ANAT 7840
Research Thesis

Goals
1. To develop the skills required for conducting and reporting research in the biomedical sciences

Course format
The student is expected to build and present a record of the research work carried out for the MS degree. The student will be expected to (a) present the research as a written record (b) present, discuss and defend the research before a thesis committee.

The seminar presentation should last no longer than 2 hours. The presentation will be assessed by a 3-member thesis committee. Students will be given the opportunity to re-present their seminar if it fails to meet sufficient standards under the headings listed below.

Grading
Presentations will be scored according to the following schematic:

- clarity of presentation
- identifying study strengths and weaknesses
- understanding of research area
- quality of findings
- summary of presentation

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>clarity of presentation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>identifying study strengths and weaknesses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>understanding of research area</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>quality of findings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>summary of presentation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There is no written test or examination in this course. Final grade for the course will be calculated from the points earned under each of the headings in the different schematic diagrams above.

Course Director:
Dr. You

Credits: 6

Dates of class:
Research labs

Required:
Write thesis
Defend thesis
Grading by thesis committee

Grades:
Final grades will be posted in Blackboard at the end of the course.
The Dissertation Process

Research Masters students should consult with the Course Director at the end of the first year to learn the requirements for admission to candidacy, regulations governing the length of time allotted for completion of the dissertation, documentation, and all requirements for production and submission of the dissertation manuscript.

The Dissertation Committee:
The student selects a faculty member (research advisor, lab PI) who agrees to direct the dissertation. The research advisor, in consultation with the student, forms a dissertation committee of at least three members. The composition of the committee must be approved by the Course Director. After confering with the research advisor and the other committee members, the student prepares a dissertation proposal. Committee members are expected to cooperate in the best interests of the candidate. Reasonable compromises will probably have to be made. On request, the Program Director can serve as a consultant to the candidate and committee. The Chair of the department of Structural and Cellular Biology may be petitioned to resolve problems in the event of extraordinary difficulties.

Timetable

FIRST YEAR
No later than July 15 in year 1:
The candidate should choose a research lab, research advisor (lab PI), and research topic. The candidate will then schedule an advising meeting with the research advisor (lab PI) to discuss requirements and procedures as well as to set a tentative research timetable. The Course Director should be informed when a research timetable is reached.

No later than July 21 in year 1:
The candidate will submit one copy of the approved timetable, signed by the candidate and the research advisor (lab PI), to the Course Director. The candidate and research advisor (lab PI) will set a date, time, and place for the defense of the completed thesis.

No later than July 30 in year 1:
1. The Dissertation Proposal: This is an intra-departmental document of one typed page, describing the dissertation. It should be submitted to the Course Director no later than July 30. This document must be signed by all members of the dissertation committee. If no proposal has been submitted by that date, the omission may affect the decision of whether the student can be allowed to become a candidate for the degree in the second year.
2. The Prospectus: The prospectus collectively consists of (1) the research timetable (2) the dissertation proposal and (3) the dissertation committee approval document. The prospectus is required by the degree program. The candidate’s dissertation committee must meet formally to discuss the prospectus and sign it, after which it is submitted to the Course Director for approval. The prospectus is due to the Course Director no later than July 30 of the first year.

Admission to Candidacy:
When a properly signed prospectus is submitted to the Course Director, the student becomes a candidate for the MS Anatomy Research degree.

SECOND YEAR
The Dissertation:
After the research advisor approves the completed thesis, the thesis is presented to the thesis committee at a thesis defense seminar. All members of the SCB faculty are invited to attend and are welcome to participate.

No later than April 10 in year 2:
The date for the thesis defense should be no later than April 10 of the year of graduation. The candidate should notify the Course Director of these dates and pick up the forms for reporting the results of the defense examination from the Course Director.

No later than April 12 in year 2:
Within 2 days after the completion of the thesis defense, the dissertation Committee will notify the Course Director of the result using the thesis defense assessment form provided. The Course Director will notify the candidate in writing about these results.

No later than April 30 in year 2:
If the candidate passes the thesis defense, the dissertation committee will inform the candidate (after a period of deliberation) at the conclusion of the thesis defense. The dissertation committee will sign the thesis defense assessment form and return it to the Course Director. The candidate does not convey the form.

If the candidate does not pass the thesis defense, the dissertation committee will inform the candidate at the end of the thesis defense, outline requirements that must be fulfilled to satisfy any deficiencies, and set a date for a follow-up thesis defense (or some part thereof) within two weeks. The dissertation committee will indicate this information on the form returned to the Course Director. The candidate does not convey the form.