

Course Outline

1. Document Information

Degree Program	Computer Science
Course Number	CS 499B
Course Title	Senior Thesis in Computer Science
Semester Hours	3
Course Coordinator	Chun-Hsi Huang
Revision Term	Spring 2020
Latest Revision	Spring 2021

2. Catalog Description

A continuation of CS 498, carrying out the approved research under the supervision of a Computer Science faculty culminating in a written thesis and presentation to the Computer Science faculty, evaluated by a committee consisting the advisor, the instructor of the course, and a member (as representative) of the Undergraduate Curriculum Committee.

3. Textbooks

- No Textbooks required.

4. References

- Leedy, P.D. & Ormrod, J. E. (2018). Practical Research: Planning and Design, 12th Edition.
- Barrass, R. (2000). Scientists Must Write. A Guide to Better Writing for Scientists, Engineers and Students. Chapman and Hall, London, New York.

5. Course Learning Outcomes

- Critical Thinking and Written Communication: Students produce a clearly written, Computer Science specific thesis that analyzes a complex problem or addresses a significant research question with insight and imagination.

- Search, read, analyze, and summarize scientific literature.
- Pursue a scientific fact, plan a scientific work, and analyze scientific data. Draw conclusions and make scientific inferences.
- Understanding of the current research questions in Computer Science.
- To demonstrate the diverse skills and problem-solving abilities acquired during the students' undergraduate education.

6. Assessment of the Contribution to Student Outcomes

Outcome	1	2	3	4	5	6
Assessed	X	X	X	X		X

7. Prerequisites by Topic

CS498

8. Major Topics Covered in the Course

1. How to do scientific research: Literature review, summarizing literatures, conducting experimentation. {16 classes}
2. Technical reporting writing {16 classes}
3. Formal report and oral presentation {6 classes}