BIO 651 – Thesis II and Final Thesis Advisory Committee Meeting - 4 Credits.

The purpose of BIO 651 is to allow MCB students to finish their research, to produce a written Master's Thesis and to defend their Thesis with an oral presentation. After successfully completing Thesis I (BIO 650), students must register for BIO 651 Thesis II ("Thesis Form" must be obtained from Director or Program Coordinator's office). Students will continue with the data collection phase of the thesis project during the first half of the semester (approximately 6-10 weeks). Students should also be working on the initial draft of their written thesis during the first part of Thesis II. Students should keep their Thesis Advisory Committee members continually updated on the progress of their research. Students should consult with their Thesis Advisor to determine when data collection is complete. Once the data collection phase is complete, the student will spend the remainder of the semester finishing the written thesis and preparing their oral presentation. Please see the Thesis Handbook for specific formatting details. Copies of the initial draft of the thesis should be emailed to the Thesis Advisory Committee at least two weeks before the thesis defense.

Goals as defined in the MCB Thesis Handbook:

- 1. To finish research related to your thesis question.
- 2. If required, schedule a mid-semester Thesis Advisory Committee meeting.
- 3. Schedule a Thesis Defense meeting with the Thesis Advisory Committee. Secure a room reservation with appropriate audio/visual equipment.
- 4. Finish writing your Master's Thesis and obtain approval for distribution to your Thesis Advisory Committee.
- 5. Distribute copies of your written thesis at least two weeks before your thesis defense. Committee members should provide you with feedback on the written thesis which can be incorporated into the final version of the Master's Thesis.
- 6. Successfully present and defend your thesis to your Thesis Advisory Committee. The Thesis Defense presentation will be open to the public, followed by a private meeting with the Thesis Advisory Committee.

General Written Thesis Guidelines (see Thesis Handbook for further details)

Your written thesis should be presented with the following sections:

- Introduction contains the literature review
- Background- states the rationale of the project



- · Aims- a list of the specific aims of the project
- · Rationale -includes the method to investigate each specific aim
- Materials and Methods describes the sequence, techniques, conditions and tools actually used in the thesis research for data collection and analysis.
- Results a presentation of the data collected during your research without interpretation. Data should be presented in an organized fashion using figures, tables and charts.
- Discussion data is analyzed and conclusions are drawn. A discussion on whether the
 original goals of the project have been met can be included along with speculation on the
 implications for the research.
- Future Directions- suggestions for future experiments that will complement the results should be discussed. Any future lines of research that stem from the project can also be presented.
- References

Final Thesis Advisory Committee Meeting -Thesis Defense

A final draft of the thesis, incorporating corrections and changes suggested by the Thesis Advisory Committee, are to be distributed to the Committee at least two weeks prior to the scheduled defense. The final thesis defense will begin with a formal presentation of the thesis by the student (minimum: 40 minute duration). In all cases, the thesis defense will be publicized and be open to the community. Therefore, the student's presentation should include a basic introduction to the topic area. All parts of the thesis should be covered including the literature review, rationale, materials and methods, results, data analysis and conclusion. The presentation should be a true lecture emphasizing the strong and exciting points of the project. The student will field questions from the committee and the general audience immediately after the presentation. After an appropriate interval the thesis advisor will dismiss the audience and call the meeting into executive session. At this time the committee will pose their final questions to the student and suggest their last corrections, if needed. The student will then be asked to leave the room while the committee votes on the final acceptance of the thesis and decides on a course grade. Immediately thereafter, the student will be informed of their decision and, if accepted, be given congratulations for a job well done. After the thesis defense, the student is responsible for making all additions and/or corrections recommended by the Thesis Advisory Committee before collecting signatures on the signature page of the thesis. If there are no corrections or additions, the signature page of the thesis will be signed by the Thesis Advisory Committee and the thesis can then be submitted to the University for binding. If significant weaknesses are identified and/or significant changes to the thesis are



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recommended by the committee, the student will be responsible for addressing these in a revised draft to be re-submitted to committee before final acceptance of the thesis is granted.

