional, field of experience, new areas of interest for research, and future career goals. Students must have the topic approved by the faculty advisor and MPH Director no later than the end of the second term of study. Student is required to complete the Thesis/Essay Topic Form (under development) and submit it for signature by the advisor and MPH Director.

2. **Focus based on MPH concentration**

- **Infectious Disease Management, Intervention and Community Practice**
The thesis or essay for the MPH Infectious Disease Management, Intervention and Community Practice concentration must be in the field of infectious diseases. The thesis would include original research done by the student or an investigative problem undertaken during an practicum in a public health agency, health care institution, or an issue, problem, or policy of study interest. The essay would be a critical review of the literature of a problem, policy, issue, or practice in the above-described fields of study.
- **Infectious Disease Pathogenesis, Eradication and Laboratory Practice**
The thesis or essay for the MPH Infectious Disease Pathogenesis, Eradication and Laboratory Practice concentration must be in the field of infectious diseases and may draw on specialties such as microbiology, immunology, and epidemiology to provide a public health perspective. The thesis would include original research done by the student or an investigative problem undertaken during a practicum in a public health agency, health care institution, or laboratory, or an issue, problem of study interest. The essay would be a critical review of the literature of a problem or issue in the above-described fields of study

3. **Committee Composition**

- **Thesis Committee:** consists of a Chair and two other faculty members of whom one must be from the Department. The proposal for the thesis will consist of:
 - Introduction
 - Research questions
 - Review of relevant literature
 - Proposed methodology
- **Essay Committee:** consists of a Chair and an additional faculty reader not from the Department. The proposal for the essay will consist of:
 - Introduction
 - Problem statement
 - Review of relevant literature

The Graduate School of Public Health and the University of Pittsburgh have established regulations for the composition of the committee. See **Appendix D** (pg. 44-45) for the GSPH regulations governing the composition for the MPH essay or thesis committee.

- Once the committee members are selected the student is responsible for sending a copy of the Thesis/Essay Committee Composition (under development) form to the MPH Program Director for approval (copy to the IDM Student Services Coordinator).
 - A memo requesting approval of the student's committee is sent to the Assistant Dean for Student Affairs and signed by the students IDM faculty advisor, thesis/essay chair and the MPH Program Director.
 - Committee meetings cannot be held until the committee is approved. The MPH Director approves all committees.
 - The student will receive notification of approval from the MPH Program Director (sent by the IDM Student Services Coordinator).
 - The student is required to notify the MPH Program Director (with a copy to the IDM Student Services Coordinator) of their meeting date for departmental records, and to ensure that the appropriate paperwork is completed at the meeting
 - Following the identification of the essay/thesis committee, the student must prepare a formal proposal and submit it to the chair of the student's committee. The Thesis/Essay chairperson will call a meeting of the committee to approve the proposal.
4. **Thesis or Essay Types** (not entirely mutually exclusive, discuss with your faculty advisor)
- Original investigation (Thesis): This would involve the formulation of a hypothesis and the collection and analysis of data to test the hypothesis. The data may already exist or represent an original collection. Consideration of the time and financial resource necessary might limit the scope of the research so that the essay takes the form of a demonstration or pilot project. The project would then demonstrate a methodology or structure and/or process which would have a much wider field of potential applicability.
 - Literature Review (Essay): In a literature survey, all of the relevant literature on a given topic would be examined in order to create a definite "state-of-the-art" document about the topic. This is not the same thing as a literature search, which would be required for the other types of essays/thesis as well. In the survey, the student's competence in analysis, evaluation and synthesis must be demonstrated.
 - Policy Analysis (Essay): The student would review relevant federal, local, and agency policies (legislation, regulations, guidelines, bylaws, etc.) and analyze these for their implications for service and planning. A recommendation for policy direction for an agency or an individual position paper would probably be a part of the final essay product. An essay might also analyze the process of policy development in an agency.
 - Program Development (Essay): The essay could report on the development of a program or plan for agency or institutional implementation. This plan would be based on an analysis of agency services and policies and an explanation for the logic of need for the proposed program and its feasibility. This would be a program developed by the student or else can follow the model specified under.
 - Management Issue Analysis (Essay or Thesis): The student will collection data and analyze specific programmatic management issues which may occur within health care organization, government agencies, or community based organizations involved in communicable disease/behavioral health monitoring, services, or programs. The student may also analyze a management decision (institution of a new program, restructuring of staff, etc.) which may include a review of relevant management principals and an evaluation of the effects of the decision on agency structure, functioning and service delivery.
 - Program Evaluation (Essay or Thesis): The student could use tested and appropriate program evaluation methods (i.e. outcome-based, analytical survey and so forth) to arrive at a judgment regarding the success of a program in meeting its objectives. This approach would require the student to make suggestions for improvement in effectiveness or possible for a change in objectives.

