

Department of Molecular Biosciences
(Formerly Cell Biology, Microbiology and Molecular Biology
with name change effective in 2023)

Graduate Student Handbook

USF and MBS Policies & Procedures

MBS, USF

Version 10.1; Revised 07/2023

Revised by Brant Burkhardt, originally prepared by LN Shaw with input from the MB Graduate Committee, faculty, and staff.

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Program timelines ~~Guidelines~~

Graduate Education at USF is administered at three levels. The USF Office of Graduate Studies (<http://www.grad.usf.edu>) is the hub of graduate education at USF and oversees:

- Compliance of all graduate programs

- Incoming graduate applications

- USF Graduate student policy

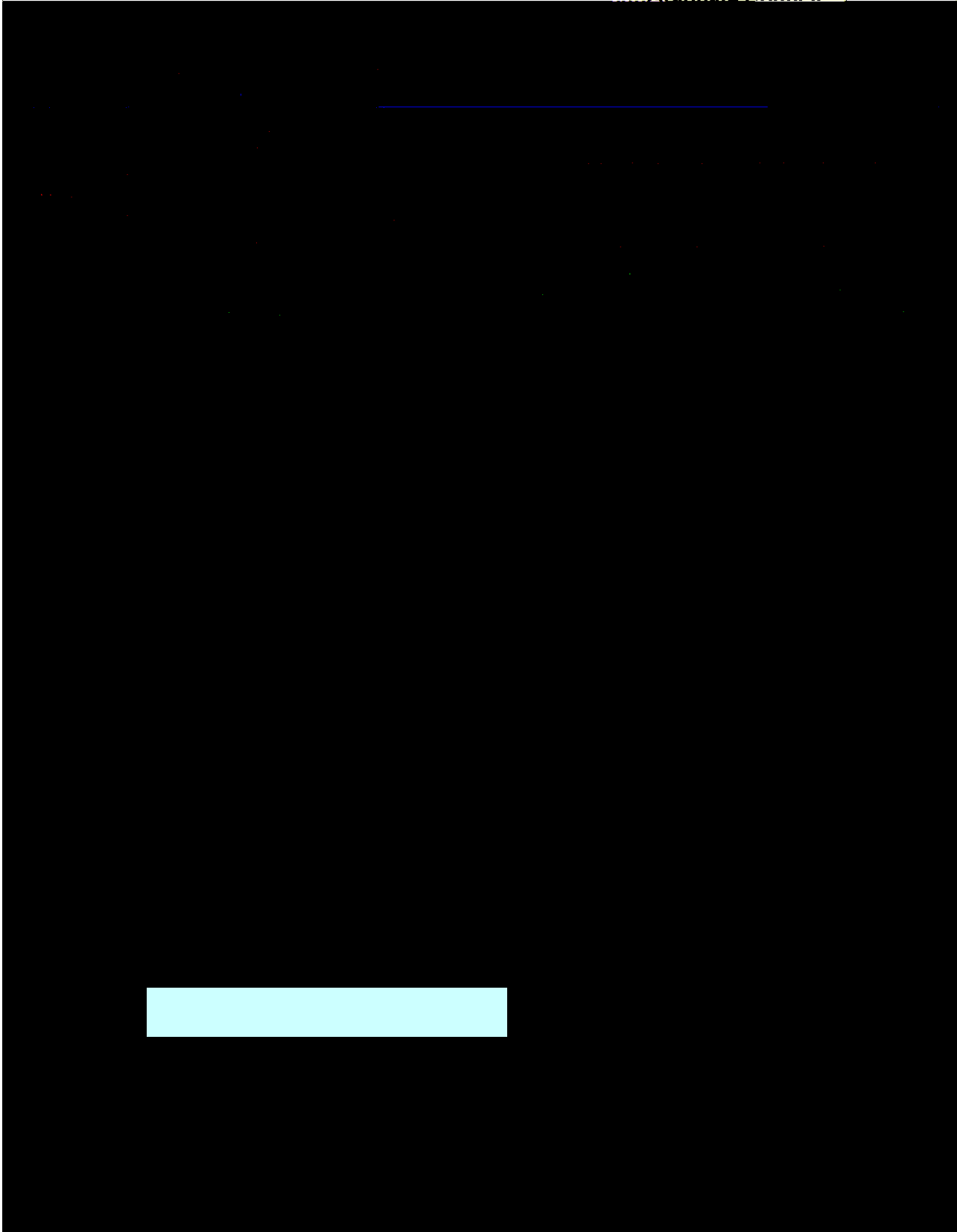
- USF graduate fellowships and awards

- Graduate student success initiatives (i.e. workshops, seminars, symposia)

