

GSBS Student Handbook

2020-2021

Contents

Section One: Degree-granting programs	7
PhD in Biomedical Sciences.....	7
MS in Biomedical Sciences.....	7
MS in Clinical Investigation	7
MS in Medical Science	7
MD/PhD	7
Section Two: Technical Standards, Accommodations, the Honor Code and Professionalism	8
Technical Standards	8
Observation.....	8
Intellectual/Conceptual Abilities.....	8
Motor Skills	8
Communication.....	8
Behavioral and Social Attributes.....	9
Accommodations for Disabilities	9
Honor Code	9
Professionalism	9
Section Three: Academic Policies and Regulations.....	10
Requirements for Academic and Research Activities	10
International Students	10
Tuition Waiver.....	10
Stipend	10
Fees	10

Curricula	10
Grading	11
Research Courses	11
Research Rotations	11
Pre-Qualifying Research	11
Thesis Research	12
Graduate Research	12
Academic Activities Beyond Course Curricula	12
Attendance	12
Holidays	12
Drop	12
Withdrawal	12
Incomplete	13
Course Evaluation by Students	13
Grade Appeals	13
Appeals Procedure	13
Review	13
Finding	14
Good Academic Standing	14
Satisfactory Academic Progress	14
Review of Academic Standing	14
Probation	15
Probation for Unsatisfactory Academic Performance	15
Probation for Honor Code Violation	15

Family Accommodation	15
Leave of Absence	16
Personal	16
Medical.....	16
Withdrawal and Dismissal from the GSBS	16
Student Requests to Change Thesis Advisor.....	17
Thesis Advisor Requests that the Student Leave the Research Group.....	17
Thesis Advisor Leaves UMMS	17
Pre-Qualifying Exam Completion	17
Post-Qualifying Exam	17
Visiting Students	18
Non-Degree Students.....	18
Section Four: Academic Milestones.....	19
Research Rotations and Thesis Lab Commitment	19
Qualifying Exam (QE)	19
QE Timeline	20
Delayed QE.....	20
Selection of QE Committee Members	20
Specific Aims Meeting Guidelines.....	21
Format for Specific Aims and Specific Aims Meeting	21
Specific Aims Meeting Outcomes	22
QE Proposal and Examination Format	22
Outcomes of the Qualifying Exam	22
Responsibilities of the Thesis Advisor.....	23

Responsibilities of the General Examiner (GE)	23
Responsibilities of the QE Committee Chair	23
Responsibilities of the Student	24
Appeal of QE Outcomes	24
Thesis Research Advisory Committee (TRAC) Meetings	24
Selection of Committee Members	24
TRAC Meetings	24
TRAC Outcomes	25
Responsibilities of the Student	25
Appeal of TRAC Outcomes	25
Completion of Graduate Studies with a Master of Science (MS) in Biomedical Sciences degree	25
Dissertation Defense Examination	26
Approval of Proposed Dissertation Timeline by the TRAC	26
Formation of Dissertation Exam Committee	27
Preparation for the Defense Examination	28
Enrollment Status and Stipend During Preparation for the DE	28
The Defense Exam	29
DEC Outcomes	29
Post-Defense Completion of Dissertation	29
Completion of Degree Requirements	30
Degree Conferral	30
Dissertation Completion and Commencement	30
Section Five: Awards and Recognitions	31
Incentives for Individual, Competitive External Funding	31

Section Six: Academic Student Resources	32
GSBS Student Affairs	32
Center for Academic Achievement	32
Section Seven: Student Health and Wellness	33
Health Insurance	33
Student Health Services	33
Student Counseling Services	33
Mental Health Emergencies.....	33
Employee Assistance Program (EAP)	33
Fitness Center	33

Section One: Degree-granting programs

The GSBS has five degree-granting programs:

PhD in Biomedical Sciences

Within the PhD in Biomedical Sciences degree program, there are academic plans:

[Biochemistry & Molecular Pharmacology](#)

[Bioinformatics & Computational Biology](#)

[Biomedical Engineering & Biotechnology](#)

[Cancer Biology](#)

[Clinical & Population Health Research](#)

[Computational Biomedical Sciences and Engineering](#)

[Immunology & Microbiology](#)

[Interdisciplinary](#)

[Millennium PhD](#)

[Neuroscience](#)

Quantitative Computational Bioscience and Bioengineering

[Translational Science](#)

MS in Biomedical Sciences

[MS in Clinical Investigation](#)

MS in Medical Science

[MD/PhD](#)

The MD/PhD program is also called the Medical Scientists Training Program (MSTP).

Section Two: Technical Standards, Accommodations, the Honor Code and Professionalism

Technical Standards

Technical standards refer to non-academic proficiencies that are essential for meeting the academic requirements of the GSBS. Students must demonstrate proficiency in intellectual and physical tasks that together represent the fundamentals of biomedical research.

Students must possess abilities and skills that allow for observation, intellectual and conceptual reasoning, motor coordination, and communication.

Students must meet the prescribed technical standards, with or without accommodations that may be prescribed by the Academic Accommodations Committee (see below). A student's judgment must be based on their own powers of selection and observation, leaving use of a trained intermediary unacceptable in many situations. Service animals, as defined by the Americans with Disabilities Act, are allowed in campus facilities in accordance with federal law and institutional guidelines.

Observation

Students must be able to acquire and assimilate knowledge by direct observation (visual, auditory, and tactile) of experiences within the research and instructional settings.

Intellectual/Conceptual Abilities

Students must be able to measure, calculate, analyze, reason, integrate and synthesize information to solve problems.

Motor Skills

Students must possess sufficient postural, neuromuscular, and eye-to-hand control to independently use standard equipment and to execute standard procedures in their field.