5. Institutional Review Board (IRB)

All Thesis/Essay work involving human subjects must have IRB approval. Please discuss this with your IDM faculty advisor and your thesis/essay chairperson. Refer to the University of Pittsburgh IRB website: <http://www.irb.pitt.edu/>. During the first semester of study, students must complete the University of Pittsburgh online research modules <https://cme.hs.pitt.edu> and the successful completion certificate (copy) of each module will be provided to the Faculty Advisor. Students must maintain the original copy for their records for future reference and documentation for IRB submission.

6. Thesis/Essay Committee Meetings

- The student will submit the first 3 chapters of the thesis/essay to the Thesis/Essay chairperson 2 weeks in advance of the scheduled meeting.
- It is the student's responsibility to schedule the meeting with the Thesis/Essay chairperson and provide a copy of the first 3 chapters in both electronic and print versions.
- Based on the thesis/essay committee meeting, revisions will be made to the conceptualization, aims, and the design of the study. This meeting and approval by all committee members are required.
- Those completing a thesis rather than an essay, the proposal must be submitted to the Institutional Review Board (IRB) prior to the initiation of the study.
- It is the responsibility of the student to seek additional assistance with data analysis from resources at the University.
- It is the responsibility of the student to obtain approval to move forward with the study from the Committee chair and approval from the IRB prior to the collection of any data.

7. Thesis/Essay Committee Defense

- Upon completion of the study, the student will complete the remaining chapters of the thesis or essay and submit it to the Committee Chair for review.
- If a conference room or audio-visual equipment is needed, the student must contact the IDM Student Services Coordinator in advance of the meeting to reserve the room and/or equipment.
- It is up to the Committee Chair to determine if the student is ready to present the thesis or essay for final defense.
- The student may be required to complete additional data collection, analysis, or other development prior to final defense.
- In collaboration with the Committee Chair, the date, time, and location of the final defense will be scheduled at least 1 month in advance.
- Copies of the thesis/essay will be made by the student and delivered to the office of all committee members 2 weeks prior to the date of the defense. The advance submission of the document must be a full 2 weeks excluding any holidays or semester breaks and fit within the schedules of participating committee faculty.
- The committee will conduct a final examination on the Masters' Thesis / Essay.
- Three copies of the approved Thesis or Essay will be submitted, one to the faculty advisor, one to the department office and one to the GSPH registrar, no later than one week after the end of the term/session.

8. General Style of Thesis/Essay

Essays and theses are written in a clear, concise prose, utilizing the Style and Form Manual for Graduate Thesis and Dissertation Preparation at the University of Pittsburgh, March 1993 for final preparation procedures. This is available for the GSPH Office of Student Affairs or (<http://www.pitt.edu/~graduate/etd/templates.html>). The most recent edition of the American Psychological (APA) Style Manual must be followed. Most thesis or essays will include the following elements:

- **Introduction:** A statement of the purpose of the study or research description of the agency or environment of data collection, identifying the problem and stating scope or focus of the study or research, including, where appropriate, the hypothesis to be tested.

- **Review of relevant literature:** A comprehensive review, and synthesis of journal articles, books, etc. on the same theme, indicating major relevant findings and indicating gaps in knowledge which the study may attempt to address.
- **Methods:** Documents, terms and statement of assumptions, how the information is to be collected and analyzed; describes the specific procedures used to collect and store the data, describe the IRB approval process, and the limitation of the study.
- **Findings:** Describes data management, results of study, policy decisions, policy materials, and original research data and identifies biases or limitations of the study results.
- **Discussion:** Describes the implications of the results, synthesis of major trends, discussion of meaning of the data for the field, correlation with other studies from the literature review, and outlines areas for further investigation of research.
- **Conclusions:** Includes a summary of major findings, application to agency planning, the field and other recommendations).
- **Bibliography:** Includes all references in the document and must follow the APA format
- **Abstract:** A brief statement of the research question, design, and conclusions of the study.

