UNDERGRADUATE THESIS PRESENTATION GUIDELINES
Department of Chemistry and Biochemistry, UCSC

TO THE UNDERGRADUATE DEGREE CANDIDATE:

The submission of the Senior thesis is the last step in the program leading to the award of your degree. Your manuscript is a scholarly statement of the results of a substantial period of research and preparation. Your research advisor will receive a copy of your final thesis, and it will be made available for future students in the program’s majors.

The Department of Chemistry and Biochemistry Curriculum Committee has established guidelines for uniformity in the physical format of the manuscript. The purpose of the Committee in establishing these guidelines is to obtain uniformly high quality theses and consistency in the arrangement of the contents. The thesis must be a professionally finished work in format, style, spelling and appearance. The finished document is a reflection of both your work, and the department. Failure to follow these instructions may result in rejection of your thesis or instruction to revise it before final approval is given.

DEADLINE: One final copy, approved and signed by the faculty sponsor, is due by the stated date in the eighth week of your last quarter prior to graduation.

PREPARATION OF FINAL COPY

1. Number of Copies: One final copy, approved and signed by the faculty sponsor, is due by the stated date in the eighth week of the last quarter prior to graduation. The student will submit one copy to the faculty sponsor and once it is approved and signed, the manuscript will be delivered to the Department of Chemistry and Biochemistry Undergraduate Program Assistant. The faculty research advisor will evaluate the thesis and submit a written evaluation. If the faculty research advisor recommends honors for the thesis, a second faculty member will be selected to evaluate the thesis. In this case, a second copy should be provided by the student.

2. Font: A thesis must meet high standards of quality. The printing must be of "letter quality." It must be as clear and dense as if it were typed using a typewriter. No particular choice of font or typeface is mandated; any clearly legible font that is not ornate or fancy, using either 10 and 12 point size, is acceptable. However, fonts should not be mixed inappropriately.

3. Spacing: Use double spacing throughout except in footnotes, indented quotations set off from the text, bibliography entries of more than one line, captions or tables and appendices of data.

4. Margins: Every page of the thesis must be kept within the following margin limits: A minimum margin of 1.5 inches (for binding purposes) on the left side of the page; 1 inch at the right side; 1.25 inches at the top and bottom of the page.
5. **Justification and hyphenation:** The right margin may be justified if this improves the appearance and legibility of the thesis. Long words may be hyphenated at the discretion of the typist to prevent unusually short lines from appearing, but hyphenation should be minimized.

6. **Pagination:** All pages except the title page are numbered. This includes full-page photographs, charts and graphs, the bibliography and appendices. For the preliminary pages, small Roman numerals (ii, iii, etc.) should be used. Page i is the title page, but the page number is not printed on this page. Page ii is a blank page (showing no page number). Any dedication or acknowledgment section you may wish to include will follow the blank page, and should be numbered in the small Roman numeral series, with the page numbers displayed. The Table of Contents then follows, and is numbered with the small Roman numeral series; this is followed by a List of Figures. The remainder of the thesis is numbered with Arabic numerals (1, 2, etc.). The page numbers that are displayed must be centered at the top of each page, within the top margin. Note that no words, punctuation, or diacritics of any kind should accompany the page number: thus use "4"; not "-4-" or "4." or "Page 4".

7. **Tables, charts, graphs:** Full-page tables, charts, graphs and other non-text material require the same margins as typewritten pages. If necessary, wide tables, charts, and figures can be placed sideways. Figures may be embodied in the text or take up a full page. Each figure or table must be numbered and should have a caption. The caption itself should be centered and should always be on a page by itself, not on the back of a preceding page. With full-page figures, the caption should be put on the facing caption page. Such a caption page must be the mirror image of a normal page, i.e., the wider margin is on the right.

8. **Figures and Graphics:** Original artwork (chemical structures, formula, schemes, etc.) should be prepared using professional graphics programs such as ChemDraw, Powerpoint, etc. Hand-drawn structures are generally not considered acceptable. As a guideline, the artwork should be of the quality that would be acceptable for publication.

9. **Published material:** As the author of the thesis manuscript, you will be asked to certify that any previously copyrighted material used in your work, beyond "fair use," is with the written permission of the copyright owner. The pages of the published material must have the same margins and type of paper as specified for the thesis, which may necessitate reduction of the material. Note that enlargement of the materials to meet standard margin requirements is not needed. When using reprints, page numbers of the reprint should be removed and replaced with numbers corresponding to the position of the reprint within the thesis.

**ARRANGEMENT OF MANUSCRIPT**

1. **TITLE PAGE** (see sample title page in the appendix for accepted format): One original title page, prepared in the exact format as the attached sample must be submitted. The final version of
the thesis must be arranged in the following order. The title page is numbered i but the page number is not displayed. The date on the title page will depend on the quarter you receive your degree. The only degree designations and disciplines to be indicated on the title page are as follows:

- Biochemistry and Molecular Biology, Bachelor of Science
- Chemistry, Bachelor of Arts
- Chemistry, Bachelor of Science

The following are examples of title page disciplines for students with approved parenthetical notations: Chemistry (Biochemistry) or Chemistry (Environmental Chemistry).

2. DEDICATION AND/OR ACKNOWLEDGMENTS: If you wish, you may include a page with a brief note of dedication or acknowledgment. The pages of this section should be assigned a place in the small Roman numeral sequence for the preliminary pages, and the numbers should be centered in the top margin.

3. TABLE OF CONTENTS: The thesis must have a Table of Contents. If diagrams, charts, photographs, etc. are scattered throughout the text, include a separate List of Figures after the Table of Contents.

4. TEXT: The text of the thesis follows the Table of Contents. The first page, typically the beginning of either an introduction or a first chapter, will be numbered 1 in Arabic numerals. The text should follow the typical flow of a research paper including: Introduction, Theory (if applicable), Results and Discussion, and Conclusion. The details of your experimental procedures will either be in a Materials and Methods section following the Introduction, or in an Experimental Section after the Conclusion section, depending on the standard followed by your subdiscipline of chemistry or biochemistry.

5. FOOTNOTES AND REFERENCES: The placement of footnotes is a matter of preference that you should discuss with your adviser. Footnotes may be placed at the bottom of the page, at the end of the chapter, or at the end of thesis. The Committee requires only that the format is consistent and that it is in a style appropriate for professionally published material in the field.

6. APPENDICES: A last section may contain supporting data for the text in the form of one or more appendices. Examples of appendix material include spectra, data sheets, questionnaire samples, illustrations, maps, charts, etc.