Communication

Students must have the ability to observe, understand, and participate in lectures and laboratory instruction. Students must be able to effectively analyze and present literature and research data in large and small group settings and to individuals. During presentations and in other educational settings, students must be able to respond to questions in a manner that reflects the norms of professional discourse.

Behavioral and Social Attributes

Students must possess the emotional and mental health required for full utilization of their intellectual abilities, the exercise of good judgment, the socio-cultural interactions required for collaborative teamwork, the prompt completion of responsibilities inherent in working in research, the ability to function under the stress inherent in research, and the ability to understand and comply with ethical standards for the conduct of research. Students must be able to communicate in a professional manner within reasonable timelines.

Accommodations for Disabilities

In accordance with Section 504 of the Rehabilitation Act, the Americans with Disabilities Act (ADA), the ADA Amendments Act, and [UMass Medical School policy](#), no qualified individual with a disability shall, on the basis of that disability, be excluded from participation in UMMS programs or activities. UMMS will provide reasonable accommodation to a qualified individual with a disability.

All admitted students who are seeking accommodations in order to successfully fulfill program requirements are entitled and encouraged to initiate, prior to matriculation or at any time after matriculation, discussions with the Director of Student/Learner Accommodation Services and to apply for accommodations via UMMS [procedures](#). Accommodations cannot be issued retroactively.

Only the AAC can grant academic accommodations. Neither course directors, program directors, thesis mentors, thesis research advisory committee members, GSBS staff nor the GSBS Dean can grant accommodations.

Honor Code

All students accepting appointment to the GSBS agree to follow the guidelines of the [Honor Code](#). Procedures for and consequences of violations of the Honor Code are detailed in the policy.

Professionalism

All standards of civil, state, and federal law governing professional conduct are required to be upheld by all persons on the UMMS campus. A list of policies, procedures, and guidelines are provided by the [Diversity and Inclusion Office](#).

Unprofessional conduct that involves any activity covered by DIO policies will be handled in accordance with those policies.

Section Three: Academic Policies and Regulations

Requirements for Academic and Research Activities

GSBS students are appointed as non-benefitted employees (GRA100). Non-benefitted employee status, as defined by Human Resources, requires a minimum of 15.2 hours work per week. Progress toward thesis completion requires significantly more effort.

Students are entitled to 20 academic break days per year, in addition to University holidays. It is the responsibility of the student to ensure that all academic requirements and professional obligations to the research group are met.

Students are allowed no more than four hours per week of additional UMMS employment (example: teaching assistantships, etc.).

International Students

Administrative responsibility for UMMS student visas rests with [Immigration Services](#) (IS). It is the responsibility of the GSBS and the student to work with IS to complete the necessary documentation for issuing, maintaining, and renewing a visa. Loss of visa status will automatically result in being placed on Leave of Absence.

Tuition Waiver

Students appointed as GRA100 receive a tuition waiver.

Stipend

Students appointed as GRA100 receive an annual stipend. The stipend amount may be adjusted at the start of an academic year at the discretion of the GSBS. The stipend is paid bi-weekly through the standard UMMS payroll process. It is subject to federal and state withholdings unless the individual is a citizen of a country that has a tax treaty with the United States government. A student should contact Immigration Services to determine whether they are subjected to a tax treaty.

Fees

[Fees](#) are assessed of all GSBS students and are paid by the GSBS, the Thesis Advisor or the Thesis Advisor's Department.

Curricula

Students experience a set of common, required classroom and research courses, as well as academic plan-specific elective requirements. Students must adhere to the requirements of their [degree program and academic plan](#).

Grading

All courses are required to have a grading policy presented by the course director at the start of the semester. Grading policy for each course is reviewed by the GSBS Curriculum Committee and approved by GSBS Assembly. All courses use the following designations for grades:

Letter grade	GPA	Description
A	4.0	Above proficient
A-	3.7	
B+	3.3	Proficient
B	3.0	
B-	2.7	Below proficient
C	2.0	Unsatisfactory
F	0	Unsatisfactory
P (pass)	N/A	Above proficient/Proficient
MP (marginal pass)	N/A	Unsatisfactory
F (fail)	N/A	Unsatisfactory
I (incomplete)	N/A	See policy
W (withdrawn)	N/A	See policy

Research Courses

All PhD students must be registered for one of four types of Research Courses during each semester of every academic year.

Research Rotations

Following matriculation, students register for Research Rotations with GSBS Faculty each semester until a dissertation advisor is approved.

Pre-Qualifying Research

Following approval to join a dissertation laboratory, students register for Pre-qualifying Research each semester until they have successfully completed the Qualifying Examination.

Thesis Research

Following satisfactory completion of the Qualifying Examination, students register in Thesis Research each semester until they accumulate 90 credit hours of training (classroom study and research).

Graduate Research

Upon completing 90 credit hours of training (classroom study and research), students register each semester for Graduate Research.

Research courses are graded with a Pass/Marginal Pass/Fail scale. Research course grades of MP or F cannot be remediated.

Academic Activities Beyond Course Curricula

Individual academic plans may require participation in seminars, workshops, journal clubs, or tutorials that may or may not be official GSBS courses.

Attendance

Course directors will provide an attendance policy, (including, but not limited to, mechanisms for handling absences, tardiness, deadline postponements, or assignment/participation makeup), at the start of the semester. Students are expected to adhere to the attendance policy.

Holidays

The institution recognizes federal, state, and religious holidays when scheduling required activities. Students should consult the Human Resources list of [recognized holidays](#) and determine whether additional formal accommodations from GSBS are necessary. Students are responsible for work missed, even when formal accommodations are granted

Drop

Each term contains a defined period of time during which a student may unenroll for a class with no record of the class on the student's transcript. Outside of this defined time period, a student must Withdraw to unenroll. It is the responsibility of the student to know the Drop deadline for each semester.

