

Master's Thesis Research – MSBS 5000Q

General:

A master's thesis is 5 credits, must be laboratory (not library) based and must be hypothesis driven. The thesis is usually done over one or two semesters or a summer and a semester. Conclusion of the research is based on testing the hypothesis but not necessarily on proving the hypothesis (unlike a doctoral thesis). The mentor's lab is given \$1,000 to help defray the costs of the research for each student completing a master's thesis.

Selection of a Mentor:

Students in the MS Program who plan to do a research thesis should meet with the Associate Dean of Student Affairs during the first semester to select a mentor. In addition, students should also seek advisement from their respective track advisor.

Timeline of Procedures for Initiating and Completing a Thesis:

- Note that the Thesis Advisory Committee should be appointed, and the thesis proposal submitted in a timely fashion, usually within a month or two after the thesis work has begun or at the end of the Master's Lab Rotation if enrolled.
- Identify a mentor and agree on a project. Discuss the estimated time to completion.
- Register for the 5-credit master's thesis research, course number MSBS 5000.
- Form a Thesis Advisory Committee (TAC) consisting of a minimum of three individuals from faculty of SGS Newark-RBHS who are expert in the subject of the research. Members may be from the same department, but not from the same laboratory.
- Write a short (< 10 pages) proposal of the work to be performed, clearly stating the hypothesis to be tested.
- Submit the proposal to the members of the TAC and have them sign the Thesis Advisory Committee Nomination Form. Submit the signed, dated form to the SGS Newark-RBHS Administrative Office.
- Upon completion of the experiments, write a MS dissertation. [Same general form as the Ph.D. thesis, but much narrower in scope. In general, the dissertation is approximately 50 - 60 pages long without references]. Follow the guidelines below regarding format.
- Submit the dissertation to the TAC for approval.
- Once the TAC has approved the dissertation, have the members sign the Report of Completion of Requirements form for master's students and submit the signed form, along with one original and 2 copies of the dissertation to the SGS Newark-RBHS administrative office.
- Note that many forms are now available as DocuSign forms. [For all forms, visit the SGS Newark - RBHS forms page.](#)

GUIDELINES FOR MS THESIS PREPARATION

Submit one original and 2 good quality copies (**3 in total, not stapled or bound**) directly to the SGS Newark-RBHS administrative office.

- PAPER: standard size, 8 1/2" x 11" bond; 25% rag content or better for the original. A lesser quality paper may be used for the copies.
- MARGINS: 1 3/4" from left; 1 1/4" from top; 1" from right and bottom
- FORMAT: Single side, block format, double space throughout the text. Font style and minimum size must be either Times New Roman (12 pt) or Ariel (11 pt).
- Use a new page for each segment or division.

TITLE PAGE

Should contain **ONLY** the following:

- a. title in capital letters;
- b. name of the candidate with degrees already awarded, and college/university with date;
- c. the following statement for MS candidates: "A Thesis submitted to the School of Graduate Studies, Rutgers, The State University of New Jersey in partial fulfillment of the requirements for the MS Degree"
- d. this statement is followed at the bottom of the Title Page by: "Newark, New Jersey 07103" and "Month and Year" during which the thesis is being presented.

FORMAT

- a. Title page as described above
- b. Table of Contents
- c. Acknowledgements
- d. Abstract
- e. Introduction
- f. Rationale
- g. Materials and Methods
- h. Experimental Results
 - i. Section I
 - ii. Section II (Divide if appropriate)
 - iii. Section III
- i. Discussion
- j. Summary and Conclusions
- k. Bibliography
- l. Appendix, Abbreviations

FOOTNOTES

Are allowed to be included at the bottom of the same page.

ACKNOWLEDGMENTS

Include the sources of financial support.

ABSTRACT

Not to exceed 350 words, double-spaced.

FIGURES, TABLES AND ILLUSTRATIONS

- a. Should be numbered consecutively in Arabic numbers.
- b. Should include self-explanatory legends and title on the same page. If this is not feasible, use the next numbered page and turn the figure so that it faces the legend.
- c. Type legends preferably 1 1/2" space.
- d. Do not use oversize tables, figures or illustration; if necessary, reduce to 5" x 8" overall.
- e. Insert figures, tables and illustrations as close as possible to the text describing the results.

ABBREVIATIONS

Use standard chemical symbols, Journals, units of measurements, etc.

REFERENCES

- a. References may be arranged in the text either by mentioning the surname of the first (1-3) authors and year of publication, or by consecutive numbers in the order of citation.
- b. Give the **complete title and all co-authors (surnames and initials)** of each paper included in the bibliography. Arrange in alphabetical sequence according to senior (co) author's surname, or in the numerical order of citation in the text.
- c. Multiple lines of each reference should be typed single spaced.
- d. Allow double space between references.