

CS/IS49 : Computer Science/ Information Systems Independent Study

General Information

Author:	<ul style="list-style-type: none">James Miketta
Course Code (CB01) :	CS/IS49
Course Title (CB02) :	Computer Science/ Information Systems Independent Study
Department:	CSIS
Proposal Start:	Winter 2025
TOP Code (CB03) :	(0702.00) Computer Information Systems
CIP Code:	(11.0103) Information Technology.
SAM Code (CB09) :	Clearly Occupational
Distance Education Approved:	No
Will this course be taught asynchronously?:	No
Course Control Number (CB00) :	CCC000391393
Curriculum Committee Approval Date:	03/27/2024
Board of Trustees Approval Date:	06/18/2024
Last Cyclical Review Date:	03/27/2024
Course Description and Course Note:	CS/IS 49 provides independent exploration to familiarize students with research techniques, career options, and special academic interests in computer science and information systems. Emphasis shall be on individual research projects, library research, and/or preparation of research papers. There is no prescribed course content. Students develop and complete a research project approved by the sponsoring instructor and division chairperson. Note: Registration is open to any student at GCC who is currently registered for six or more units and who is admitted to Independent Study by the instructor. A student is limited to one Independent Study per semester and no more than 12 units credit toward the AA Degree or Certificate, and no more than six units per division. The units received may be acceptable for college transfer subject to the approval of the individual college. This course may be taken 3 times; a maximum of 9 units may be earned.
Justification:	Mandatory Revision
Academic Career:	<ul style="list-style-type: none">Credit
Author:	No value

Academic Senate Discipline

Primary Discipline:	<ul style="list-style-type: none">Computer Information Systems (Computer network installation, microcomputer technology, computer applications)
Alternate Discipline:	<ul style="list-style-type: none">Computer Science
Alternate Discipline:	No value

Course Development

Basic Skill Status (CB08)

Course is not a basic skills course.

Allow Students to Gain Credit by Exam/Challenge

Course Special Class Status (CB13)

Course is not a special class.

Pre-Collegiate Level (CB21)

Not applicable.

Grading Basis

- Grade with Pass / No-Pass Option

Course Support Course Status (CB26)

Course is not a support course

Transferability & Gen. Ed. Options

General Education Status (CB25)

Not Applicable

Transferability

Transferable to CSU only

Transferability Status

Approved

Units and Hours

Summary

Minimum Credit Units (CB07) 1

Maximum Credit Units (CB06) 3

Total Course In-Class (Contact) Hours 54 - 162

Total Course Out-of-Class Hours 0 - 0

Total Student Learning Hours 54 - 162

Credit / Non-Credit Options

Course Type (CB04)

Credit - Degree Applicable

Noncredit Course Category (CB22)

Credit Course.

Noncredit Special Characteristics

No Value

Course Classification Code (CB11)

Credit Course.

Variable Credit Course

Funding Agency Category (CB23)

Not Applicable.

Cooperative Work Experience

Education Status (CB10)

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	0	0
Laboratory Hours	3 - 9	0
Studio Hours	0	0

Course Student Hours

Course Duration (Weeks)	18
Hours per unit divisor	54
Course In-Class (Contact) Hours	
Lecture	0
Laboratory	54 - 162
Studio	0

Total 54 - 162

Course Out-of-Class Hours

Lecture	0
Laboratory	0
Studio	0
Total	0

Time Commitment Notes for Students

No value

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Co-Requisite

Concurrent registration in 6 or more units

AND

Advisory

ABSE186 - Essentials in Reading and Paragraph Writing (in-development)

Objectives

- Compose a 400 to 450-word thesis-based essay which: (a) summarizes and cites appropriately a reading passage provided as a prompt, (b) includes a clear thesis statement, (c) uses evidence to support the thesis, (d) shows clear organization into an introduction, body, and conclusion, and (e) uses appropriate rhetorical modes such as comparison/contrast, cause/effect, and persuasion in order to support a thesis.