Withdrawal

Students may withdraw from a course and receive a grade of withdrawn (W) if $\leq 75\%$ of the semester is complete. The course will remain on the transcript with a grade of W. Matriculated students must carry nine credit hours of study in a semester.

Incomplete

A student who is unable to complete a course due to unforeseen circumstances and who has completed at least 75% of the coursework with a passing grade may petition the course director for a grade of Incomplete (I). The student must complete the coursework in the time determined by the course director. The course director will change the student's grade upon completion of the work. The course director is authorized to determine whether completion of the course requirements include retaking all or part of the course in the next term that it is offered.

Failure to complete the course work within the defined time will result in a change to a grade of Fail (F).

Course Evaluation by Students

Courses and course instructors are evaluated by students during or upon completion of the course. These on-line, anonymous evaluations are initiated and coordinated by the GSBS.

Grade Appeals

Appeals Procedure

The student must first seek to resolve the issue by appealing directly to the faculty member who issued the grade. If unsuccessful, the student must appeal in writing, via email, to the GSBS Assembly Chair within twenty business days of the original decision. The timeline begins when the grade is available to the student in the system of record.

A grade may be appealed only on procedural grounds. The student must identify the procedural irregularities that contributed to the decision.

The GSBS Assembly Chair reviews the appeal and may either reject the appeal or convene an ad hoc Appeals Committee to consider the appeal. The Appeals Committee will consist of three tenured Professors who have no conflicts of interest and who are drawn from a standing roster of GSBS faculty who are eligible and willing to participate. The GSBS Assembly Chair must provide a written response to the student. If the Appeals Committee is convened, the GSBS Assembly Chair does not take part in the appeal, but reports the outcome to the Dean, in writing.

If the GSBS Assembly Chair has a conflict with the particular case, the GSBS Assembly Vice-Chair will act as convener.

Review

The Appeals Committee may request written/electronic communications pertaining to the appeal, interviews with relevant parties, and GSBS records relevant to the case.

The Appeals Committee will review the body of evidence to determine whether established procedures were followed.

Finding

The Appeals Committee may recommend to either uphold or vacate the original grade. The Committee must provide written justification for their decision in a written report to the GSBS Assembly Chair. The Committee may recommend an alternate grade.

If the original decision is vacated, the faculty member or governing body that issued the grade must address the issues raised by the Appeals Committee, in writing, to the GSBS Assembly Chair. The GSBS Assembly Chair reports all of the findings to the Dean, who will consider the findings and confirm the original grade or issue a new grade.

The Dean will provide a written summary of the final decision to the GSBS Assembly Chair, the Appeals Committee, and to the student.

Good Academic Standing

Good Academic Standing requires that a GPA \geq 3.0 with no C or marginal pass (MP) grades.

Satisfactory Academic Progress

Satisfactory Academic Progress status for BBS students is determined at the end of each academic year as described in the table below.

Satisfactory Academic Progress status is conferred at the end of the indicated year when

Year 1	the student has completed all required classes and has obtained a thesis advisor commitment for thesis research by August 31
Year 2	the student has passed the Qualifying Exam and is enrolled in Thesis Research
Year 3	the student has successfully completed the PARC course requirement and annual TRAC requirement
Years 4-6	the student has completed the annual TRAC requirement
Years 7 and beyond	No student in this category is making Satisfactory Academic Progress unless so indicated by the TRAC

Review of Academic Standing

If student falls out of Good Academic Standing or is not making Satisfactory Academic Progress, they are reviewed by the Academic Standards Committee. There are two possible outcomes: probation

with remediation, or withdrawal from the GSBS. The Academic Standards Committee is charged with developing a remediation plan in collaboration with the course director or with the research advisor and the Thesis Research Advisory Committee (TRAC), if applicable. The remediation plan will contain specific benchmarks and expected times of completion. The Academic Standards Committee will review progress toward remediation and will advise the Dean whether or not it finds the remediation to have been successful.

Probation

A student can be placed on probation for failure to maintain Good Academic Standing or Satisfactory Academic Progress or for Honor Code violations.

Probation for Unsatisfactory Academic Performance

Any student holding a GPA <3.0 or a C or MP grade is placed on probation.

A student who has received an evaluation of marginal pass (MP) in any Research Course will be placed on probation until the next evaluation. If the student's next evaluation is pass (P), they will be removed from probation. If a second MP is received at any subsequent evaluation, the student will be reviewed by the Academic Standards Committee.

Probation for Honor Code Violation

The term and conditions of probation will be defined and communicated to the student by the Dean following the conclusion of Honor Board proceedings.

When the period and/or conditions of probation end, probationary status is immediately lifted.

Any new violation during the probationary term will trigger review by the Academic Standards Committee, which will make a recommendation to the Dean about the student's ability to continue in graduate studies.

Family Accommodation

Students can request up to eight weeks of time for the care of a child or other family member. During this time, the student will remain enrolled. The student will continue to receive a stipend for up to eight weeks plus any unused academic break days. The timing of family accommodation can be consecutive or nonconsecutive.

After eight weeks, the student will return to full-time student responsibilities or will initiate a Leave of Absence.

Leave of Absence

Students may request a leave of absence (LOA) for a period of up to one year. All leaves of absence or returns from leaves of absence require a meeting with the Dean or Dean's designee. Students on probation may have conditions of reinstatement set by the Dean, the Thesis Advisor, and/or TRAC.

During a LOA, the student remains enrolled, but does not receive stipend. The stipend end date is the effective date of the LOA. Enrollment requires that the student show proof of health insurance coverage. The Student Health Insurance plan is available for purchase in the event that the leave of absence extends past the time covered by the annual premium.