- Graduate student recruitment and marketing

- Thesis and dissertations

- Approval of new graduate



Incoming Course/Degree Requirements

It is expected that candidates for graduate degrees in the department of MBS will have completed courses equivalent to those required for the B.S. in Cell and Molecular Biology, or Microbiology, at USF.

Out of State Students

All students admitted to the University of South Florida after fall 2008, and who did not previously reside in the state of Florida for 12 months prior to matriculation, will be considered an out-of-state student for tuition purposes. Should a student under this classification receive financial support (please see below) via a Research Assistantship (RA), or Teaching Assistantship (TA), then they will be considered in-state students for tuition purposes ONLY during the semester(s) of support. At the termination of financial support, such students will revert to being considered out-of-state students.

Financial Assistance

There are several mechanisms available to MBS graduate students for financial support during their time in our program. For research students it is likely, although not guaranteed, that they will be funded via departmental Teaching Assistantships (TA); or via Research Assistantships (RA) from the research grants of their Major Professor. Departmental TAs are awarded and renewed prior to the

Support from Outside Scholarships

MBS encourages its students to obtain outside support for their graduate studies, in the form of scholarships and fellowships. Normal practice for those students receiving extra support by such mechanisms will be to implement a reduction in teaching assistantship assignment (e.g. receiving one section of support, rather than two). Care will be taken to ensure that students with outside support will still receive overall financial support (fellowship + TA) equivalent to existing MBS stipend levels. In such situations, scholarships and fellowships should be considered a mechanism to reduce teaching burden, and thus allow more time to focus on research, and degree completion. Exceptions to these rules will only be made if the funding source specifically requires a full stipend to be received in addition to the scholarship or fellowship. In such cases, we will do our best to accommodate, but any such support is dependent on available funds and standing within the program.

Outside Employment and Activities

Under the terms of the UFF Graduate Assistants United Collective Bargaining Agreement with USF, all students supported by RA or TA in MBS must report, and seek approval for, ALL outside activities and employment to the Chairman and Graduate Director of MBS. This should be performed prior to assuming any such position via the appropriate USF website. The MBS Chairman retains the right to deny any such request.

Spring Admission

Where appropriate the department of MBS will offer admission to its graduate program for students in the Spring Semester. Those students who enter during the Spring Semester will be unable to follow the exact timelines defined elsewhere in this document for the MS and Ph.D. degrees. As such, these students will be required to embark on the core-MBS graduate degree course requirements beginning in the Fall Semester of their first year. Students will be expected to use their first semester to

MBS Graduate Committee will evaluate any such applications and determine if the student in question will be readmitted to the program. In such cases, MBS may require student to undertake additional course work, to demonstrate competency and retake any qualifying examinations. Any student readmitted to the program must adhere to the policies contained within the Graduate Catalog in the year of readmission; however, the time to degree requirements will be calculated based on the original date of admission. Students taking any examination in each semester must be enrolled for a minimum of 2 credit hours of graduate credit. PhD students who advance to candidacy must enroll in at least 2 credits of BSC7980 in EVERY semester thereafter. Those students funded by Graduate Assistantships or Teaching Assistantships are expected to register as full-time students. Students with an approved leave of absence will not be subject to these requirements.

Selection of a Major Professor without Laboratory Rotations

In the first semester of residence, MBS research graduate students will be required to begin the process of identifying a Major Professor under which to study. Those students admitted with a mentor already agreed upon will enter that pfcZggfUvcfUc directly in lieu of rotation to begin research.

