MCDB 596 – Intensive Research in MCDB for BS/MS Candidates

MCDB 596 Student Contract

As a student conducting year-long independent research for Yale College course credit and the BS/MS Senior requirement, I agree to the following:

- I am expected to devote an average of 20 hr/week to this research. I am aware that failure to do so will result in withdrawal from the Masters program.
- I will make every effort to attend my research mentor’s laboratory meetings.
- I will attend prepare and present a poster at the MCDB Poster Symposium on April 24, 2020.
- I will make every effort to schedule my Thesis Defense at a time that fits with my mentor’s schedule.

Name: _____________________________________________________________________________ (Please Print)

Signature: ___________________________ Phone: ___________________________ Class ___________

Email Address: __________________________________________________________________________________

Research Mentor: ___________________________ Dept.: ___________________________ (Please Print)

Committee Member: ___________________ Dept: ___________________________

Committee Member: ___________________ Dept: ___________________________

Committee Member: ___________________ Dept: ___________________________

Title for Research: _________________________________________________________________________________

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Committee Meetings: Students are to schedule committee meetings in each of the two academic terms to discuss their thesis and research. The format of the meeting can be arranged by the research mentor. Students should notify the office of the DUS as to the date of the committee meetings at mcdb.ureg@yale.edu. The student should complete the top portion of the Committee Meeting Spring#1 (available on Canvas) and provide the form to the Research Mentor for completion. The Research Mentor is expected to provide the completed form to the office of the DUS mcdb.ureg@yale.edu after the committee meeting. Committee meetings may be scheduled by the student through 25LivePro website.

Spring Poster Symposium: Students should present a poster for the research symposium in April. Upload a pdf copy of your poster to Canvas one week before the Poster Symposium. The Poster Symposium will be held Friday, April 24, 2020 from 2-4pm in the YSB Lobby. The purpose of the symposium is to share information and more specifically to highlight undergraduate research at Yale. Refreshments will be provided courtesy of the MCDB Dept. The symposium will be open to anyone wishing to attend, so please encourage friends, colleagues, family and other students to come. Your research mentor is strongly urged to attend.

Poster Guidelines: Each student in MCDB 596 must prepare a poster for the Poster Symposium on April 24, 2020 2:00-4:00pm in YSB Lobby. Posters can be as large as 3’ X 5’, but may be smaller. We will have poster boards and easels available to put your poster on. Posters may be printed professionally (please note that there is no funding available for this expense from MCDB), or the student may print them on a color printer and assemble individual sheets onto the poster board at the poster session. DO NOT WAIT until the 11th hour to print your poster as the poster-printing service is always backlogged.

Posters should have a title, and the authors (including you and your research mentor) should be listed as well, usually in large letters at the top. Indicate which research course you are in (MCDB 595). The poster should include three sections: Introduction, Results, and Conclusions. The Introduction explains the purpose of your project; the Results section contains figures and/or tables showing your data, with legends or commentary; the Conclusion summarizes what you learned. Feel free also to include what you would do next were you to continue working on the project.

If you continue in research, the first presentation you are likely to give at a scientific meeting is a poster, so this will be good practice. The fewer words and the LARGER THEY ARE WRITTEN make it easier for people to notice and examine your poster. If a poster contains a great deal of text in small font, the audience may not read it. The same applies to data. Tables with large numbers of entries may be ignored. Simple figures with a concise conclusion for each are optimal. You should begin to organize your poster well in advance and you should allow at least one day for planning it and at least one day for producing the various parts of it. Bring it to the session ready to assemble. Please keep in mind that content should take precedence over form. It is much more important that your poster be clear, informative, and thoughtful than that it look highly professional. Aesthetic appeal is of course nice, but the science is paramount. Finally, discuss your presentation with your colleagues and research mentor well before the session and if you have any further questions/concerns bring the preliminary poster to show the instructor in charge.

Submission and Formatting Instructions for All Written Work: All papers should be uploaded to the Assignment section in Canvas by the deadlines stated. Additionally, please follow these formatting instructions: Students should follow the American Psychological Association Guidelines for formatting instructions. You can use the following URLs for more information:

- [www.apastyle.org](http://www.apastyle.org)
- [https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/general_format.html](https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/general_format.html) (which is referenced by the Center for Teaching and Learning at this URL: [https://ctl.yale.edu/FacultyResources/English](https://ctl.yale.edu/FacultyResources/English))

Be sure to include a title page with the following information: (a) Title of Research, (b) Student Name, (c) PI Name and names of other laboratory mentors (other than PI), (e) Course & Term. Make sure to include a header on pages 2 through the end of the document with (a) Student Name, (b) Course & Term and (c) Page Number. Save papers as a pdf using the following nomenclature: StudentLastName_FirstName_MCDB596Thesis_Term&Year.pdf. Please send a copy to all your committee members.