9. Submission of Thesis/Essay Copies

The finalized electronic dissertation (ETD) must also be submitted to the IDM academic office in addition to the GSPH Office of Student Affairs. Students are **required** to submit **three** (3) copies of the approved final bound essay or thesis; one each to the student's faculty advisor, the Department, and the Dean's office, no later than one week after the end of the semester. An electronic copy of the finalized essay must also be submitted to the IDM academic office. Essays and theses completed by IDM alumni are available in the IDM library (A438 Crabtree Hall - see IDM Student Services Coordinator for access) and online via the [University of Pittsburgh ETD digital library system](#).

VI. GSPH REGULATIONS FOR ALL MPH STUDENTS

See [Graduate and Professional Bulletin of the University of Pittsburgh](#) and [GSPH Bulletin](#).

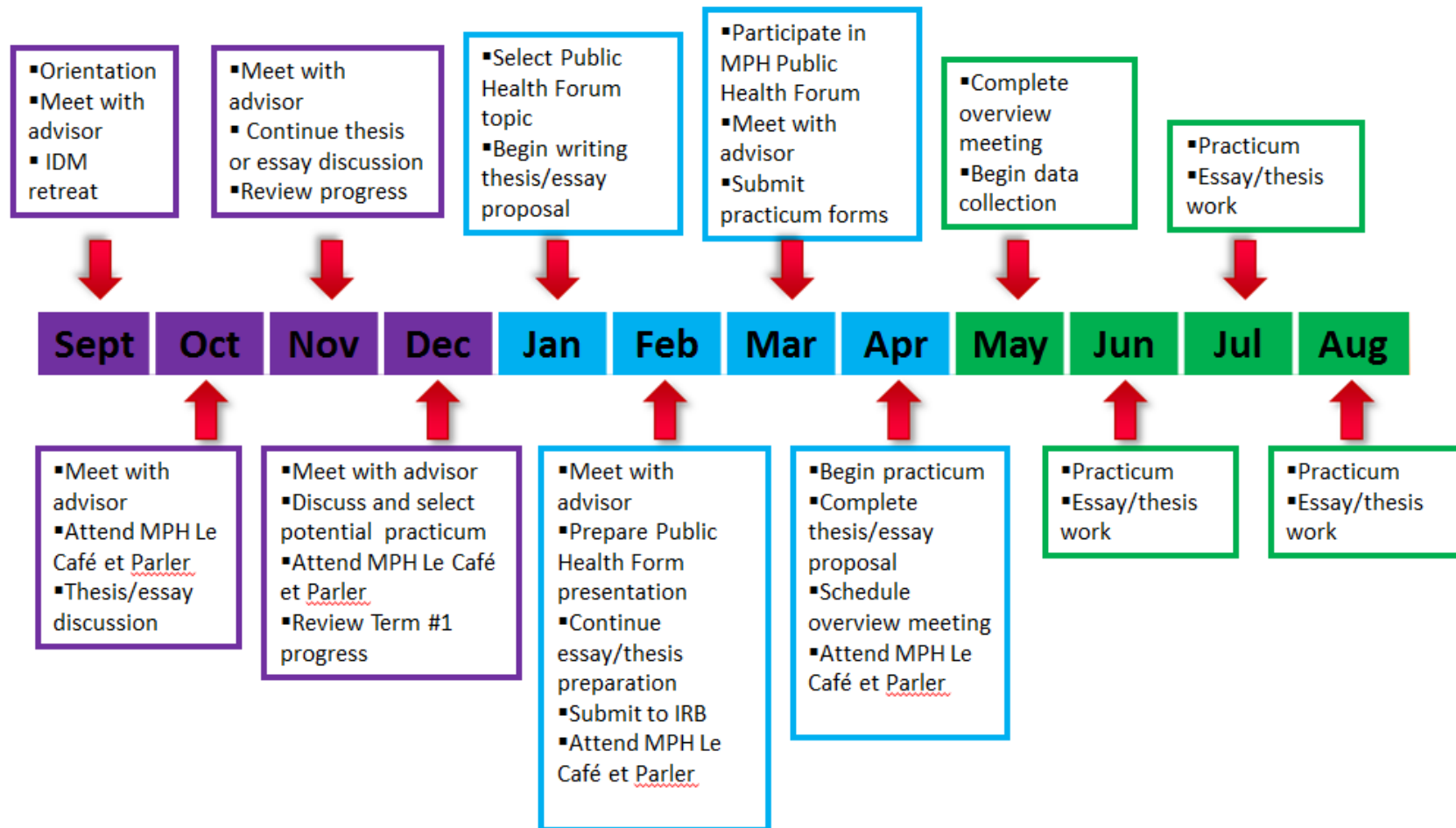
- A. All students must choose their thesis/essay mentor from the IDM primary and secondary faculty.
- B. A minimum of 42 credits of graduate study is required for MPH degrees in the Graduate School of Public Health. A grade point average of at least a B (GPA = 3.0) and a least an "S" in GSPH core courses which make up the program for any graduate degree must be maintained. A student with full graduate status is automatically placed on probation whenever their cumulative graduate GPA falls below 3.0. When a student's QPA falls below 3.0 the student, advisor, and department receive notice from the school's Student Performance Committee. If a student has a cumulative GPA below 3.0 for two consecutive terms, they are likely to be dismissed from the program. Students must have a cumulative GPA of 3.0 or above to be eligible to graduate.
- C. A grade of B or better must be maintained for all school wide core courses required in a student's academic program (see summary of requirements above). If a grade of C is earned the GSPH Educational Policies and Curriculum Committee recommends that the student and advisor meet to discuss the grade and that the student is strongly encouraged to re-take the core course. However, this final decision is up to the advisor and the student. If a grade below a C is earned, that student must repeat the course.
- D. Completion of a satisfactory essay or thesis.
- E. Normally, full-time students enroll for no more than 9-12 credits per term. For those who apply for federal loans, federal regulations require a student to complete the degree within a maximum time frame (no more than 150% of required credits), to have completed (receive the final grade) for at least 67% of the total # of credits attempted at any point in time, and to maintain a satisfactory grade point average. In other words, you cannot accumulate more than 150% of the school required credits, which is translated into 63 credits, before graduation.
- F. Full-time students are expected to complete their degree within 2 years after admission to the program. It is recommended that part-time students complete their degree within 3-4 years after admission to the program.

