

STUDENT HANDBOOK

DEPARTMENT OF INFECTIOUS DISEASES AND MICROBIOLOGY GRADUATE PROGRAMS (August 2013 Version)

TABLE OF CONTENTS

TOPIC	Page
INTRODUCTION.....	2
PROGRAM REQUIREMENTS	
Doctoral (PhD) Program	3-14
Examinations Requirements	8-11
Dissertation Requirements.....	11-13
PhD Degree Progression Timeline.....	14
Master of Science (MS) Program	15-22
Examination Requirements	19
Thesis Requirements	20-21
MS Degree Progression Timeline	22
Master of Public Health (MPH) Program	
Infectious Disease Management, Intervention, and Community Practice (MIC)	23-31
Practicum Requirements.....	27-28
Thesis/Essay Requirements.....	28-31
Master of Public Health (MPH) Program	
Infectious Disease Pathogenesis, Eradication and Laboratory Practice (PEL)	32-39
Practicum Requirements.....	35-36
Thesis/Essay Requirements.....	36-39
GRADUATION GUIDELINES	40
Application for Graduation.....	40
Electronic Theses & Dissertations (ETDs)	40
IDM Exit Interview.....	40
TRANSFER BETWEEN PROGRAMS IN IDM.....	41
IDM FACULTY RESEARCH INTERESTS	42
APPENDICES	43-49
Appendix A <i>GSPH Departmental Academic Offices</i>	43
Appendix B <i>Courses Requiring Prerequisites</i>	44
Appendix C <i>Courses Requiring Permission to Enroll</i>	45
Appendix D <i>GSPH Committee Regulations</i>	46-47
Appendix E <i>Procedure for Required Course Exemptions</i>	48
Appendix F <i>IDM Student Service Flowchart</i>	49

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 completing your degree. The information provided in this document includes specific details about the requirements for completion of your degree. It should be your first source of information regarding your coursework, examinations, and requirements for graduation. Note that University and GSPH 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. In addition, please read memorandums and emails from the department, program directors, and advisors regarding requirements.

Faculty – This document provides the requirements, policies, and procedures guide for the operations of the graduate programs. Please use it as resource while advising IDM graduate students.

Students & Faculty – All faculty and students are required to be knowledgeable of and adhere to the academic integrity policies of the University of Pittsburgh. The complete Guidelines on Academic Integrity are available [online](#). All students are also required to complete the [Academic Integrity Module](#).

ALL IDM STUDENTS ARE BOUND BY THE REGULATIONS BELOW

Academic Integrity

Students are expected to comply with the University of Pittsburgh's Policy on Academic Integrity. Any student suspected of violating this obligation for any reason 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.

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.

Social Media

Students will be working in practicum sites and other learning environments within and outside the University and students should be cognizant of the issues of confidentiality. Students are prohibited from posting and "live streaming" information, data, or photos via phones, laptops, or other electronic devices from these learning sites on social media of any kind. Exceptions for this can be made only with written release from individuals at the learning sites and must be discussed with the student faculty advisor for approval prior to any recording. Failure to comply may result in disciplinary action or expulsion from the program.

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

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

Course Number	Course Name	Credits
BIOST 2041 ^{Note}	Introduction to Statistical Methods I	3
BIOST 2042 ^{*Note}	Introduction to Statistical Methods II	3
EPIDEM 2161*	Methods of Infectious Disease Epidemiology	1
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
PUBHLT 2030	Research Ethics	1
INTBP 3240	Graduate Student Writing Seminar	2
MSMVM 3410	Microbial Pathogenesis	2

Note: If student decides to take BIOST 2014, then, s/he does not have to take BIOST 2041 or 2042. However, the student must select an additional elective.

2. GSPH Required Courses

Course Number	Course Name	Credits
EPIDEM 2110	Principles of Epidemiology	3
PUBHLT 2011	Essentials of Public health	3
PUBHLT 2022	Public Health Grand Rounds (2 semesters required)	0

Required Course Exemptions:

If you have earned a graduate degree and have completed a similar course, you must follow the instructions on Appendix E to obtain exemption from a required course. Procedures are different for department and school-wide GSPH exemptions.

3. Elective Courses

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

Six (6) elective credits must be completed. Below are elective 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
BIOST 2014 ^{Note}	Intro to Biostatistics for Biomedical Scientist	3	Summer
EPIDEM 2160*	Epidemiology of Infectious Disease	2	Fall
EPIDEM 2180*	Epidemiological Methods I	3	Spring
EPIDEM 2260 *	Epidemiological Basis for Disease Control	2	Fall
FACDEV 2200	Practicum on University Teaching	3	Fall/Spring/Summer
IDM 2014*	Functional Genomics of Microbial Pathogens	3	Every other Fall
IDM 2032	Human Diversity and Public Health	2	Fall
IDM 2038	Prevention, Treatment, and Control of Global Infectious Diseases	3	Spring
MSIMM 2210	Comprehensive Immunology	2	Spring
MSIMM 2230*	Experimental Basis of Immunology	2	Spring
MSMVM 3440	Vaccines and Immunity	2	Spring

Note: If student decides to take BIOST 2014, then, he/she does not have to take BIOST 2041 or 2042. However, the student must select an additional elective.

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. **NOTE: According to University policy, students are not permitted to take the examination unless their cumulative GPA is 3.0 or higher.** See *Examination Requirements* pgs. 8-9 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, and research methods in these areas. . **NOTE: According to University policy, students are not permitted to take the examination unless their cumulative GPA is 3.0 or higher.** See *Examination Requirements* pgs. 10-11 for additional information.

C. Research/Dissertation

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 his/her first year. In the first two semesters (fall/spring) of the graduate program, the Department allows two laboratory rotations. PhD students are limited to faculty members who are able to support a four year position in their lab. Eligible faculty will give a presentation of their research focus to new students early during the fall semester of the first year. Each student's lab work will be evaluated twice a year (fall and spring semesters) by the rotation PI or the faculty advisor. These

assessments will be included when determining pass/fail for the preliminary and comprehensive exams.

2. First Dissertation Committee Meeting - Submission and Approval of Research Proposal

After passing the doctoral comprehensive exam, the student must form a dissertation committee according to GSPH guidelines and submit a research proposal to their dissertation committee for approval. Since the comprehensive examination is usually held in July, the **first dissertation committee meeting must be held by mid-December**. See *Dissertation Requirements* pg. 12 for details.

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. See *Dissertation Requirements* pg. 13 for details.