Selection of a Major Professor with Laboratory Rotations

Students admitted to the MBS research graduate program without a Major Professor already determined will be assigned to laboratory rotations during their first semester of residency. The details of these rotations should be determined by the student in conjunction with appropriate MBS Faculty and the MBS Graduate Director/Committee in advance of their joining the program. Students will submit a minimum of 3 names of MBS faculty they are interested in rotating with to the MBS Graduate Office. Students are required to contact MBS professors prior to the beginning of their first(io)8(r)-4()-16(t

MBS department who finds themselves without a Major Professor or committee will be guided and advised, in an ad-hoc manner, by the MBS Graduate Committee. This is expected to be in only the most extreme of situations, and suffice for matters such as annual reports, or the approval of specific aims for written qualifying examinations. In such situations, the MBS Graduate Committee will be

Academic Integrity and Dishonesty

The department of MBS, the USF Office of Graduate Studies and the University of South Florida hold academic integrity and honesty in the highest regard. Students are individually responsible for being aware of, and complying with, University Regulations and Policies, and must conduct themselves accordingly. Specific information with regards to these policies can be obtained from the USF Office of Graduate Studies. Students should note that the regulations apply not only to your coursework, but to your research activities as well.

USF Academic Probation

The USF Office of Graduate Studies will automatically place any student on academic probation if their TOTAL graduate GPA falls below 3.00 (referred to as P1 probation). This probation will be effective from the beginning of the following semester (summer included). Students with a graduate GPA below 3.0 for two consecutive semesters (referred to as P2 probation) will be prevented from registering for classes without the permission of the MBS Graduate Committee and the CAS Associate Dean for Graduate Studies. Students that have 3 consecutive semesters with a total GPA below 3.00 will be placed on P3 probation and will not be able to enroll in any classes without the permission of the MBS Graduate Committee, the CAS Associate Dean for Graduate Studies and the Assistant Dean from the USF Office of Graduate Studies. Notification of probation will be made to the student by the USF Office of Graduate Studies, and in writing by the MBS Graduate Director. Students that are placed on probation must schedule an immediate meeting with the MBS Graduate Director AND Major Professor to construct an academic plan to remove the probation. At the end of each probationary semester, there are several possible outcomes:

1. Removal of the probation. Students who have increased their graduate GPA to 3.0 or above will now be considered in academic good standing. This can only be initiated by the USF Office of Graduate Studies.
2. Continued probation. Students whose GPA remains below 3.0, will progress to P2 or P3 status, and will be prevented from enrolling in classes unless approved by the MBS Graduate Committee and the CAS Associate Dean for Graduate Studies (P2), or the USF Office of Graduate Studies (P3).
3. Dismissal from the MBS program. The MBS Graduate Committee may proceed with academic dismissal, or recommend to the student voluntary withdrawal, from the MBS Graduate Program following P1, P2 or P3 (he)] TJETQqf1 0 0 1ouo2a49fa] TJE0.00000967 0 612 792 reW*

of intended graduation, a petition of removal must be filed with the USF Graduate School. Such students will have ONE additional semester to clear the probation.

CAS and MBS Academic Probation

The MBS department or the College of Arts & Sciences may also place students on probation for other reasons as appropriate. These include, but are not limited to, a lack of research performance or

submission of an action plan, detailing the benchmarks and timelines needed to complete the degree, and must be signed by the student's major professor, the MBS Graduate Director and the MBS Chairperson. An approved TLE also allows the age of courses to be extended.

Thesis/Dissertation Requirements

The thesis or dissertation of all graduate students admitted to a graduate degree program at the University of South Florida must conform to the Electronic Thesis and Dissertation (ETD) guidelines from the USF Office of Graduate Studies. Required paper documentation must be submitted to the USF Office of Graduate Studies (the MBS Graduate Office) to be considered for graduation in that semester. Once a thesis or dissertation is ready for submission to the USF School of Graduate Studies committee members must sign the Certificate of Approval (COA) form indicating approval of the document. The Certificates of Approval must be signed by the student's major professor(s) please note that faxed signatures are acceptable, however they must be that of your professor(s). The COA form also contains a Committee Verification signature area that the MBS Graduate Director must sign,

be a completed and final version that is ready for evaluation by their advisory committee. If a student fails to submit all copies of their final thesis or dissertation by this 2 week deadline then the seminar/defense will automatically be cancelled, and the student will be responsible for rescheduling it.