A student may only return from a LOA on the first day of a semester. If the leave of absence was initiated less than six weeks prior to the end of a semester, the LOA must extend through the following semester. For students taking a full, one-year LOA, the return would be in the first semester following the one-year LOA period.

If the student does not return to school at the end of the LOA period, the student will be withdrawn by the Graduate School. Requests for extensions beyond one year require a written communication to the Dean that includes a proposed new enrollment date and justification for the extension.

A Leave of Absence will invalidate visas for international students. Return from LOA will require acquisition of a new visa. International students wishing to take a LOA must coordinate the leave and the return with Immigration Services

There are 2 types of LOA: Personal and Medical.

Personal

Personal LOA is a leave for any reason of the student's choice.

Medical

Medical LOA follows the procedures of personal LOA with the following additions:

1. Requires a letter from a medical professional with appropriate expertise relevant to the diagnosis who (1) prior to Medical LOA being approved, attests that a medical condition prevents the student from being able to participate in their educational training, and (2) prior to approval of return from Medical LOA, attests that the medical condition that warranted a Medical LOA has resolved to a sufficient degree for the student to be able to participate fully in their educational training
2. Allows UMMS-provided health insurance coverage to continue throughout the length of the LOA

Withdrawal and Dismissal from the GSBS

A student may voluntarily withdraw from the Graduate School at any time by informing the Dean in writing.

The Dean may request that a student withdraw from the GSBS or may dismiss a student from the GSBS. If a student refuses a formal request for withdrawal, they will be dismissed.

A request for withdrawal or a dismissal can occur for continued unsatisfactory academic performance that is documented by evaluation(s) from the Academic Standards Committee and/or for Honor code violation(s).

Student Requests to Change Thesis Advisor

A student in good academic standing may request a change of thesis advisor after consultation with GSBS Student Affairs and Academic Affairs. The student will have the opportunity to rotate in one or two labs for up to eight weeks, during which time the student's stipend will be supported by the GSBS. Prior to a rotation being approved, faculty members will confirm to the student and the GSBS that they have appropriate resources to support the student in thesis research.

GSBS Academic Affairs will conduct a review with the student and the potential thesis advisor midway through the rotation.

At the end of the first rotation (or earlier), if the first potential advisor does not accept the student for thesis research, the student will begin a second rotation. If the student has not secured the commitment of a thesis research advisor upon completion of one or two rotations, the student will be withdrawn from the GSBS.

Thesis Advisor Requests that the Student Leave the Research Group

This process is identical to the process described for students seeking to change their Thesis Advisor.

Thesis Advisor Leaves UMMS

Pre-Qualifying Exam Completion

If the student wishes to remain enrolled in the GSBS, the student must identify a new thesis advisor. If the student wishes to join their thesis advisor at the new institution, they will be unenrolled from the GSBS.

Post-Qualifying Exam

If the student wishes to accompany the advisor to the new institution, they may do so while maintaining their enrollment at UMMS. The student is required to meet all GSBS and academic plan requirements, including course work, annual submission of an IDP, and two annual TRAC meetings.

A student who working at another institution is required to meet twice per year with the TRAC.

GSBS Students conducting thesis research at other campuses must be compensated at equal to or greater than the total GSBS compensation (stipend plus full value of the Student Health Insurance Plan).

The amount of compensation will be specified in a signed agreement between the Dean and the dissertation advisor at the time the student leaves campus.

Visiting Students

A student who is enrolled in another institution but is conducting thesis research in the laboratory of a UMMS faculty member is required to register as a Visiting Non-Degree student. Visiting Non-Degree students are appointed annually and are not subject to GSBS academic requirements.

The conditions for Appointment and renewal are:

1. The appointment must commence at the start of an academic term, and continue through at least two consecutive terms
2. The student must enroll in BBS990 each term (Graduate Research)
3. Total annual stipend level, from all sources, must meet or exceed the GSBS stipend
4. Student Service Fees must be paid by the research advisor or host department
5. The GSBS Program Fee (\$90) must be paid to offset GSBS administration costs
6. The GSBS must receive annual confirmation from the home institution that the student is enrolled in a PhD program and is meeting all academic requirements of the degree program at the home institution.

Non-Degree Students

Courses may be taken by non-degree students with the permission of the course coordinator and in compliance with the [Non-Degree Registration Policy](#).

Section Four: Academic Milestones

Research Rotations and Thesis Lab Commitment

There are five Research Rotation Sessions – two each in the Spring and Fall semesters, and one in the Summer term.

Most rotation sessions are eight weeks long, with some variability in length to accommodate observed holidays and academic events.

Students are required to rotate in three distinct research groups in the first three Rotation Sessions (Fall Session 1, Fall Session 2, and Spring Session 1).

After completing three distinct rotations, the student has the following options:

1. Secure a Thesis Research Commitment and begin thesis research.
2. Rotate in a fourth research group-
3. Return to a prior rotation for a revisit, without securing a commitment.

Students who worked in paid or unpaid research settings at UMMS prior to matriculation, including students in the PREP program, are not permitted to rotate in the lab of their previous mentor prior to the third rotation session, following two rotations in other distinct labs.

GSBS provides financial support for all students through the entirety of their first academic year, regardless of when a student commits to a thesis research group.

Thesis Research Commitment forms are due June 1. If a student does not secure a Thesis Research Commitment by June 1, the student will be advised by the GSBS Dean or Dean's designee on selecting a fifth rotation session in order to obtain a thesis lab commitment.

In rare, extenuating circumstances, after consultation with Student Affairs and the Academic Standards Committee, the Dean may provide a student with the opportunity to do a sixth rotation in the Early Fall session.