- G. If a thesis is completed, copies of the approved signed bound thesis are required to be submitted to the faculty advisor and the IDM academic office. The finalized electronic thesis (ETD) must also be submitted to the IDM academic office, in addition to the GSPH Office of Student Affairs. If an essay is completed copies of the approved signed bound essay are required to be submitted to the faculty advisor, IDM academic office, and GSPH Office of Student Affairs. An electronic copy of the essay is also to be submitted to the IDM academic office.

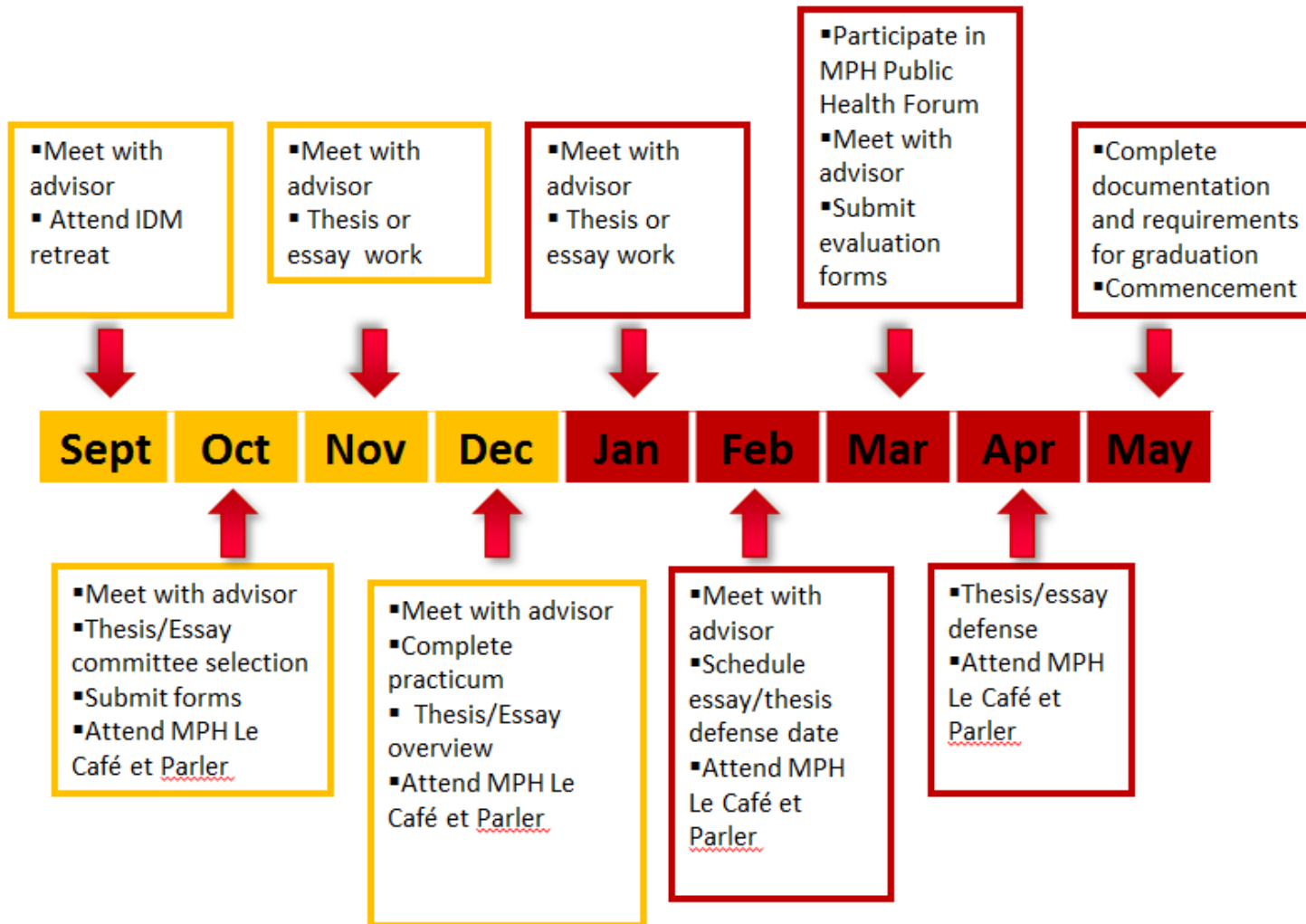
VII. SPECIAL NOTE TO PART-TIME STUDENTS

It is recommended that part-time students complete their degree within 3-4 years after admission to the program. Part-time students must be enrolled for a total of 6 credits each semester to maintain part-time status. You cannot take the required courses as suggested, so you must work with the MPH Program Director to organize the sequence of classes.

Master of Public Health Degree Progression Year 1



Master of Public Health Degree Progression Year 2



GRADUATION GUIDELINES

A. Application for Graduation

In conjunction with their advisor, **students are to ensure** that all graduation requirements have been completed. These include: completion of core courses, completion of departmental required courses, completion of the minimum credits required for the degree to be awarded, passing of all required examinations, completion of written requirements (dissertation, thesis, essay), achievement of a cumulative GPA of 3.0 or higher, and completion of a practicum (if required).

Graduation occurs at the University of Pittsburgh at the end of all semesters. There are two graduation dates during the summer semester (June and August). Students must be registered for one credit during their last semester of study. Note that international students must obtain permission from the Office of International Services as to whether they are permitted to register for less than full-time status. During the last semester students are to contact the GSPH Office of Student Affairs to complete an application for graduation. After the application is completed the student is responsible for completing all required forms and adhering to all policies and procedures. Further information is available on the [GSPH Web site](#).

