

COURSE DESCRIPTION

Department and Course Number CSC 209

Course Coordinator Weide Chang

Course Title Research Methodology

Total Credits 1

Current Catalog Description

Research methodology, problem formulation and problem solving. Orientation to the requirements for Master's Thesis or Project. Presentations on various research topics. Prerequisite: Fully classified graduate standing, passing score on the WPE, completion of at least 12 units of 200-level courses in Computer Science. Graded Credit/No Credit. 1 unit.

Textbook

1. Computer Science Master Student Handbook
2. CSUS Guide for Thesis Project Format (Textbook Information Desk, 2nd Floor, Hornet Bookstore or <http://www.csus.edu/gradstudies/forms/Project.pdf>)

Course Goals

1. To provide students with knowledge about the process and requirement for Master's Thesis or Project.
2. To familiarize students with faculty's research interests.
3. To expose students to scientific research methodology and present them with the resources available for conducting Master's Thesis or Project.
4. To provide students with an opportunity to formulate a proposal for Master's Thesis or Project.

Prerequisites by Topic

1. Having fully classified graduate standing.
2. Having completed at least 12 units of 200-level courses in Computer Science.
3. Having passed the WPE.

Major Topics Covered in the Course

1. Graduation policy and requirements of the department and Graduate Center (1 hr)
2. Master's thesis versus project (1 hr)
3. Formal research methodology including practices such as problem statement, literature survey, solution formulation, timeline, result analysis, and conclusions (2 hrs)
4. Research resources (1 hr)
5. Proposal composition (1 hr)
6. Technical writing and oral presentation (1 hr)
7. Professional ethics and plagiarism (1 hr)
8. Faculty's presentations in proper guidelines (7 hrs)

Estimated CSAB Category Content

	CORE	ADVANCED		CORE	ADVANCED
Data Structures	_____	_____	Computer Org & Architecture	_____	_____
Algorithms	_____	_____	Concepts of Programming Languages	_____	_____
Software Design	_____	_____			

Oral and Written Communications

Students are introduced to technical writing and oral presentation skills.

Social and Ethical Issues

Students are exposed to social issues such as professional ethics and plagiarism in formal research.

Theoretical Content

No significant component.

Problem Analysis

No significant component.

Solution Design

No significant component.