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 semester. The presentation will be evaluated by the faculty in attendance. Attending faculty will be provided with an evaluation form prior to the seminar, and the IDM-PhD Program Director will compile, review, and then discuss these evaluations 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. Note: **All** PhD students are required to attend Journal Club regardless of year in the program.

5. Publication Requirement for Graduation (policy instituted August 2005 & amended August 2013)

It is required that students have a minimum of one publication as primary author **PUBLISHED** and/or in **PRESS** at the time of their dissertation defense. One of these papers must be a first author publication and invited reviews are excluded from this criterion. The dissertation committee should monitor student's progress towards these publications, so s/he 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. See *Dissertation Requirements* pgs. 13-14 for additional information.

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 GPA 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 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 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, 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. The absolute maximum number of credits any student can take is 15.
- 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 (A419F). 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

Please note: PhD students must take 15 credits each fall and spring semester and 6 credits each summer of their first two years to meet the 72 credit requirement to reach Full-time Dissertation Research (FTDR) status.

1st Year

Fall Term (Students cannot take more than 15 credits in any semester)

Course Number	Course Name	Credits
EPIDEM 2110	Principles of Epidemiology	3
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 15

Spring Term

Course Number	Course Name	Credits
IDM 2002	Molecular Virology	2
IDM 2021	Special Studies in Microbiology (Lab Rotation II)	3
IDM 2025	Microbiology Seminar	1
IDM 2420	Experimental Virology	1
MSMVM 3410	Microbial Pathogenesis	2
PUBHLT 2011	Essentials of Public Health	3
PUBHLT 2022	Public Health Grand Rounds	0
Elective(s)	See list of recommended electives	1-3
		TOTAL 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)	4
INTBP 3240	Graduate Student Writing Seminar	2
		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
PUBHLT 2030	Scientific Ethics	1
BIOST 2041	Introduction to Statistical Methods I	3
Elective(s)	See list of recommended electives	1-6
		TOTAL 15

Spring

Course Number	Course Name	Credits
BIOST 2042	Introduction to Statistical Methods II	3
IDM 2021	Special Studies in Microbiology (Research)	4-6
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

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 6

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.**

The exam is typically held during the month of June in the first year of study. In the event of a failure, the student may apply to the Graduate Programs Director 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. 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.

Selection and Establishment of the Examination Committee

The examination committee must follow these rules:

1. The committee must be comprised of at least three Pitt faculty.
2. The exam chair must be from the Department of Infectious Diseases and Microbiology.
3. 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*).

The dissertation advisor will not be a member of this committee, nor will s/he 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. Once the faculty coordinator selects the committee, the IDM Student Services Coordinator submits it to the Dean's office for approval. 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. Once instructions are provided, students are encouraged to practice with their lab and/or fellow students as long as no faculty member participates.

Examination Format

The examination coordinator 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.

Re-examination Procedure

If the student fails the PhD preliminary exam, the student may appeal to the Graduate Programs Director by submitting a written request via email. If granted, the examination coordinator will select two new committee members to serve on the re-examination committee, but will keep the original committee chair if possible. The composition of the committee will represent two (2) University departments, at least half of the committee will hold primary appointments in GSPH, and at least half will be graduate faculty. The exam format will remain the same, and the paper will stay the same. Students who are not permitted to retake the examination or who do not pass the re-examination will be released from the program.

A student who obtains an MS degree in the IDM Department or at any other institution/department and enters the PhD program, the student MUST take the preliminary exam. S/he will take the *PhD comprehensive exam* within one year of matriculation into the PhD 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. 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 includes 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."

An informal and instructional meeting will be held approximately three (3) months prior to the scheduled exam date.

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 coursework and has decided on the general area of their research and has chosen a major advisor.

The exam will usually occur in June or July of the second year of study with a final grade of pass or fail. In the event of a failure, the student may apply to the Graduate Programs Director 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. One week 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.

Selection and Establishment of the Examination Committee

The examination coordinator (usually the PhD Program Director) will work with the IDM Student Services Coordinator to establish the comprehensive examination committee under the following rules:

1. The committee must be comprised of at least three Pitt faculty.
2. The exam chair must be from the Department of Infectious Diseases and Microbiology.
3. 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*).

The dissertation advisor will not be a member of this committee, nor will s/he attend. Once the faculty coordinator selects the committee, the IDM Student Services Coordinator submits it to the Dean's office for approval. Students will be notified of their committee members and will be provided further instructions by the examination coordinator at an informational session.

Examination Format (policy changed March 2010)

The examination format will consist of two components. In the first component, the student will write a short, seven page grant proposal based on their current research project. The examination chair must approve the abstract and proposal, then the IDM Student Services Coordinator will send the approved proposal to the rest of the committee two weeks before the scheduled oral examination. The examination coordinator will establish the deadlines and communicate them to the students during the informational session. 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 examination coordinator 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 Graduate Programs Director 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:

- A. 1 page with a brief paragraph overview and then a list of the specific aims (2 or 3 aims)
- B. 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 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

If the student fails the PhD comprehensive exam, the student may appeal to the Graduate Programs Director by submitting a written request via email. If granted, the examination coordinator will select two new committee members to serve on the re-examination committee, but will keep the original committee chair if possible. The composition of the committee will represent two (2) University departments, at least half of the committee will hold primary appointments in GSPH, and at least half will be graduate faculty. The exam format will remain the same. Students who are not permitted to retake the examination or who do not pass the re-examination will be released from the program.

VI. PUBLICATION REQUIREMENT FOR GRADUATION

It is required that doctoral students have a minimum of one publication as primary author **PUBLISHED** and/or in **PRESS** at the time of their dissertation defense (effective for classes entering fall 2005 and after). The dissertation committee should monitor student's progress towards publication, so that they can meet this requirement on time.

If a student cannot meet this requirement due to extreme conditions and plans to submit the manuscript at a later stage, the student should appeal to the Graduate Programs Director explaining the situation in writing and the proposed timeline for submission/publication. This letter should have the PI's approval and signature as well.

VII. 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** 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. Since the comprehensive examination is usually held in July, 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. Remember, the proposal used for the comprehensive exam is not your dissertation proposal, but can serve as an early version of one. **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. Its style and format must conform to the standards set 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)

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 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.