B. Electronic Theses & Dissertations (ETDs)

Students submitting a dissertation or thesis as their written requirement for their degree **must** submit their dissertation/thesis electronically via the University of Pittsburgh's ETD system. Assistance in this process is available from the University Library System, the Graduate School of Public Health, and Computing Services and Systems Development. Further information is available at <http://www.pitt.edu/~graduate/etd>. **Note:** it is imperative that students adhere to the ETD formatting specifications. It is not uncommon for GSPH's Office of Student Affairs to return the document multiple times for failure to adhere to these specifications.

C. IDM Exit Interview: Departmental Requirement

After completing all requirements for the degree, including the thesis/dissertation defense or approval of the MPH essay, all IDM students are to participate in an exit interview with the IDM Director of Graduate Programs. This interview is to obtain useful feedback about the student's experiences in IDM, to obtain forwarding address information, and to discuss plans for ensuring that the Department receives a bound copy of the thesis/dissertation. Students are to contact the Director of Graduate Programs during the final weeks of their last semester to set up an interview.

D. IDM Graduation Checklist

In order to assist graduating students with the tasks to be complete during the months prior to graduation, a checklist is available on the IDM [website](#).

TRANSFER BETWEEN IDM GRADUATE PROGRAMS

I. MASTER'S TO DOCTORAL PROGRAM TRANSFERS *(policy updated 2007)*

Transfer from the IDM MS program to the IDM PhD program is not allowed. However, students who have completed or are on track for completing all requirements for the MS program may apply for entrance into the IDM PhD program through the standard application route. Applications to the PhD program can occur prior to completing the MS degree, although entrance into the PhD program could only occur after the completion of the MS degree. Students wishing to apply to the PhD program must formally do so. Application procedures can be obtained from the IDM Student Services Coordinator or from the IDM [website](#).

II. DOCTORAL TO MASTER'S PROGRAM TRANSFERS

The student, with concurrence from their faculty advisor, must inform the Admissions Coordinator in the GSPH Office of Student Affairs, the IDM Department Chair, Director of IDM Graduate Programs, and the IDM Student Services Coordinator of their decision to transfer to the master's program. The student should also discuss this with the IDM Director of Graduate Programs prior to taking action to make this transfer. After receiving permission from the IDM Department Chair, the student must finish the required courses for the master's program, pass the master's comprehensive examination (MS students), and successfully defend a master's thesis (MS and MPH students). It is noted that GSPH requires three core courses to be completed for a student to receive an MS degree, even if they are seeking an MS upon exit from the PhD program.

III. TRANSFERRING IDM - MPH CONCENTRATIONS

The student, with concurrence from their faculty advisor, must inform the Admissions Coordinator in the GSPH Office of Student Affairs in writing of their transfer to another MPH concentration. The student should also inform the IDM Student Services Coordinator of the transfer. Once the Department Chair signs off on the transfer, the Student Services Coordinator will notify you by email of the successful transfer.

IV. ENTRY OF NON-DEGREE STUDENTS INTO DOCTORAL OR MASTER'S PROGRAMS

Active non-degree GSPH students who wish to apply for an IDM degree granting program must submit a formal statement to the GSPH Admissions Coordinator requesting to be considered for admission to a specific program. Applications to degree programs are subject to a full review by the IDM Admissions Committee. Credits earned during the semester(s) under a non-degree status will be counted towards IDM program course requirements. Upon acceptance into the program, students will be subject to the requirements set for the selected IDM graduate program. **GSPH policy states that non-degree students are only eligible to earn 12 credits prior to admission to a degree-granting program.**

IDM FACULTY AND RESEARCH INTERESTS

During the course of your graduate studies, you will work closely with a faculty member who will serve as your major advisor. As you begin to identify potential advisors, one critical factor in your decision making process will include the specific research interests of individual faculty members. Complete faculty biosketches, statements of research interests, recent publications, and contact information are available on the IDM Departmental Web site (<http://www.idm.pitt.edu/directory/faculty.asp?Type=R>). **You are strongly urged to begin to work towards identifying a major advisor immediately upon entering an IDM graduate program.**