Graduation Requirements

There are several USF specific deadlines that must be met successful graduation. These include, but are not limited to, matters concerning the dissertation/thesis, class registration, seminar defense, credential certification etc. These dates are available from the USF Office of Graduate S

MBS GRADUATE PROGRAM REQUIREMENTS

M.S. in Biology, with a concentration in Cell Biology & Molecular Biology

Non-Thesis MS- Biology Program Catalog Requirements 2023-2024

- Minimum of 30 credits required (*approved by MBS*)
- Core Requirements - 6 credit hours
 - BSC 6393 Advances in Life Sciences Credit Hours: 1 (Taken 3 times)
 - BSC 6930 Lectures in Contemporary Biology Credit Hours: 1 (Taken 3 times)
- Concentration (required) - 15 credit hours minimum
 - Students select courses approved by the supervisory committee or department

MBS GRADUATE PROGRAM REQUIREMENTS

Non-Thesis M.S. in Microbiology

Non-Thesis MS Microbiology Program Catalog Requirements 2023-2024

- Minimum of 30 credits required (*approved by MBS*)
- Core Requirements - 6 credit hours
 - MCB 6205 Bacterial Pathogenesis Credit Hours: 3 (Current listing may have 6932)
 - MCB 6306 Advanced Bacterial Genetics Credit Hours: 3 (Current listing may have 6932)
- Additional Required Courses - 3 credit hours
 - BSC 6930 Lectures in Contemporary Biology Credit Hours: 1 (Taken three times)
- Electives - 21 credit hours minimum
 - Select from the following or other graduate courses approved by the supervisory committee:
 - Please contact Graduate Program Specialist for List of Approved Classes
 - 15 of the 30 credit hours must be in courses of a microbiological nature. Approval of such courses will be made by the MBS

- PCB 6525 Molecular Genetics Credit Hours: 3
- BSC 5425 Genetic Engineering and Recombinant DNA Technology Credit Hours: 3
- Note: Additional courses not on the list may be substituted with the approval of the thesis committee and MBS Graduate Director.
- BSC 6939 CMNT Seminar (in either the 1st or 2nd semester of residence)
- BSC 6932 (1 hrs) Masters Qualifying Exam during final semester
- BSC 6910 Directed Research may be applied here
- BSC 6905 Independent Study may be applied here
- 15 additional hrs of credit must be at 6000-level
- 15 credits must be in MBS courses
- Due to rule changes at USF, NO 4000-level credit will be applied to NT-MS degrees after January 2016
- Submission of a

MBS GRADUATE PROGRAM TIME LINES

MS-Bio NON-Thesis Program

_____ tracking example of full time-enrollment through program in 1.5 years *

Semester 1 (fall) | BSC 6930 Lectures in Contemporary Biology (1 of 3)
| BSC 6393 Advances in Life Sciences (1 of 3)
| BSC 6932 Cellular Processes
| BSC 6932 Cellular Metabolic Processes
| '6G7 *- ' &A]WcV]U`DfcWggYg
| Gi Va]hAnnual Progress Report by December 15th

Semester 2 (spring) | '6G7 6930 Lectures in Contemporary Biology (2 of 3)
| '6G7 6393 Advances in Life Sciences (2 of 3)
| BSC 6932 Introductory Bio Genomics [()] TJETQq0.00000912 1[()] T]] 612 792 reW*02 792

Advisory Professor for Non-Thesis MS Students

All non-thesis-MS (NT-MS) students in the MBS graduate program have NT-MS Director (At present, this is Dr. James Riordan) serve as the advisor. This professor will help with course selection choices, academic advice and will be the instructor of record for the final qualifying exam taken during the first semester of enrollment. This professor will also be the instructor of record for the final qualifying exam form and lead the examining committee for this requirement. It is required that NT-MS students consult with their advisory professor prior to enrollment to ensure that they meet departmental and degree requirements. NT-MS students should also meet with their

paper will review a topic of your choosing that has NOT been included in the coursework of your other classes. The topic must be approved by your non-thesis MS advisor before starting work on the document. Papers should be a minimum of 5000 words in length, not including references, title page, tables or figure legends. Papers should include a minimum of 20 distinct citations of research papers, using a standard numerical documentation format.