Deadlines for BIO651 (Spring Semester):

Dates	Task	Duration	Description
January 2 - February 28	Experiments and Data analysis	8-10 weeks	Some experiments can be finished during the thesis editing phase
March 1-30	Thesis- 1st draft writing	4 weeks	Concentrate 100% on writing; avoid experiments. Identify proofreaders (learning commons, lab mates, professors)
April 1	Thesis draft due to	Advisor	2 weeks before submission to committee
April 1-15	Edit thesis with revisions from advisor	2 weeks	Main focus: thesis edits (as advisor provides them). If time allows, finish up experiments & data analysis.
April 15	Thesis draft due to c	ommittee	2 weeks before oral thesis defense
April 15-26	Prepare Oral Thesis Presentation.	1-2 weeks	Main focus: Oral presentation. If time allows, finish up any remaining experiments for inclusion in oral defense and/or final thesis
~April 26	Thesis oral defense	deadline	2 weeks before end of finals
April 26 - May 10	Edit Thesis Final draft with revisions from committee.	~2 weeks	Main focus: final edits to thesis. If time allows, finish up any remaining experiments for thesis.
May 10	Final Written Thesis Draft Due		Distribute final copy of thesis to committee Collect signatures from committee.
May 12	Graduate Commencement		Final Grades Due May 13

Thesis Distribution

One copy of your thesis will be bound, cataloged and shelved within the Library's Theses Collection. The binding cost for this copy is paid for by ABL. The following additional copies must be printed - 3 Bound copies of the thesis for: the MCB Program Director, the thesis advisor, and the student. The thesis binding cost for these 3 copies will be covered free of charge to the student by the department. If you would like additional copies of your bound thesis, you will be responsible for the cost, but you are more than welcome to order additional

copies. In addition to submitting the final hard-copy thesis manuscript to the library, students must also provide the library with one PDF version of the thesis manuscript for digitization.

Sample MCB Thesis:

Use the link below to access a sample MCB thesis that is available online:

https://search-proquest-

com.libraryproxy.quinnipiac.edu/docview/1846107628/D9DEC76539E7487FPQ/1?accountid=1 3381

Make sure to schedule an appointment with the program director for advice as your thesis writing process begins.

The Arnold Bernhard Library offers a guide to writing and submitting your thesis. You can access the information using the link below:

https://libraryguides.guinnipiac.edu/c.php?g=307970

Schedule an appointment with Arnold Bernhard Librarian (Kiana Arevalo at kiana.arevalo@quinnipiac.edu) 1-2 weeks before final draft is due (to go over procedures and to answer any questions).

Note that the library no longer binds the thesis. It will publish the thesis electronically via Proquest.

Final Steps (after a successful thesis defense):

- 1. Complete any last edits from the committee to create a final copy of your thesis. This should be saved as a pdf file and emailed to your committee and to your advisor. Note that you should incorporate edits recommended by your committee (including your advisor). These edits might have been sent to you in written format or discussed during your thesis defense.
- 2. Make sure that your thesis adheres to the formatting set in MCB Thesis manual/guidelines (note the margin requirements for printing/binding).
- 3. Once you have completed your edits, share your revised thesis with your committee. You should print a signature page and pass it on to committee members to co-sign. A pdf version shared by email is acceptable. These signatures can be collected electronically via email.
- 4. If they approve the edits, all committee members will then sign the signature page of your thesis (either digitally or on printed form).
- 5. Collect the signed sheet and scan it to a digital copy (pdf) if necessary and attach the signed pdf and attach to the rest of your thesis. Email it to me.
- 6. You will need to schedule a virtual appointment with the library official (kiana.arevalo@quinnipiac.edu).
- 7. You will need to fill out forms and follow directions shown here: http://librarvguides.guinnipiac.edu/c.php?q=307970.

On questions about publishing option, students typically choose Traditional publishing, no embargo, and no copyright, but consult with your mentor if any of these should be changed for your project.