Spring: Written Thesis: Due Date: One week prior to Committee Meeting/Thesis Presentation – send to all committee members;
Final Deadline: April 24, 2020 @ 4:00pm. for uploading Thesis to Canvas.
  o One chapter should be Introduction/Review of the field. Subsequent chapter(s) will discuss the student’s research and a thorough discussion of it.
  o The length of the thesis should be 40-100 pages double spaced (not including Bibliography in the page count).
  o Each committee member should receive a copy of the thesis at least one week prior to meeting with the committee.
  o Additional guidelines for thesis should to be arranged in consultation with the student’s research mentor.
There will be letter grades for each semester. The grade will be determined by the student’s faculty committee.

**Spring: Thesis Defense:** The student is expected to give an oral thesis defense to the committee, followed by a comprehensive examination of the thesis conducted by the thesis committee. Students should notify the office of the DUS mcdb.ureg@yale.edu as to the date of the thesis defense – and provide the Thesis Defense Scheduled Form. Student should also provide the Thesis Defense Committee Meeting Spring #2 to the research mentor before the defense. The Research Mentor is expected to provide the completed form to the office of the DUS mcdb.ureg@yale.edu following the defense.
MCDB 596 Committee Meeting Form – Spring

Student: ___________________________________________ Date of Committee Meeting: ____________
Deadline: No later than mid-Semester

Thesis Advisor: ___________________________________________________ Dept: _______________________

Committee Member: _______________________________________________ Dept: _______________________
Committee Member: _______________________________________________ Dept: _______________________
Committee Member: _______________________________________________ Dept: _______________________

Research: ______________________________________________________________________________________
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Proposal/Plan: _________________________________________________________________________________
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Student: It is the Student’s responsibility to schedule the Committee Meeting Spring date, book a room, complete the top portion of this form and provide to Thesis Advisor at Committee Meeting.
Thesis Advisor: Please complete the “Proposal/Plan” portion of this form; and return to office of MCDB DUS at mcdb.ureg@yale.edu For questions, contact crystal.adamchek@yale.edu
MCDB 596 - Thesis Defense (Scheduled)

Student (please type name): ________________________________________________

Date of Thesis Defense: ___________________________________________________________________________

Location of Thesis Defense: ________________________________________________________________
(Students are responsible for procuring location for Thesis Defense - in cooperation with Thesis Advisor; use 25LivePro to reserve room)

Research Title:
___________________________________________________________________________________
____________________________________________________________________________________________

Thesis Advisor: _____________________________________________________ Dept: _______________________
Committee Member: _______________________________________________ Dept: _______________________
Committee Member: _______________________________________________ Dept: _______________________
Committee Member: _______________________________________________ Dept: _______________________

I hereby certify by submission of this form that all parties listed above have been informed of the Thesis Defense date and location at least one week prior to defense. I also further certify that I have provided electronic copies of my written thesis to each member of my committee at least one week prior to the scheduled defense.

________________________________
Student Signature (electronic accepted – include net id)

Student: It is the Student’s responsibility to schedule the Thesis Defense date, book a room, complete this form, upload to canvas and send copy to mcdb.ureg@yale.edu. For questions, contact crystal.adamchek@yale.edu
Student:  It is the Student’s responsibility to schedule the Thesis Defense date, book a room, complete the top portion of this form and provide to Thesis Advisor at Thesis Defense.

Thesis Advisor: Please complete the “Proposal/Plan” portion of this form; assign a letter grade below, and return to office of MCDB DUS at mcdb.ureg@yale.edu For questions, contact crystal.adamchek@yale.edu

Proposed MCDB 596 Grade (Spring): ____________ *(letter grade) should reflect the following:

Written Thesis
Thesis Defense
Poster Presentation
Lab Performance

Additional Factors for Grade Consideration by the Committee:

1. Progress made since last Committee meeting
2. Knowledge of scientific literature relevant to the research project
3. Thinking critically about research project
4. Demonstrating initiative and independence in experimental design and project directions
5. Motivation and work ethic
6. Technical competence at the bench, trouble-shooting ability
7. Quality and clarity of oral presentations