An outline of the topic will be due within 2 weeks of agreeing the subject with your advisor. The outline should include a short paragraph referring to the importance of the topic, and a list of 5 peer reviewed papers to be included in the final paper. Students should include a short explanation for each of the papers, and their relevance/importance to the review topic.

Upon agreement of a topic, the student and advisor will identify 2 other MBS faculty to serve as the examination committee.

The full paper will be due no later than 4 weeks before the end of the semester (including finals week). USF plagiarism software will be used as a matter of course for assessing content similarity.

The paper will be presented to your examination committee via a powerpoint presentation 2 weeks after submission of the final document. At this time your committee will question you on the subject and content of the paper.

Note: a practical way to approach the literature is to seek out a recent review on the topic of your choice, and to use this as a foundation to develop your research paper.

Papers must include the following:

- A. An overview of the topic, and its relevance to Cell Biology, Microbiology or Molecular Biology.
- B. A full review of the respective topic in terms of its importance and relevance.
- C. Literature cited section at the end of the paper.
- D. Proper grammar and spelling.
- E. Organization and clarity.
- F. Pages must be numbered and should include your last name in the header of each page. A word count must be included on the title page.

The examination is open to all members of the department and must be announced two weeks prior to the presentation.

A request for oral examination must be coordinated through the MBS Graduate Office.

The student will be required to defend the submitted review to the unanimous approval of the examining committee to pass the examination.

An evaluation rubric will be utilized to assign a final grade for the examination.

Students must take the examination in the final semester of their degree program.

Should a student not pass the oral examination they may retake it, one time only, upon the written consent of the advisory professor.

A student who fails the oral examination twice will be dismissed from the program.

MBS GRADUATE PROGRAM REQUIREMENTS

Thesis M.S. in Microbiology

Thesis MS Microbiology Program Catalog Requirements 2021-2022

- Minimum of 30 credits required (*approved by MBS*)
 - 15 of the 30 credit hours must be in courses of a microbiological nature

MBS GRADUATE PROGRAM TIME LINES

MS-Bio Thesis Program

_____ tracking example through program in 2.5 years *

**based on successful completion of oral qualifying exam in the time specified, good academic standing and continuation of research during summer sessions*

Semester 1 (fall) j 6G7 6910 Directed Research or Laboratory Rotations

Departmental Residence Requirements

A minimum of one and a half years of graduate work beyond the Bachelor's degree is required.

Of the 2 remaining faculty members at least one must be Graduate Faculty from MBS, whilst the other may be from any other relevant department at USF. Please note that the inclusion of committee members from outside MBS will require approval of the Major Professor and MBS Graduate Director.

The committee must be established within two semesters of entering the program. The responsibility for forming the committee lies with the student. This time limit requirement is in place to ensure that the advisory committee is formed in sufficient time to administer and supervise the thesis proposal and oral qualifying examination.

assuming that all course work requirements can be completed in time. If this is not possible then spring admitted students will attempt their oral in the fall of their 2nd year.

The examination is expected to be conducted after, or in concurrence with, the completion of all formal course work, except for the BSC6930 Lectures in Contemporary Biology and any BSC6905 / MCB 6919 Independent Study requirements.

A request for oral examination must be coordinated through the MBS Graduate Office.

The oral examination will comprise of a formal thesis proposal presentation, which the public may attend, followed by a private period of questioning by the thesis advisory committee.

Students should submit a final version of their thesis proposal to the MBS graduate office no less than 2 weeks before the proposed oral examination date. The MBS graduate program assistant

MBS GRADUATE PROGRAM REQUIREMENTS

Cell and Molecular Biology

PhD Program Requirements

Departmental Residence Requirements

A minimum of four years of graduate work beyond the Bachelor's degree is required. The student must earn at least 90 post-baccalaureate semester credits. At least one academic year of residence must be on the Tampa campus of the University of South Florida.

An academic year's residency is defined as a minimum of 9 hours of enrollment in both the fall and spring Semesters.

It is expected that students will continue their research during summer semesters. Six hours of enrollment are considered full time during this term.

Deviations from these rules must be recommended by the student's supervisory committee and approved by the USF Office of Graduate Studies Dean.