Dissertation Defense

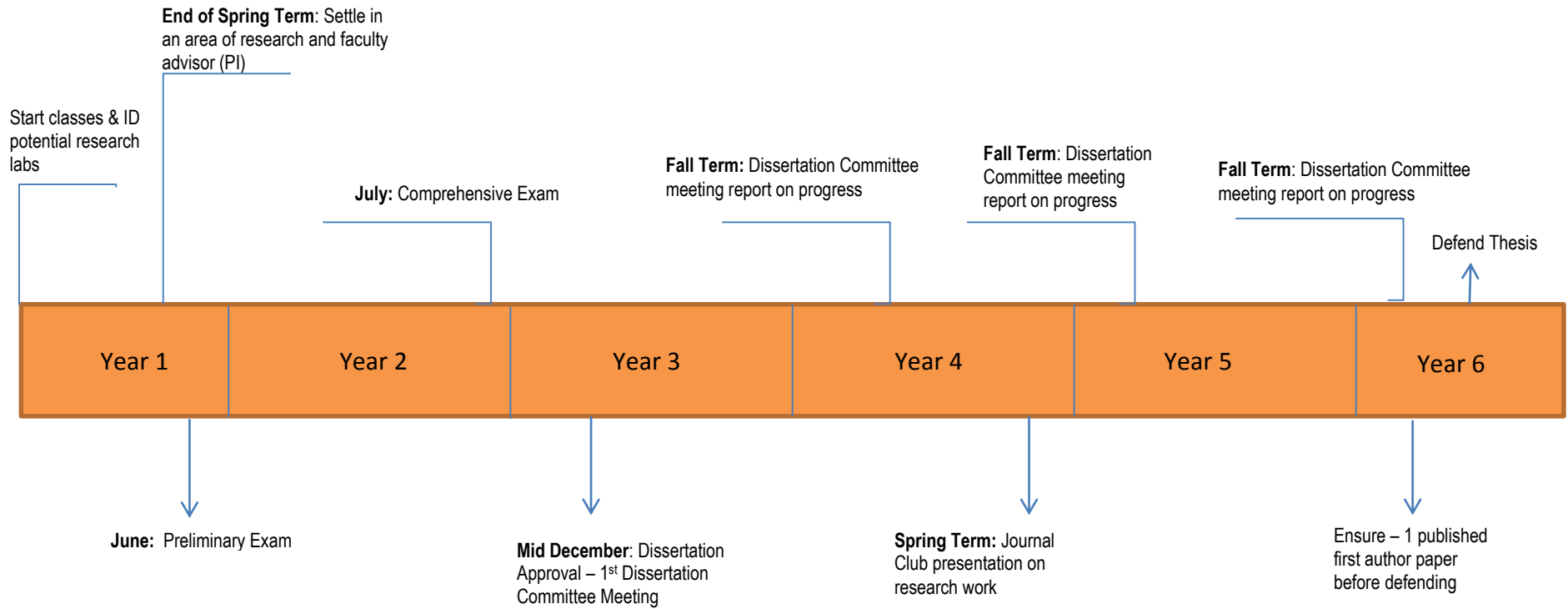
The dissertation defense consists of a formal public seminar on the subject of the dissertation. This is followed by a closed door examination of the student by the dissertation committee members. Approval of the dissertation requires unanimity by the dissertation committee. The defense must be held in 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 defense announcement and its location. It is the student's responsibility to find an appropriate date for the defense.

Dissertations completed by IDM alumni are available in the IDM library (A438 Crabtree Hall) and online via the [Institutional Repository at the University of Pittsburgh](#). Please note that students must submit dissertations online via [D-Scholarship](#) and adhere to the etd template. Please see templates on the etd website: <http://www.pitt.edu/~graduate/etd/templates.html>. Online tutorials on formatting can also be found here: http://www.library.pitt.edu/other/files/etd_tutorials/etdtutorial.html.

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. 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 the 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 fields of molecular biology, microbiology, immunology, and 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)

Course Number	Course Name	Credits
BIOST 2041 ^{Note}	Introduction to Statistical Methods I	3
BIOST 2042* ^{Note}	Introduction to Statistical Methods II	3
EPIDEM 2161*	Methods of Infectious Disease Epidemiology	1
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
PUBHLTH 2030	Research Ethics	1

Note: If student decides to take BIOST 2014, then, s/he does not have to take BIOST 2041 or 2042. However, the student must select an additional elective.

2. GSPH Required Courses

Course Number	Course Name	Credits
EPIDEM 2110	Principles of Epidemiology	3
PUBHLT 2011	Essentials of Public Health	3
PUBHLT 2022	Public Health Grand Rounds (2 semesters required)	0

Required Course Exemptions:

If you have earned a graduate degree and/or have taken a similar course, you must follow the instructions in **Appendix E** to obtain exemption from a required course. Procedures for department and school-wide GSPH exemptions are different.

3. Elective Courses

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

Two (2) elective credits must be completed. Below lists some suggestions. However, you are strongly encouraged to identify appropriate electives in consultation with your advisor (offered through GSPH or MVM programs) that are most related to your research area.

Advisors and course coordinators can approve other electives, including the following:

Course Number	Course Name	Credits	Semester Offered
BIOST 2014 ^{Note}	Introduction to Biostatistics for Biomedical Scientist	3	Summer
EPIDEM 2160*	Epidemiology of Infectious Disease	2	Fall
EPIDEM 2180*	Epidemiological Methods	2	Spring
EPIDEM 2260 *	Epidemiological Basis for Disease Control	2	Fall
IDM 2014*	Functional Genomics of Microbial Pathogens	3	Fall
IDM 2038	Prevention, Treatment, and Control of Global Infectious Diseases	3	Spring
MSIMM 2210	Comprehensive Immunology	2	Spring
MSIMM 2230*	Experimental Basis of Immunology	2	Spring
MSMVM 3440	Vaccines and Immunity	2	Spring

Note: If student decides to take BIOST 2014, then, he/she does not have to take BIOST 2041 or 2042. However, the student must select an additional elective.

B. Required Examination

Master's Comprehensive Examination

Each student must pass a comprehensive examination that will be designed to test the ability of the student to analyze and to interpret data in the fields of molecular biology, microbiology, immunology, and/or infectious diseases. See *Examination Requirements pg. 19* for additional information.

C. Research

1. Selection of Research Topic and Major Advisor

After completing two laboratory rotations (or before), 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 (or before) 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. Each student's lab work will be evaluated twice per year (fall and spring semesters) by the rotation PI or the faculty advisor.

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 *Thesis Requirements pg. 20*.

3. Presentation of Thesis and Defense

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 pg. 20* for additional information.

III. GSPH REGULATIONS FOR MS STUDENTS

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

- A. Credit requirement: a minimum of 36 credits of graduate study is required for masters of science degrees in the Graduate School of Public Health.
- B. 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.
- 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 comprehensive examination, and to graduate.
- D. A grade of B or better must be maintained for all school-wide and department required courses in a student's academic program (see summary of requirements above). If a grade of C is earned in an elective course, 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 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. The absolute maximum is 15 credits per term.
- 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.*")

IV. SUGGESTED SEQUENCE OF COURSES

Note: Full-time MS students cannot register for less than 9 credits until the spring term of their second year. A total of 36 credits are required.