Qualifying Exam (QE)

The QE is conducted in three parts:

1. Specific aims meeting
2. Creation and submission of a written proposal
3. Oral examination

QE Timeline

1. QE Committee should be formed and approved by the Program Director and the Dean or his/her Designee by January 31.
2. The Specific Aims page is due to the committee 1 week before the Specific Aims meeting.
3. The Specific Aims meeting must be held by March 15.
4. The written proposal is due to the committee 4 weeks after successful completion of the Specific Aims meeting.
5. The oral exam must be completed by May 1 and must be 5-7 weeks after the Specific Aims meeting.
6. Any retests (written or oral) must be completed within 2 weeks of the oral exam.
7. Any exceptions to this timeline must be petitioned in writing and approved by the Dean or his/her Designee.

Delayed QE

A student in good academic standing who wishes to delay the QE beyond the end of Year 2 must discuss their situation with GSBS Student Affairs and must provide the Dean with the following written documentation for the Dean's review:

1. A justification for the delayed QE
2. A proposed schedule for QE completion
3. A statement from their thesis advisor(s) signifying continued financial and educational support throughout the QE completion timeline

A schedule for QE completion for any student who is not in Good Academic Standing or who is not making Satisfactory Academic Progress will be determined by the Dean.

Failure to complete the QE by the end of the fall semester of the post-QE year will result in withdrawal.

Selection of QE Committee Members

The committee consists of four members. Three members are chosen by the graduate program, or, if permitted by the graduate program, are chosen by the student and advisor and subsequently approved by the graduate program. The fourth member is the General Examiner, appointed by the Dean or his/her designee.

The committee consists of four members. Three members are chosen by the graduate program, or, if permitted by the graduate program, are chosen by the student and advisor and subsequently approved by the graduate program. The fourth member is the General Examiner, appointed by the Dean or his/her designee.

The Thesis Advisor is not a member of the Qualifying Exam Committee (QEC).

All members of the Qualifying Exam Committee (QEC) must hold GSBS faculty status. GSBS Contributing and Affiliate Faculty are not permitted to serve on a QEC. No QEC member can be the current or former spouse or a relative of the student or the dissertation advisor.

The QE committee Chair and the GE must be a tenured Associate Professor or Professor. Neither the QE committee Chair nor the GE can be a co-author, co-advisor, or active collaborator with the student. Collaborations between other members of the QE committee and the student must be declared at the time of committee selection.

The final QE committee selection, including the Chair, will be approved by the student's program director and the Dean. No portion of the QE may proceed without approval of the QE committee by the Dean.

Specific Aims Meeting Guidelines

No Specific Aims meeting will proceed in the absence of any member of the QE committee. If a member of the Committee cannot be present, the Specific Aims meeting must be rescheduled.

During the Specific Aims meeting the student will articulate the hypothesis or question to be investigated and the rationale for undertaking these studies. General approaches will also be discussed so that the committee can evaluate the feasibility of the proposed Aims. During this meeting, the committee may suggest revisions to the Aims, including the removal or substitutions for Aims more suitable for testing the student's competency during the subsequent exam.

This meeting also provides an opportunity for faculty to communicate areas of investigation or concerns that the student should expect to address during the formal exam. The primary purpose of the Aims meeting is to help the student prepare for the subsequent exam.

Format for Specific Aims and Specific Aims Meeting

1. The student will prepare a 1-page Specific Aims page (single spaced; 11 pt NIH-approved font (e.g., Arial); 0.5" margins). References are optional, but if included must be on a separate page.
2. A student who has previously submitted an NIH F31 or grant application of similar length with substantial input from their thesis advisor is expected to develop at least one Aim not contained within the jointly developed application.
3. Previously submitted grants must be disclosed and submitted to the QE committee prior to the Specific Aims meeting.
4. The meeting must not exceed one hour in duration, unless discussion of revisions requires additional time.
5. The student must prepare a brief PowerPoint presentation (no more than 15 minutes uninterrupted and 10 slides) to introduce the background and rationale for the research proposed, as well as a brief experimental outline of each Aim. Experimental details or preliminary data will not be presented.
6. Transcript and letter from the thesis advisor (supporting the student's candidacy) will be reviewed by the committee at this time.
7. The thesis advisor can have input on the Specific Aims before this meeting.
8. The thesis advisor may attend the Specific Aims meeting but is not a member of the committee. The advisor is allowed to have a wrap-up discussion with the student following the meeting.

9. The outcome of the meeting, including details of any substantial revisions to the Specific Aims, must be communicated to the student in writing by the QE Chair.

Specific Aims Meeting Outcomes

1. The Specific Aims are approved, and the student may begin preparing the full proposal.
2. The Specific Aims must be revised according to committee recommendations. Revisions must be submitted by email to committee members within one week. The Chair, in consultation with the rest of the QEC, will communicate approval of the revised Aims or requests for additional revision within the subsequent week.
3. The committee may call an additional Specific Aims meeting at their discretion if extensive revision of the original Specific Aims is warranted.

QE Proposal and Examination Format

1. Students are encouraged to write a proposal that directly relates to their likely thesis research, although an unrelated topic may be chosen.
2. The written exam must be in F31 (F30 for MD/PhD students) format: 1-page specific aims (single spaced), 6 pages (single spaced, 11pt NIH-approved font (e.g., Arial), 0.5 inch margins) proposal, inclusive of figures but not references.
3. The exam room must be scheduled for a 3-hour time period, although the expectation is that exams will be completed within 1.5-2 hours.
4. The thesis advisor may not be present at the QE exam.
5. The student must prepare a brief (~10 minute) presentation to introduce their proposal, which they will be allowed to present uninterrupted at the beginning of the exam. Additional slides can also be prepared to facilitate further discussion, if needed.