Ph.D. Degree Coursework Requirements

The MBS department does not impose specific requirements on the structured course that students are obligated to take beyond: PCB 6920 Advances in Cell and Molecular Biology, PCB 6956 Scientific Grant Writing, BSC 6930 Lectures in Contemporary Biology and 2 other structured courses. The direction and guidance for choosing the structured graduate courses, and the timing thereof, resides with the Major Professor and dissertation committee. It should be noted from the Ph.D. timeline and benchmarks portion of this document that although the required 2 structured classes are recommended to be taken in an uninterrupted fashion, students can elect to take their 2nd structured course in the spring of their 2nd year (3rd year for spring admits) should their Major Professor deem it appropriate. It is not permitted for students to take any of their structured courses in semesters beyond the completion of their oral examination. The Major Professor will also be responsible for directing the student towards enrollment in any other classes as they see appropriate outside of the core requirements of our graduate program.

Doctoral Advisory/Dissertation Committee

The major advisor and at least three additional faculty will constitute a student's advisory committee.

Of the remaining 3 additional faculty members, at least 2 must be Graduate Faculty from MBS, and at least one must be from OUTSIDE the MBS department (this outside faculty member can be from Moffitt). Please note that the inclusion of committee members from outside MB will require approval of the Major Professor and MBS Graduate Director.

The committee must be established within two semesters of entering the program. The responsibility for forming the committee lies with the studentLang (en-US)BDC q0.00000912 0 612 792 reW*

minutes. Students must give an outline of their work, including relevant background information, preliminary studies and the proposed framework and timeline for their dissertation research.

Following the presenton

expected to be in PowerPoint format, and should last from 30-45 mins, allowing at least 15 minutes at the conclusion for questions from the audience. Students should coordinate with their Major Professor, the Graduate Director and the MBS departmental seminar committee for the timing of this requirement during the semester preceding the seminar. It should be noted that the departmental seminar CANNOT be used to fulfill 1 of the 2 presentations at regional/national meetings, or final oral defense requirements.

Required Enrollment in Dissertation Research

Following admission to candidacy, a graduate student in the MBS Ph.D. program must enroll in BSC 7980 Doctoral Dissertation when engaged in research, data collection, or writing activities relevant to the doctoral dissertation.

Advisors should assign the numb

MBS Policy for Doctoral Seminar and Defense

Be sure to consult the ETD Process Checklist before the semester you anticipate for graduation. <https://www.usf.edu/graduate-studies/students/electronic-thesis-dissertation/etd-process-checklist/dissertation.aspx>

All doctoral students must be enrolled in 1 hour of BSC 7936 Ph.D. Seminar during their final semester, in addition to at least 2 hours of BSC 7980 Doctoral Dissertation.

The defense/seminar is open to the public and must be announced two weeks prior to the presentation.

The dissertation defense examination should be held at least two weeks before the USF deadline to submit completed dissertations to ProQuest.

Students are required to submit to the MBS Graduate Office a request for the final oral defense of the Ph.D. degree at least four weeks before the proposed seminar date.

The MBS Graduate Director, the Associate Dean of the College of Arts and Sciences, and each of the members of the graduate committee must complete a request for oral defense form. This form should contain the date, time, title of the proposed defense seminar and the name of the Chair of defense.

Students should ensure that the USF Office of Graduate Studies holds on record their most recent dissertation advisory committee form. Any discrepancies in the makeup of the committee may prove cause for delay of the defense.

Changes to the Ph.D. committee must be completed at least 6 weeks BEFORE the Ph.D. final dissertation examination, and all committee members must agree to the change.

Changes to a graduate committee will not be approved to facilitate graduation.

Students wishing to graduate during the summer must make arrangements with their graduate committee by the end of the Spring Semester.

A minimum of three members, including the Major Professor is required to proceed with the defense.

If a member cannot attend in person, participation is permissible via speakerphone or video conference.

The final Ph.D. Oral Examination is the culmination of the student's graduate education and is a significant formal event.

This examination will be conducted by the student's advisory committee, but shall be chaired by a senior and distinguished scholar, appointed by the USF Office of Graduate Studies Dean.

The chair may not be a member of the student's advisory committee or any member of the MB