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
		TOTAL 2

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
PUBHLT 2030	Scientific Ethics	1
Elective(s)	See list of recommended electives	2-3
		TOTAL 11-12

Spring

Course Number	Course Name	Credits
BIOST 2042	Introduction to Statistical Methods II	3
IDM 2021	Special Studies in Microbiology (Thesis Research)	7
IDM 2025	Microbiology Seminar	1
Elective(s)	See list of recommended electives	2-3
		TOTAL 13-14

Thesis Defense

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".

Examination Format

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.

Governance of the Examination Committee

The comprehensive examination is taken at the end of the first academic year, typically in May. Students must take the exam when it is scheduled. 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. 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*. The committee conducts the examination within four weeks after distribution of the paper to the student by the MS Program Director. An information session will be held at least four weeks in advance of the exam as well.

Re-examination Procedure

If the student fails the MS comprehensive exam, the student may appeal to the Graduate Programs Director by submitting a written request via email. If granted, the MS Program Director will select two new committee members to serve on the re-examination committee, but will keep the original committee chair if possible. The exam format and scientific paper will remain the same. Students who are not permitted to retake the examination or who do not pass the re-examination will be released from the program.

VI. THESIS REQUIREMENTS

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 pgs. 46-47** 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 by Student Affairs.** 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 all committee meetings, students must submit their research proposal/progress report to all thesis committee members two (2) weeks in advance.** This report can take any number of formats, but should include a short introduction/background, statement of the problem, data/findings, conclusions, and plans.

First Thesis Committee Meeting

After passing the master's comprehensive exam, the student must hold a thesis committee meeting and submit a research proposal for approval. Since the comprehensive examination is usually held in May, the **first thesis committee meeting must be held by mid-November.** **Please note: Prior to the first committee meeting, students must submit their research proposal to all thesis 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

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 36 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) and online via the [Institutional Repository at the University of Pittsburgh](#). Please note that students must submit theses online via [D-Scholarship](#) and adhere to the etd template. Please see templates on the etd website: <http://www.pitt.edu/~graduate/etd/templates.html>. Online tutorials on formatting can also be found here: http://www.library.pitt.edu/other/files/etd_tutorials/etdtutorial.html.

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.

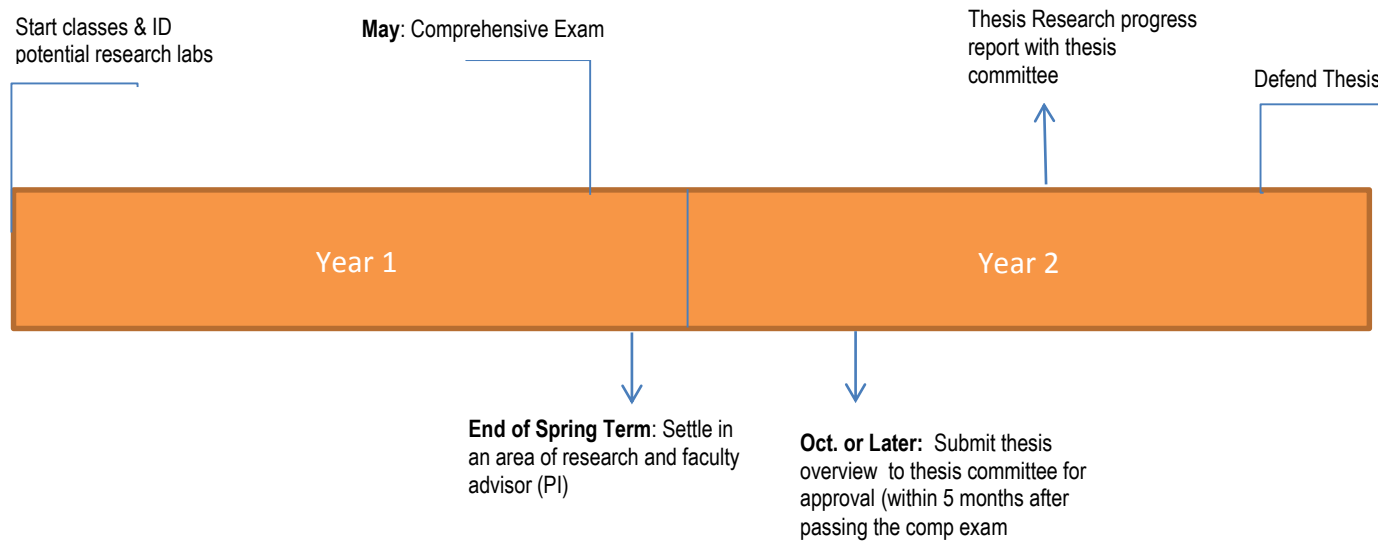
VII. SPECIAL NOTE TO PART-TIME STUDENTS

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 an IDM faculty member to serve as co-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 take the correct courses to prepare for the exam, consult your advisor and/or the MS program Director.

Master of Science Degree Progression



MASTER OF PUBLIC HEALTH (MPH-MIC) PROGRAM INFECTIOUS DISEASE CONCENTRATION IN MANAGEMENT, INTERVENTION AND COMMUNITY PRACTICE

I. LEARNING OBJECTIVES

Upon completion of the MPH-MIC degree, the student 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 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 within programs, agencies, and systems.
5. Demonstrate knowledge of public health and theoretical frameworks required to work effectively in a multidisciplinary and local, national, and international public health settings.

II. SUMMARY OF REQUIREMENTS

A. Courses

1. Department Required Courses

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

Course Number	Course Name	Credits
IDM 2007#	Public Health Communicable Disease Practicum	3
IDM 2021	Special Studies (thesis/essay writing)	3
IDM 2032	Human Diversity and Public Health	2
IDM 2034	Control and Prevention of HIV/AIDS	2
IDM 2025	MPH Microbiology Seminar (all semesters)	1
IDM 2038	Prevention, Treatment, and Control of Global Infectious Diseases	3

2. GSPH Required Courses

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

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

Required Course Exemptions:

If you have earned a graduate degree and/or have taken a similar course, you must follow the instructions in **Appendix E** to obtain exemption from a required course. Procedures for department and school-wide GSPH exemptions are different.