No QE will proceed in the absence of any member of the QE committee. If a member of the Committee cannot be present, the QE must be rescheduled.

Outcomes of the Qualifying Exam

Pass

The proposal meets or exceeds expectations, and the exam performance meets or exceeds expectations. This outcome requires that at least three QE committee members vote to pass the student.

Not Passed – Revise

The student is required to revise the QE Proposal and may not enter into doctoral thesis research until the revisions have been approved by the committee. Revisions are not complete until all members of the committee approve.

Not Passed – Retest

The student must retest and may not enter into doctoral thesis research until passing the retest. At the direction of the QE committee, this may require that some or all of the proposal be re-written. Only one retest is permitted.

In all cases of a “Not passed” outcome, the QE committee creates a remediation plan. The remediation plan includes a specific timeline for revision and/or retest. If other, additional remediation is required (e.g., completion of a course), the QE committee provides the student and the Dean with a summary that includes educational objectives and the mechanism for assessing attainment of the objectives.

Fail

The student does not meet the specified objectives of the QE upon a retake. Failure of the QE results in withdrawal of the student from the GSBS.

Responsibilities of the Thesis Advisor

The thesis advisor will provide a written evaluation of the student in advance of the QE exam. GSBS staff will solicit this evaluation and distribute to the QE Chair.

Responsibilities of the General Examiner (GE)

The GE ensures that the examination is fair and rigorous, and that student assessment is based on the approved learning objectives and is consistent with QEs of other students.

Upon completion of the exam, in the presence of and in consultation with the other members of the QE committee, the GE completes the [QE outcome form](#). If a revision or re-test is required, the GE, in consultation with the other members of the QE committee, completes a new QE outcome form upon completion of the remediation.

The GE also completes the [GE checklist](#) and submits that to the GSBS office.

Responsibilities of the QE Committee Chair

The Chair of the QEC will require documentation of QE committee approval prior to proceeding with scheduling any portion of the QE.

The Chair is responsible for informing the student of exam procedures, assuring compliance with the expected timeline of the QE process, reviewing the thesis advisor’s written evaluation in advance of the Specific Aims meeting, reviewing the student’s transcript and determining whether program requirements have been met, communicating relevant details of the student’s academic record to the committee at the start of the exam, ensuring fair treatment of the student during the exam, leading the committee’s deliberation to determine exam outcome, and communicating the outcome and the committee’s evaluation (from the QE outcome form) to the student. The Chair will also communicate the outcome with the student’s thesis advisor upon request by the thesis advisor.

Responsibilities of the Student

Students are required to obtain the Dean's approval of their QE Committee prior to initiating any part of the QE process.

Students are required to complete every QE assignment and report and any other academic communication with the GSBS administration through Blackboard.

Appeal of QE Outcomes

An appeal of a QE outcome will follow the same procedure as described for grade appeals. The student must initiate an appeal in writing, via email, to the GSBS Assembly Chair within twenty business days of the conferral of the outcome, which is the day of the QE.

Thesis Research Advisory Committee (TRAC) Meetings

The TRAC meeting is a formal, required course in the GSBS curriculum. Students must enroll each Fall semester and must complete the TRAC meeting by the end of the Fall semester. Failure to hold a meeting in the Fall semester will result in a grade of Incomplete, and failure to remediate a grade of Incomplete by the end of the academic year will result in a grade of Fail.

Additional TRAC meetings may be held each year at the request of the TRAC or the student.

Selection of Committee Members

Students will select TRAC members early in the third year and submit the [TRAC selection form](#) to the GSBS.

The TRAC committee is composed of the thesis advisor and three additional members. The Chair of the TRAC must be a tenured GSBS faculty member. The Chair cannot be a collaborator on the student's thesis research. If the Chair becomes involved in a collaboration with the student, the Chair may remain on the TRAC but must resign as Chair and another Chair must be selected. GSBS Contributing Faculty members may serve on TRACs, but may not serve as TRAC Chair. A GSBS Faculty appointment is required for service on a TRAC.

As a member of the TRAC, the thesis advisor may be present for the TRAC meeting. However, the presence of the thesis advisor is not a requirement.

TRAC Meetings

During each meeting, the TRAC will meet separately with the advisor in the absence of the student and will also meet separately with the student in the absence of the advisor.

If scheduling conflicts prevent the timely convening of a TRAC meeting, the meeting may proceed with one member absent. If the thesis advisor cannot attend the meeting, then the thesis advisor must prepare a written summary of the student's progress since the last meeting and the aims for the

subsequent period. The summary must be distributed to the other TRAC members in advance of the TRAC meeting.

The presence of the TRAC Chair is required. If the Chair is unable to attend, another TRAC member must serve as Chair for the meeting or the meeting will be rescheduled.

TRAC Outcomes

After the discussion has concluded and the TRAC has met separately with the student and advisor, the TRAC will determine the outcome of the meeting. The TRAC Chair will communicate the outcome to the student.

Pass: Continue with research, meet again in one year.

Pass: Continue with research, meet again in a time frame less than one year (time must be specified)

Pass: Change program to "Complete with MS in Biomedical Science"

Marginal Pass: continue with research, meet again in a specified time of less than 6 months

Marginal Pass: Change Program to "Complete with MS in Biomedical Science"

Fail: Withdraw from GSBS with no degree

Responsibilities of the Student

Students are required to complete every TRAC assignment and report and any other academic communication with the GSBS administration through Blackboard. Students are required to distribute their pre-TRAC meeting summary to each member of the TRAC at least three days prior to the TRAC meeting. Students are required to distribute their post-TRAC meeting summary to the TRAC within one week of the TRAC meeting.