APPENDIX A GSPH DEPARTMENTAL ACADEMIC OFFICES

DEPARTMENTS & CENTERS

- Behavioral and Community Health Sciences (BCHS) 227 Parran Hall
- Biostatistics (BIOST) 326 Parran Hall
- Environmental and Occupational Health (EOH) 328A Bridgestone Pt/ 100
Technology Drive
- Epidemiology (EPIDEM) A512 Crabtree Hall
- Health Policy and Management (HPM) A645 Crabtree Hall
- Human Genetics (HUGEN) A302 Crabtree Hall

CERTIFICATE PROGRAMS

- Community-Based Participatory Research and Practice (BCHS) 227 Parran Hall
- Environmental Health Risk Assessment (EOH) 328A Bridgestone Pt/ 100
Technology Drive
- Evaluation of Public Health Promotion and
Health Evaluation Programs (BCHS) 227 Parran Hall
- Global Health 205 Parran Hall
- LGBT Health & Wellness (IDM) A419F Crabtree Hall
- Minority Health & Health Disparities (BCHS) 227 Parran Hall
- Public Health Preparedness and Disaster Response (EOH) 328A Bridgestone Pt/ 100
Technology Drive
- Public Health Genetics (HUGEN) A302 Crabtree Hall

APPENDIX B COURSES REQUIRING PREREQUISITES

Course Number	Course Title	Course Offered	Prerequisite Course(s)
BCHS 2598	Social Inequities in Health	Summer	BIOST 2011/2041 EPIDEM 2011
BIOST 2016	Introduction to Sampling	Spring	BIOST 2011/2041
BIOST 2042	Introduction to Statistical Methods II	Spring	BIOST 2041
BIOST 2049	Applied Regression Analysis	Spring	BIOST 2042
BIOST 2093	Data Management and Analysis		Co-requisite: BIOST 2041
EPIDEM 2160	Epidemiology of Infectious Disease	Fall	EPIDEM 2110
EPIDEM 2161	Methods Infectious Diseases Epidemiology	Spring	EPIDEM 2110 & EPIDEM 2160
EPIDEM 2170	Chronic Disease Epidemiology, Internet, NIH Grant Writing	Spring	EPIDEM 2110 EPIDEM 2600 BIOST 2011/2041
EPIDEM 2180	Epidemiological Methods I	Spring	EPIDEM 2110 & BIOST 2041 Co-requisite: BIOST 2042
EPIDEM 2181	Design of Clinical Trials I	Fall	EPIDEM 2110
EPIDEM 2260	Epidemiological Basis Disease Control	Fall	EPIDEM 2110 & BIOST 2011/2041
IDM 2002	Molecular Virology	Spring	IDM 2001 OR INTBP 2000
IDM 2161	Methods Infectious Diseases Epidemiology	Spring	EPIDEM 2110
IDM 2420	Experimental Virology	Spring	IDM 2002
MSIMM 2230	Experimental Basis of Immunology	Spring	MSIMM 2210
PUBHLT 2016	Capstone: Problem Solving in Public Health	Fall/Spring	EPIDEM 2110 & BIOST 2011/2014 & PUBHLT 2014 & 2015 & 2022 & BCBS 2509 & EOH 2013 & HPM 2001
PUBHLT 2020	Advanced Topics in LGBT Research	Spring	PUBHLT 2018

Only course instructor(s) can grant exemptions from class prerequisites or co-requisites. Per instructor consent an "Admission to Closed Class or Restricted Class" form may need to be completed. This form is available in GSPH Student Affairs or from the IDM Student Services Coordinator.

Please refer to the [GSPH course catalog](#) for updates to this list.

APPENDIX C COURSES REQUIRING PERMISSION TO ENROLL

Course Number	Course Title	Permission Type	Course Offered
BCHS 2504	Overview Health Communication	Department	Spring
BCHS 2522	Public Health Program Planning	Department	Spring
BIOST 2062	Clinical Trials: Methods and Practice	Department	Spring
HPM 2135	Health Policy	Department	Fall
HUGEN 2041	Bioethics	Department	Fall
IDM 2007	Public Health Communicable Disease Practicum	Department	Fall/Spring/Summer

Student must complete Admission to Closed Class or Restricted Class - available in office of IDM Student Services Coordinator and GSPH Office of Student Affairs. Forms to be submitted to department or instructor offering the course. See Appendix A for a listing of GSPH departmental office locations.