3. Elective Courses

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

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

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 2523#	Public Health Program Planning, Implementation, and Evaluation	3	Fall/Spring
BCHS 2525	Introduction to Applied Research	3	Fall/Spring
BCHS 2558	Health Program Evaluation	3	Spring
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

B. Practicum

Each student is expected to complete a public health focused practicum. The practicum is a structured and educationally supervised assignment at an approved practice, service, or policy site with an experienced professional. Students may start their practicum after their first semester of study. Planning for the practicum should begin with the student's advisor as soon as the program starts. Students must spend a minimum of 200 hours at their site, and complete all necessary paperwork for the department and practicum location. See *Practicum Requirements* pg. 27 for additional guidelines.

C. Thesis/Essay

Students must complete a thesis or an essay to graduate from the program. See *Essay/Thesis Requirements* pg. 28 for additional guidelines.

III. GSPH REGULATIONS FOR ALL MPH STUDENTS

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

- All students must choose their thesis/essay mentor from the IDM primary and secondary faculty.
- 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. The absolute maximum number of credits any student can take is 15.
- 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.

IV. 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. The aim of the curriculum is 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, evidenced based interventions, education, leadership, facilitation, evaluation in clinical care settings, public health departments and other community settings at the county or state and government agencies, institutions, community based organizations, NGOs, hospitals, and other agencies and programs dealing with infectious diseases. The curriculum 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.

V. SUGGESTED SEQUENCE OF COURSES

Note: Full-time MPH students cannot register for less than 9 credits until the spring term of their second year. A total of 42 credits are required.

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 2034	Control and Prevention of HIV/AIDS	2
IDM 2025	MPH Seminar	1
PUBHLT 2014	Public Health Overview & Discussion	1
PUBHLT 2015	Public Health Biology	2
PUBHLT 2022	Public Health Grand Rounds	0
		TOTAL 12

Spring

Course Number	Course Name	Credits
BCHS 2509	Social & Behavioral Sciences and Public Health	3
EOH 2013	Environmental Health and Disease	3
PUBHLT 2022	Public Health Grand Rounds	0
IDM 2038	Prevention, Treatment, and Control of Global Infectious Diseases	3
IDM 2025	MPH Seminar	1
Elective	Elective	1-3
Elective	Elective	1-3
		TOTAL 13-15

2nd Year

Fall

Course Number	Course Name	Credits
IDM 2032	Human Diversity & Public Health	2
IDM 2007	Public Health Communicable Disease Practicum	3
IDM 2021	Special Studies (Thesis/Essay)	2-3
IDM 2025	MPH Seminar	1
Elective	Elective	1-3
Elective	Elective	1-3
		TOTAL 12-15

Spring

Course Number	Course Name	Credits
HPM 2001	Introduction to Leadership, Management and Policy for Public Health	3
IDM 2025	MPH Seminar	1
IDM 2021	Special Studies (Thesis/Essay)	2-3
PUBHLT 2016	Capstone: Problem Solving in Public Health	2
Elective	Electives	1-3
		TOTAL 10-14

VI. 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. **Student responsibility to academic advisor**

- Schedule ongoing meetings with advisor
 - Four sessions during first year
 - Monthly sessions in second year
- Take advantage of regularly scheduled office hours and meetings by appointments
- 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-MIC Program

2. **Student responsibility for academic progress**

Schedule an appointment in advance with their advisor during the beginning of the academic year

- Possess a copy of the current program outline, course sequencing, and offerings for their particular program of study.
- Complete registration forms and obtain advisor signature in a timely manner.
- Keep advisor informed of any issues that may impede progress;
- Communicate through advanced scheduled appointments and emails
- Monitor University of Pittsburgh academic transcript. Each semester, the student should obtain a copy of their transcript through PeopleSoft to assure that all credits for required courses completed have been properly recorded.
- Students may request a change in their academic advisor. The “change form” for academic advisor must be completed and submitted to the MPH-MIC program director.

3. **Student responsibility for research related to thesis or essay**

- All MPH students must complete the on-line IRB module during the first semester of study. Please visit this website for training requirements: <http://www.irb.pitt.edu/osiris/citi.aspx>, and create an account through this [OSIRIS](#).
- The student must discuss their planned thesis or essay with their academic advisor by the end of the first semester to begin the process for IRB submission if needed. A copy of the certificate of completion must be submitted to their advisor for including in their academic file.
- All MPH students must complete the HIPPA module during the first semester of study. A copy of the completion certificate must be sent to advisor of inclusion in their academic file.

4. **Student required participation in scheduled academic events**

- Each academic year, second year MPH students are required to present a poster on their research or practice at the fall departmental Research Day.
- All MPH students are required to attend the fall departmental Research Day and fall retreat. Failure of students to participate in the fall research day will result in disqualification for any departmental or GSPH academic awards or travel grants.
- Students are required to participate in formal meetings scheduled with faculty for academic communication.

VII. 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, service, or policy site with an experienced professional. It is aimed to identify and apply theoretical frameworks and skills discussed and demonstrated in the classroom to 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, leadership, public health capacity building, advocacy, and other public health skills and competencies. The practicum site choice is based upon recommendations by the faculty advisor and the career goals of the student.

Practicum Site Selection

The student has the primary responsibility for identifying potential practicum sites in collaboration with their faculty advisor who will officially approve the practicum site by signing the [Practicum Planning Form](#) and [Learning Agreement Form](#). Students may start a practicum any time after the first semester of study.

1. Student schedules appointment with faculty advisor to discuss potential practicum sites that fit the student's interest
2. Before meeting, see the Student Services Coordinator to obtain a list of past practicum sites. The student should complete the Practicum Planning Form before meeting with their advisor.
3. Student and faculty advisor meet and agree on a practicum site and complete the [Learning Agreement Form](#) before the start of the practicum.
4. Student contacts practicum site to ensure available practicum opportunities
5. Student obtains the signatures of the practicum mentor, faculty advisor, and MPH-MIC Director on the [Practicum Planning Form](#) the [Learning Agreement Form](#), and submits forms to the Student Services Coordinator for student file

Practicum Progress

1. Student provides status reports to their faculty advisor on practicum progress
2. Nonparticipation and unexcused absences within the placement agency will result in the student failing the practicum.
3. Students are expected to follow the policies and procedures of the University of Pittsburgh and the practicum site at all times.
4. Faculty advisor communicates with the practicum mentor in person, by phone, or via web before the placement is approved and at least once during the placement.
5. Student and practicum mentor record hours to ensure they meet the 200 hour minimum requirement.
6. The practicum is graded on a letter grade basis
7. Students may accept a stipend from the agency if available, but it is not required in order for an agency to be approved.