Appeal of TRAC Outcomes

An appeal of a TRAC outcome will follow the same procedure as described for grade appeals. The student must initiate an appeal in writing, via email, to the GSBS Assembly Chair within twenty business days of the conferral of the outcome, which is the day of the TRAC meeting at which the outcome was determined.

Completion of Graduate Studies with a Master of Science (MS) in Biomedical Sciences degree

Completion with a MS degree may be initiated by the student, or it may be an outcome of a TRAC meeting. Approval for MS completion is contingent on:

1. Good academic standing

2. Completion of all GSBS course requirements
3. Successful completion of the qualifying exam
4. Research accomplishments that can be presented in a thesis

If a student wishes to complete the program with a MS degree, a TRAC meeting will be convened to review and approve the student's proposed pathway for completion of the MS. If the student has not yet formed a TRAC, the student's QE Committee will substitute. If the committee does not approve the proposal for MS completion, the student will withdraw with no degree.

Upon approval, the student will form a MS thesis committee to review the MS thesis. The committee will consist of three members:

1. A Program Director
2. A member of the current TRAC (or QE committee)
3. Any GSBS Faculty member

The student is granted sixty days of stipend support from the time of approval of the program change date for MS completion, during which time it is expected that a thesis is completed and approved by the committee for final submission. The stipend ends in sixty days regardless of whether the student has completed the requirements for the MS degree. If the stipend is terminated before the MS thesis is approved, the student will be placed on LOA and will have one year to obtain approval of the MS dissertation. Failure to complete the MS dissertation will result in withdrawal with no degree.

Dissertation Defense Examination

Approval of Proposed Dissertation Timeline by the TRAC

A student who has concluded that their dissertation research is nearly complete must propose a timeline for completion and meet with the dissertation advisor and the TRAC for review and approval of the proposed timeline.

At the TRAC meeting, the student must present:

1. A draft of the thesis abstract
2. An outline of the dissertation, including a detailed outline of the Introduction and Discussion
3. A summary of published work that will be included in the dissertation
4. Any data that are unpublished or previously unseen by the TRAC, that will be included in the dissertation. These data should be presented in publication-ready form where possible.
5. A proposed date range for the dissertation defense
6. A proposed list of external examiners

The TRAC will **Approve** or **Defer** to a later timeline.

Approval of the student's proposed dissertation timeline indicates that:

1. The student is not required to complete additional experiments
2. The vast majority of data analysis is complete or in an advanced stage

There are no outstanding obligations **defined as required** by the thesis advisor or the TRAC, that would prevent the student from focusing entirely on dissertation completion (such as waiting for a manuscript to be reviewed and accepted)

3. The student has presented a draft of the thesis abstract and a detailed outline, and the TRAC has provided feedback
4. The student has identified potential external examiners, and the TRAC has deemed these appropriate

If the TRAC Approves, the student must return the completed TRAC approval of proposed dissertation timeline form ([GSBS70](#)) to the GSBS office as soon as approval has been granted. Providing the form to the office will NOT initiate any actionable deadlines.

If the TRAC Defers to a later date, the TRAC must communicate the expectations for completion to the student, including experiments or analyses that remain to be completed, and the expected status (submitted or accepted) of publications authored by the student, before the defense timeline can be set. The TRAC may recommend an expected timeline. The TRAC must also communicate to the student whether a full TRAC meeting will be required for approval of the revised timeline, or whether a meeting with the TRAC chair is sufficient.

The student should submit a regular TRAC form ([GSBS07](#)) with a brief post meeting report that outlines the TRAC's expectations for completion. When the student has completed the assigned work and approval from the TRAC is obtained, the student must submit form [GSBS70](#).

Formation of Dissertation Exam Committee

The Dissertation Examination Committee (DEC) consists of five members. Four members must be GSBS Faculty Members. One of these must be designated as the DEC Chair. Contributing and Affiliate faculty members are not eligible to serve on DEC. The dissertation advisor cannot be a member of the committee.

An External Examiner must be selected and approved by the TRAC and the Dean. The purpose of the External examiner is to represent the academic community at large in upholding the standards of the PhD degree. Therefore, the External Examiner must:

1. Hold a doctoral degree
2. Be currently engaged in research in the field
3. Be primarily appointed as a faculty member at a PhD-granting institution or appointed at a government or other non-profit institution with a secondary appointment at a PhD-granting institution.

Co-authorships and Conflict of Interest exclusions

The DEC may consist of no more than two members who are current or intended future co-authors with the student on the work in the dissertation.

Neither the DEC Chair nor the External Examiner can be a current or intended future co-author with the student on work presented in the dissertation.

No DEC member can be the current or former spouse or a relative of the student or the dissertation advisor.

Preparation for the Defense Examination

1. The student will schedule the defense examination (DE).
2. The student will submit the DE Committee Selection Form ([GSBS14](#)) to the GSBS office 30 days prior to the DE.
3. The student will provide the GSBS office with the Request for Posting of Dissertation Defense ([GSBS11](#)) along with an ~250-word research summary 21 days prior to the defense.
4. The student will distribute the final copy of the dissertation to the DE committee 21 days prior to the DE.
5. Within 7 days of receipt, the DE Chair will review the thesis for general acceptability and will communicate his/her findings to the GSBS and to the rest of the DE committee. In the event that the Dissertation document is unacceptable,
 - 1) the DE Chair also informs the student and the dissertation advisor and provides a written summary to all detailing the deficiencies. The DE will be cancelled.
 - 2) the student will correct the deficiencies and restart the process of preparation for the DE.
6. The defense notice will be posted and electronically distributed by the GSBS 2 weeks prior to the defense. The GSBS office will not post the notice until confirmation that the defense can move forward has been received from the DEC chair.