Departments and instructors reserve the right to limit enrollment in courses to a particular number of students per class section and/or give priority to students requiring a particular course to meet a graduation requirement or enrolled in a certificate program. Per instructor and/or department consent an "Admission to Closed Class or Restricted Class" form may need to be completed. This form is available in GSPH Student Affairs or from the IDM Student Services Coordinator.

Please refer to the [GSPH course catalog](#) for updates to this list.

APPENDIX D GSPH COMMITTEE REGULATIONS

I. GSPH MILESTONE COMMITTEE COMPOSITION REQUIREMENTS

August 17, 2005; General Notes Regarding All Committees

A. Each department in the GSPH maintains a list of [core educational faculty](#). These are defined as faculty of the University of Pittsburgh who are heavily involved in the educational mission of the department as demonstrated by at least some of the following: teaching courses or having significant involvement in courses led by others; participating on a routine basis in journal club; mentoring students in independent studies and master essays; serving on curriculum committees; and serving on examination or dissertation committees. Faculty with primary appointments in the department are automatically considered core faculty. The core faculty lists are kept on record with the Office of Student Affairs and updated periodically. The departments bear the responsibility of meeting with core faculty once a year to update them on any changes in policy or procedures, and to provide them with academic program manuals.

B. Research associates *who are involved in the educational program of the department* may be listed as core faculty and allowed to serve on all committees at departmental discretion.

C. All rules below are intended as school-wide minimum standards; individual departments are free to implement more stringent requirements.

Refer to [GSPH List of Committee/Essay Rules](#).

II. PhD QUALIFYING (PRELIMINARY) EXAMINATION

- The committee must consist of at least three University of Pittsburgh faculty members.
- The committee chair must be on the [core faculty list](#) of the student's department.
- Half or more of the members must be on the core faculty list of at least one GSPH department.
- Half or more of the members must have [graduate faculty status](#).
- One of the Pitt faculty on the committee must not be on the core list from the student's department.

III. PhD COMPREHENSIVE EXAMINATION

If the comprehensive exam takes place at the same time as the dissertation proposal, then the rules for the dissertation committee apply. If the comprehensive exam is taken separately from the dissertation proposal, then the rules for the comprehensive exam committee are the same as those for the qualifying exam committee.

IV. PhD DISSERTATION COMMITTEE

- The committee must consist of at least four University of Pittsburgh faculty members.
- At least two members must be on the [core faculty list](#) of some GSPH department.
- The majority of members must have [graduate faculty status](#).
- One of the Pitt faculty on the committee must not be on the core list from the student's department.

APPENDIX D

GSPH Committee Regulations (cont.)

V. MS COMPREHENSIVE EXAMINATION

- The committee must consist of at least three University of Pittsburgh faculty members.
- The committee chair must be on the [core faculty list](#) of the student's department.
- Half or more of the members must be on the core faculty list of at least one GSPH department.
- One of the Pitt faculty on the committee must not be on the core list from the student's department.

VI. MS OR MPH THESIS COMMITTEE

- The committee must consist of at least three University of Pittsburgh faculty members.
- Half or more of the members must be on the [core faculty list](#) of at least one GSPH department.
- Half or more of the members must have [graduate faculty status](#).
- One of the Pitt faculty on the committee must not be on the core list from the student's department.

These are the same as the rules for the MS comprehensive exam, except that the thesis committee chair need not be on the core list of the student's department.

VII. MPH ESSAY

- The committee must consist of at least two University of Pittsburgh faculty members.
- Members must have primary appointments in different University departments (at least two departments represented).
- At least one member must be on the [core faculty list](#) of some GSPH department.

Faculty interact with Directors as needed to solve problems/issues with their students.

APPENDIX E IDM STUDENT SERVICES FLOWCHART

Students communicate primarily with Meredith and later with their Advisor. We can then better manage SS in IDM and within GSPH.

Meredith is the primary point of contact for students and Student Affairs. Rather than send students to SA for solutions, Meredith should be the liaison to ensure accuracy of information.

Meredith will interact with the appropriate people in Student Affairs. Students should be directed to SA only after Meredith and the Director have contacted SA and issues cannot be resolved without direct involvement with the student. Students should not contact the Associate Deans directly.