Department Forms & Documentation

The department requires the completion of four forms and one report due at different times throughout your practicum experience:

1. [Practicum Planning Form](#): Completed before the faculty advisor meeting discussing practicums. Obtain signatures and submit form to Student Services Coordinator
2. [Learning Agreement Form](#): Completed in collaboration with faculty advisor and practicum mentor before your practicum starts. Obtain signatures and submit form to Student Services Coordinator
3. [Preceptor Evaluation Form](#): Completed at the conclusion of practicum. Student will give their practicum mentor this form, and the student must submit completed form to faculty advisor with a copy to the Student Services Coordinator
4. [Student Self-Evaluation Form](#): Completed at the conclusion of your practicum. The student must submit completed form to faculty advisor with a copy to the Student Services Coordinator.
5. **Student Report**: Completed at the conclusion of practicum. Students must write a report of his/her activities during the field placement and submit it to the practicum mentor and the faculty advisor with a copy to the Student Services Coordinator

VIII. ESSAY/THESIS REQUIREMENTS

Thesis/Essay Committee and Topic

At the end of the student's first year of semester, the student must select a thesis/essay committee in collaboration with their faculty advisor. Each committee will have a thesis/essay chair, who may or may not be the student's IDM faculty advisor but this individual must be a member of the IDM faculty with primary or secondary appointments. Students and advisors are restricted to following the [University rules for committee composition](#) (see Appendix D for rules). 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 an essay or thesis is the same and must demonstrate the ability to reason based on scientific evidence and draw appropriate conclusions. The essay/thesis must meet appropriate academic standards and be written in a scholarly manner.

The topic, thesis/essay chair, and committee are all approved in writing by completing the [Thesis/Essay Planning Form](#). Before work can start on the thesis/essay, students must complete, obtain signatures, and submit form to the Student Services Coordinator. The Student Services Coordinator will submit the committee to Student Affairs for official approval. The student and the advisor will be notified once the committee is approved.

Focus of Essay/Thesis

The thesis or essay must be in the field of infectious diseases. 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 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.

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.

First Thesis Committee Meeting

Students who wish to produce a thesis must hold a committee meeting by the start of the semester before the one in which they plan to have their defense and submit a thesis proposal for approval. **Please note: Prior to the first committee meeting, students must submit their research proposal to all thesis committee members two (2) weeks in advance.** After the first meeting, it is up to the student to send drafts to the advisor. Students should develop a timeline for draft completion and communicate this to their advisor for approval.

NOTE: Essays do not require a committee meeting with all committee members.

The proposal for a **thesis** will consist of:

- Introduction
- Research questions
- Review of relevant literature
- Proposed methodology

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.

Thesis/Essay Format

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. Theses/essays completed by IDM alumni are available in the IDM library (A438 Crabtree Hall) and online via the [Institutional Repository at the University of Pittsburgh](#). Please note that students must submit theses and essays online via [D-Scholarship](#) and adhere to the etd template. Please see templates on the etd website: <http://www.pitt.edu/~graduate/etd/templates.html>. Online tutorials on formatting can also be found here: http://www.library.pitt.edu/other/files/etd_tutorials/etdtutorial.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.

Thesis Defense

- The committee determines if the student is ready to present the thesis 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 advisor/committee chair, the date, time, and location of the final defense will be scheduled at least 1 month in advance. 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.
- Copies of the thesis 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 after the defense.

Essay Submission

- The committee determines if the student is ready to submit the essay for their review for graduation.
- The student may be required to complete additional data collection, analysis, or other development prior to submission.
- Student should communicate with faculty advisor regularly throughout writing
- Copies of the 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.

Submission of Thesis/Essay 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.

IX. 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-MIC Program Director to organize the sequence of classes.

MASTER OF PUBLIC HEALTH (MPH-PEL) PROGRAM INFECTIOUS DISEASE CONCENTRATION IN PATHOGENESIS, ERADICATION AND LABORATORY PRACTICE

I. LEARNING OBJECTIVES

Upon completion of the MPH-PEL 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 research and development in novel or enhanced prevention, treatment, and eradication programs
4. Demonstrate knowledge of basic laboratory methods and data analyses as applied to public health infectious disease programs

II. SUMMARY OF REQUIREMENTS

A. Courses

1. Department Required Courses

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

Course Number	Course Name	Credits
BIOST 2093*	Data Management and Analysis	2
EPIDEM 2160*	Epidemiology of Infectious Diseases	2
EPIDEM 2180*	Epidemiological Methods I	3
IDM 2003	Host Response to Microbial Infections	2
IDM 2021	Special Studies (thesis/essay writing)	3
IDM 2025	Microbiology Seminar	1
IDM 2007#	Practicum	3

2. GSPH Required Courses

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

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

Course Number	Course Name	Credits
BIOST 2041	Introduction to Statistical Methods I	3
BIOST 2042*	Introduction to Statistical Methods II	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
PUBHLT 2014	Overview of Public Health	1
PUBHLT 2015 ^{Note}	Public Health Biology	2
PUBHLT 2016*	Capstone: Problem Solving in Public Health	2
PUBHLT 2022	Public Health Grand Rounds (2 semesters required)	0

Note: Students with a biology undergraduate major have the option to apply for a GSPH required course exemption and take IDM 2001- Molecular Biology of Microbial Pathogens.

Required Course Exemptions:

If you have earned a graduate degree and/or have taken a similar course, you must follow the instructions on **Appendix E** to be exempt from a required course. There are different procedures for department and school-wide GSPH exemptions. Exemptions from IDM courses for the MPH program are not permitted.

3. Elective Courses

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

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

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 or career goals. 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
BCHS 2523#	Public Health Program Planning, Implementation, and Evaluation	3	Fall/Spring
BIOST 2016*	Sampling Design & Analysis	3	Fall/Spring
EPIDEM 2181*	Design of Clinical Trials	2	Fall
EPIDEM 2260*	Epidemiological Basis for Disease Control	2	Fall
IDM 2008	Public Health Education Methods	2	Spring
IDM 2014	Functional Genomics of Microbial Pathogens	3	Every other Fall
IDM 2021^	Lab Practice	3	All
IDM 2034	Control and Prevention of HIV	2	Fall
IDM 2038	Prevention, Treatment, and Control of Global Infectious Diseases	3	Spring
IDM 2022	Special Topics	1-3	Fall/Summer
PUBHLT 2018*	Overview of LGBT Health Disparities	2	Fall
PUBHLT 2020*	Advanced Topics in LGBT Research	3	Spring

^ If completing a lab rotation, please notify the Student Services Coordinator and register for 3 credits of IDM 2021.