Enrollment Status and Stipend During Preparation for the DE

The student must be enrolled and supported by stipend for the duration of the time remaining to the DE, and up to six weeks following the defense. A student has 120 days after the defense exam to complete all degree requirements. Failure to complete all degree requirements will result in withdrawal from the GSBS and no degree will be awarded.

If a student takes a Leave of Absence (LOA) after TRAC approval of the dissertation exam timeline, but prior to the defense, the defense examination must be completed within one year the start of the LOA. If the dissertation exam is not successfully completed within this timeframe, the student will be withdrawn, and no degree will be issued.

The Defense Exam

The defense exam consists of a public seminar followed by a closed defense examination. The public seminar is a 45–50-minute summary of the findings reported in the dissertation, followed by questions from the audience. The closed defense examination will take place immediately after the public seminar. The dissertation advisor cannot be present during the closed-door defense.

DEC Outcomes

Pass

A student earns an outcome of Pass when the DEC unanimously decides that the defense examination is satisfactory, and the written dissertation is acceptable as presented.

In Progress - Minor Revisions

A student earns an outcome of Minor Revisions when a majority of the DEC decides that the defense examination is satisfactory, and the written dissertation requires only minor revisions that do not materially affect the content of the dissertation.

In Progress - Major Revisions

A student earns an outcome of Major Revisions when a majority of the DEC decides that the defense examination is satisfactory, and the written dissertation requires substantial revisions to the text. Major revisions include any revisions that materially affect the content of the dissertation, including the addition of significant content to the Introduction or the Discussion.

In Progress - Retest

A student earns an outcome of Retest when a majority of the DEC decides that the oral examination is unsatisfactory. The dissertation may be acceptable or may require minor or major revisions. Only one retest is permitted.

Fail

A student earns an outcome of Fail when the DEC unanimously decides that the defense examination and/or written dissertation is unacceptable and cannot be improved to the point where the DEC could find one/both acceptable.

Post-Defense Completion of Dissertation

The DEC Chair, in consultation with other DEC members, is responsible for approving a revised dissertation.

The student has four months post-defense to retest, if necessary, to submit the revised and approved dissertation and to complete [all degree requirements](#). If all degree requirements are not completed

within four months, the student will be withdrawn from the GSBS and will receive no degree. Extensions will be considered only with documentation of extreme extenuating circumstances.

Completion of Degree Requirements

All [instructions for degree completion](#) must be completed by the student before a degree will be conferred.

Degree Conferral

UMMS confers degrees four times each year (the Sunday after Memorial Day (Commencement), August 31, December 31, and March 31). A student's degree will be conferred on the first date following completion of all requirements.

Dissertation Completion and Commencement

The preparation for the annual Commencement ceremony introduces deadlines that are not controlled by the GSBS. If a student wishes to participate in Commencement, each of the following requirements must be satisfied without exception:

1. The student must submit their Dissertation Examination Committee selection form to the GSBS office no later than March 1
2. The student must submit their Thesis Defense Notification form to the GSBS office no later than March 10
3. The student must submit their Thesis Dissertation to their DEC no later than March 15
4. The student must successfully defend their Thesis no later than April 1
5. The student must complete their Thesis Dissertation edits, have them approved by the DEC Chair and deliver the appropriate signed defense outcome form indicating this approval to the GSBS office no later than May 1

Section Five: Awards and Recognitions

Incentives for Individual, Competitive External Funding

Students who are awarded competitive, externally-funded individual fellowships or who become supported by Research Supplements to Promote Diversity in Health-Related Research

will receive the greater of the following two options:

1. The GSBS standard stipend, plus 20% of the stipend component of the awarded fellowship.
2. The fellowship stipend.

Supplementation of the GSBS standard stipend will be paid by the source responsible for the student's pre-fellowship stipend and fees – either the Thesis Advisor, the Thesis advisor's department, or the GSBS. Following completion or termination of the award, the student's stipend will return to the standard GSBS stipend.

When student's health insurance and/or fees are covered in full or in part by the fellowship award, they will be paid by the funding agency. Any shortfall will be paid by the source responsible for the student's pre-fellowship stipend and fees.

Students supported by non-individual fellowships (i.e., institutional training grants), are not eligible for this incentive program.

Section Six: Academic Student Resources

[GSBS Student Affairs](#)

[Center for Academic Achievement](#)

Section Seven: Student Health and Wellness

Health Insurance

<https://www.umassmed.edu/studenthealth/student-health-care/health-insurance/>

The Bursar's Office is responsible for assisting students with health/dental insurance enrollment. Please contact the Bursar Office at (508) 856-6612 with any questions related to enrollment in the BC/BS plan offered.

Student Health Services

<https://www.umassmed.edu/studenthealth/>

Student Counseling Services

<https://umassmed.sharepoint.com/sites/StudentCounselingServicesSCS>

Mental Health Emergencies

FOR ALL STUDENTS: If a mental health emergency arises during business hours, please try to call our office first at 508.856.3220. In the event of an emergency at any time, call Emergency Mental Health (EMH) at 508-856-3562, your local ER or 911.

Employee Assistance Program (EAP)

<https://www.umassmed.edu/eap2/Employee/>

The EAP provides services to our UMMS community, including students, in the areas of personal concerns (family, financial, legal, etc.), mental health concerns, workplace concerns, and wellness and work life balance.

Fitness Center

<https://www.umassmed.edu/facilities/fitness-centers/>

The Fitness Center is currently closed due to the pandemic. Online videos from Corporate Fitness works are available:

<https://vimeo.com/corporatefitnessworks/cfw-signature-sessions>