B. Practicum

Each student is required to complete a public health focused practicum. The practicum is a structured and educationally supervised assignment at an approved practice, service, or policy site with an experienced professional. Students may start their practicum after their first semester of study. Planning for the practicum should begin with the student's advisor as soon as the program starts. Students must spend a minimum of 200 hours at their site, and complete all necessary paperwork for the department and practicum location. See *Practicum Requirements* pg. 35 for additional guidelines.

C. Thesis/Essay

Students must complete a thesis or an essay to graduate from the program. See *Essay/Thesis Requirements* pg. 36 for additional guidelines.

III. CURRICULUM

The MPH program 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 will have gained expertise in infectious disease pathogenesis and epidemiology, their relationship to the control of infectious diseases, and 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 disease

IV. SUGGESTED SEQUENCE OF COURSES

Note: Full-time MPH students cannot register for less than 9 credits until the spring term of their second year. A total of 42 credits are required.

1st Year

Fall

Course Number	Course Name	Credits
BIOST 2041	Introduction to Statistical Methods I	3
EPIDEM 2110	Principles of Epidemiology	3
IDM 2025	MPH Seminar	1
PUBHLT 2014	Public Health Overview & Discussion	1
PUBHLT 2015	Public Health Biology	2
PUBHLT 2022	Public Health Grand Rounds	0
Elective	Elective opportunity/Certificate class	1-5
		TOTAL 11-15

Spring

Course Number	Course Name	Credits
BIOST 2042	Introduction to Statistical Methods II	3
BIOST 2093	Data Management & Analysis	2
EPIDEM 2180	Epidemiological Methods I	3
EOH 2013	Environmental Health and Disease	3
HPM 2001	Introduction to Leadership, Management and Policy for Public Health	3
IDM 2025	MPH Seminar	1
PUBHLT 2022	Public Health Grand Rounds	0
		TOTAL 15

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	MPH Seminar	1
Elective	Elective opportunity/Certificate class	1-7
		TOTAL 9-15

Spring

Course Number	Course Name	Credits
BCHS 2509	Social & Behavioral Sciences and Public Health	3
IDM 2007	Public Health Communicable Disease Practicum	3
IDM 2025	MPH Seminar	1
IDM 2021	Special Studies (Thesis/Essay)	2-4
PUBHLT 2016	Capstone: Problem Solving in Public Health	2
Elective	Elective opportunity/Certificate class	1-4
		TOTAL 12-15

V. 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. The absolute maximum number of credits any student can take is 15.
- 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.

VI. PRACTICUM REQUIREMENTS

Practicum Site Selection

The student has the primary responsibility for identifying potential practicum sites in collaboration with their faculty advisor who will officially approve the practicum site by signing the [Practicum Planning Form](#) and [Learning Agreement Form](#). Students may start a practicum any time after the first semester of study.

- A. The student should schedule an appointment with their faculty advisor to discuss potential practicum sites that fit the student's interest
- B. Before meeting, the student should see the Student Services Coordinator to obtain a list of previous practicum sites. The student should complete the Practicum Planning Form before meeting with their advisor
- C. Once a preferred site has been identified, the student should initiate contact and confirm that practicum opportunity is available.
- D. The student and faculty advisor should meet and agree on the student's choice of practicum site and complete the [Learning Agreement Form](#) before the start of the practicum.
- E. The student should obtain the signatures of the practicum mentor, faculty advisor, and MPH-PEL Director on the [Practicum Planning Form](#) and the [Learning Agreement Form](#), and submit these forms to the Student Services Coordinator for student file

Practicum Progress

1. The student should provide status reports to their faculty advisor on practicum progress
2. Nonparticipation and unexcused absences within the placement agency will result in the student failing the practicum.
3. Students are expected to follow the policies and procedures of the University of Pittsburgh and the practicum site at all times.
4. It is the student's responsibility to record their work hours to ensure they meet the 200 hour minimum.
5. The practicum is graded on a letter grade basis
6. Students may accept a stipend from the agency if available, but it is not required in order for an agency to be approved.

Department Forms & Documentation

The department requires the completion of four forms and one report due at different times throughout your practicum experience:

1. **Practicum Planning Form**: Completed before student meeting the faculty advisor. Obtain signatures and submit form to Student Services Coordinator
2. **Learning Agreement Form**: Completed in collaboration with faculty advisor and practicum mentor before practicum starts. Obtain signatures and submit form to Student Services Coordinator
3. **Preceptor Evaluation Form**: Completed at the conclusion of practicum. The student should give practicum mentor this form, and must submit the completed form to their faculty advisor with a copy to the Student Services Coordinator.
4. **Student Self-Evaluation Form**: Completed at the conclusion of your practicum. The student must submit the completed form to their faculty advisor with a copy to the Student Services Coordinator.
5. **Student Report**: Completed at the conclusion of practicum. The student must write a report of his/her activities during the field placement both to the practicum mentor and the faculty advisor with a copy to the Student Services Coordinator

VI. THESIS/ESSAY REQUIREMENTS

Thesis/Essay Committee and Topic

At the end of the student's first year of study, the student must select a thesis/essay committee in collaboration with their faculty advisor. Each committee will have a thesis/essay chair, who may, but does not have to be, the student's IDM faculty advisor. This individual must, however, be a member of the IDM faculty. Students and advisors must follow the [University rules for committee composition](#) Appendix D for rules. 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 both the essay and the thesis is the same and must demonstrate the ability to reason, based on scientific evidence, and draw appropriate conclusions. The essay/thesis must meet appropriate academic standards and be written in a scholarly manner.

The topic, thesis/essay chair, and committee are all approved in writing by completing the [Thesis/Essay Planning Form](#). Students must complete, obtain signatures, and submit form to the Student Services Coordinator, who will obtain Student Affairs approval on the committee. Once approved, the faculty advisor and student will be notified.

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 can be new data collected by the student. Consideration of the time and financial resources necessary

might limit the scope of the research so that the thesis 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 must demonstrate competence in analysis, evaluation and synthesis.
- 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 implementation by an agency or institution. This plan would be based on an analysis of agency services and policies, and explain the need and feasibility for the proposed program.
- Management Issue Analysis (Essay or Thesis): The student will collect data and analyze specific programmatic management issues which may occur within health care organizations, government agencies, or community based organizations involved in communicable disease 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 principles 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 etc.) 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 possibly for a change in objectives.

First Thesis Committee Meeting

Students who wish to produce a thesis must hold a committee meeting by the start of the semester before the one in which they plan to have their defense and submit a thesis proposal for approval. **Please note: Prior to the first committee meeting, students must submit their research proposal to all thesis committee members two (2) weeks in advance.** After the first meeting, it is up to the student to send drafts to the advisor. The student should develop a timeline for draft completion and communicate this to their advisor for approval.

NOTE: Essays do not require a committee meeting with all committee members.

The proposal for a **thesis** will consist of:

- Introduction
- Research questions
- Review of relevant literature
- Proposed methodology

Institutional Review Board (IRB)

All Thesis/Essay work involving human subjects must have documented evidence of either IRB approval or exemption. 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.

Thesis/Essay Format

Theses/essays completed by IDM alumni are available in the IDM library (A438 Crabtree Hall) and online via the [Institutional Repository at the University of Pittsburgh](http://www.library.pitt.edu/other/files//etd_tutorials/etdtutorial.html). Please note that students must submit theses and essays online via [D-Scholarship](http://www.pitt.edu/~graduate/etd/templates.html) and adhere to the etd template. Please see templates on the etd website: <http://www.pitt.edu/~graduate/etd/templates.html>. Online tutorials on formatting can also be found here: http://www.library.pitt.edu/other/files//etd_tutorials/etdtutorial.html. The most recent edition of the American Psychological (APA) Style Manual must be followed. Most theses or essays will include the following elements:

- **Introduction:** A statement of: the purpose of the study, the research description of the agency, or the environment in which the data are to be collected, 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.

Thesis Defense

- It is up to the committee to determine if the student is ready to present the thesis 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 advisor/committee chair, the date, time, and location of the final defense will be scheduled at least 1 month in advance. 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.
- Copies of the thesis 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. If the committee members agree, electronic drafts may be submitted.
- The committee will conduct a final examination on the Masters' Thesis immediately following the public portion of the defense.

Essay Submission

- The committee determines if the student is ready to submit the essay for their review for graduation.
- The student may be required to complete additional data collection, analysis, or other development prior to submission.
- Student should communicate with faculty advisor regularly throughout writing
- Copies of the 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.

Submission of Thesis/Essay 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 MPH-PEL Program Director to organize the sequence of classes.

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](#). Log into My Public Health using your Pitt username and password.

B. Electronic Theses & Dissertations (ETDs)

Students submitting a dissertation, thesis, or essay as their written requirement for their degree **must** submit their dissertation/thesis/essay electronically via [D-Scholarship](#) 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. Graduation Checklist

1. Be sure you have met all [academic requirements](#) for graduation. Check program checklists.
2. Be sure you are registered for the term in which you want to graduate
3. [Apply](#) for graduation
4. If you're a doctoral candidate, make sure your [defense is properly announced](#) well in advance
5. Complete the [Exit Survey](#)
6. If you are an international student, complete the [Departure Notification Form](#)
7. Submit your essay, thesis, or dissertation according to the [instructions](#) below. Be sure that you follow all formatting instructions in the [Academic Handbook](#) and in your departmental guidelines.

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 by applying through SOPHAS-www.sophas.org. Applications to the PhD program can occur prior to completing the MS degree, although entrance into the PhD program can 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 Manager 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. The MPH program has eleven (11) GSPH core courses that must be completed. If the student has earned a graduate degree and/or has taken a similar course, s/he must follow the instructions in **Appendix E** to obtain exemption from a required course. Procedures for department and school-wide GSPH exemptions differ.

III. TRANSFERRING IDM - MPH CONCENTRATIONS

The student, with concurrence from their faculty advisor, must inform Director of the IDM MPH Program with a copy to the Admissions Manager 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 Director of the MPH Program and the Department Chair signs off on the transfer, the Student Services Coordinator will notify you by email of the successful transfer.

IV. MPH TO MS DEGREE and MS TO MPH DEGREE

If a student has completed his/her MPH degree, and is accepted to pursue an MS degree, only 6 credits from the MPH degree can be transferred into the MS degree and vice versa. This means the student must complete 30 additional credits to earn the MS degree at Pitt or 36 additional credits to earn an MPH degree.

V. 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 academic 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 by clicking on the faculty photos found here: <http://www.publichealth.pitt.edu/infectious-diseases-and-microbiology/our-faculty?department=infectious%20diseases%20and%20microbiology&type=Primary+Faculty>.

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	Spring	Pre-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 or 2041
IDM 2002	Molecular Virology	Spring	IDM 2001 OR INTBP 2000
IDM 2014	Functional Genomics of Microbial Pathogens	Fall	IDM 2001
IDM 2161	Methods Infectious Diseases Epidemiology	Spring	EPIDEM 2110
IDM 2420	Experimental Virology	Spring	IDM 2002
MSIMM 2230	Experimental Basis of Immunology	Spring	Co-requisite: MSIMM 2210
PUBHLT 2016	Capstone: Problem Solving in Public Health	Fall/Spring	EPIDEM 2110 & BIOST 2011 or 2014 & PUBHLT 2014 & 2015 & 2022 & BCHS 2509 & EOH 2013 & HPM 2001
PUBHLT 2018	Overview of LGBT Health Disparities	Fall	EPIDEM 2110
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
BCHS 2523	Public Health Program Planning, Implementation, and Evaluation	Department	Fall/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.

APPENDIX E

Procedure for Required Course Exemptions

Department Required Course Exemptions

If the student has taken an equivalent course to satisfy the department course requirement, the individual must complete the Department Required Course Exemption form, obtain official transcripts and syllabi for courses used as the basis for the request, and present it first to the faculty advisor for their recommendation, and then to the instructor of the course for exemption consideration. The course instructors will sign if they approve or disapprove the exemption on the IDM form. The completed Department Required Course Exemption form must be returned to the IDM Student Services Coordinator in A419F Crabtree Hall.

GSPH Core Course Exemptions

If the student requests an exemption from a GSPH Core Course, the individual must fill out the [GSPH Core Course Exemption form](#), obtain official transcripts and syllabi for courses used as the basis for the request, and present it first to the faculty advisor for their recommendation, and then to the instructor of the course for exemption consideration. The completed, original GSPH Core Course Exemption form must be returned to the Office of Student Affairs, 114 Parran Hall.

APPENDIX F IDM STUDENT SERVICES FLOWCHART

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

Students communicate immediately upon admission with their Faculty Advisor and at regular intervals. The Student Coordinator serves as the liaison with Student Affairs and to solve issues at the request of the student or faculty advisor.

Student Services Coordinator is the primary point of contact for students and Student Affairs.

Student Services Coordinator will interact with the appropriate people in Student Affairs.