Entry Standards

Entry Standards

Course Limitations

Cross Listed or Equivalent Course

Specifications

Methods of Instruction

Methods of Instruction Laboratory

Out of Class Assignments

- Research project

Methods of Evaluation

Rationale

Other Not applicable.

Textbook Rationale

No Value

Textbooks

Author	Title	Publisher	Date	ISBN
No Value	No Value	No Value	No Value	No Value

Other Instructional Materials (i.e. OER, handouts)

Description	To be determined by Instructor and internship need
Author	GCC Instructor
Citation	No value
Online Resource(s)	No value

Materials Fee

No value

Learning Outcomes and Objectives

Course Objectives

Conduct independent discipline-specific research activities.

Demonstrate a specific in-depth knowledge in the discipline involved.

SLOs

Apply concepts and knowledge of discipline-specific materials to research projects, essays, and other assignments.

Expected Outcome Performance: 70.0

CSIS Computer Programmer - Certificate	Analyze a programming task/problem; based on that analysis, design and implement an object oriented program using multiple classes in a high level language.
ILOs Core ILOs	Analyze and solve problems using critical, logical, and creative thinking; ask questions, pursue a line of inquiry, and derive conclusions; cultivate creativity that leads to innovative ideas. Demonstrate depth of knowledge in a course, discipline, or vocation by applying practical knowledge, skills, abilities, theories, or methodologies to solve unique problems.
CSIS Information Technology - A.S. Degree Major	Demonstrate an understanding of ethical concern associated with information technology including access, reliability, legal, ethical, and accuracy; identify types of computer crime; select, access, and use appropriate sources. Demonstrate installing, configuring, and maintaining computer and mobile devices, including diagnosing, resolving, and documenting common hardware and software. Demonstrate the proper server operation procedures, maintenance procedures and managing risks associated with real world networks.
CSIS Information Technology Certificate	Demonstrate an understanding of ethical concern associated with information technology including access, reliability, legal, ethical, and accuracy; identify types of computer crime; select, access, and use appropriate sources. Demonstrate installing, configuring and maintaining computer and mobile devices, including diagnosing, resolving and documenting common hardware and software. Demonstrate the proper server operation procedures, maintenance procedures and managing risk associated with real world networks.
CSIS Computer Science - A.S. Degree Major	Prepare a software project to implement a single scientific, mathematical, business, or technical function.
CSIS Computer Science - Certificate	Prepare a software project to implement a single scientific, mathematical, business, or technical function.
CSIS Computer Information Systems	analyze simple business or technical problems relevant to programming, and prepare solutions to them demonstrate an understanding of the operations and processes of a computer relevant to programming. implement a program in either C/C++ or Java, using objects
CSIS Computer Support Technician	demonstrate an understanding of computer structure and operations possess a basic knowledge of computer operation and capabilities with the skills to troubleshoot problems or aid in user support.
CSIS Computer Software Technician	demonstrate the ability to independently create, save, modify and print a document using a word processing program and appropriate assistive technology write a computer program using either C/C++, Java, or Visual Basic
CSIS Web Development - Certificate	use industry standard tools and techniques to produce, publish and maintain Web sites and Web content.
CSIS Web Development - A.S. Degree Major	use industry standard tools and techniques to produce, publish and maintain Web sites and Web content.

Additional SLO Information

Does this proposal include revisions that might improve student attainment of course learning outcomes?

No

Is this proposal submitted in response to learning outcomes assessment data?

No

If yes was selected in either of the above questions for learning outcomes, explain and attach evidence of discussions about learning outcomes.

No Value

SLO Evidence

No Value

Course Content

Lecture Content

No value

Laboratory/Studio Content

Research project (54-162 hours)

Total hours: 54-162

Additional Information

Is this course proposed for GCC Major or General Education Graduation requirement? If yes, indicate which requirement in the two areas provided below.

No

GCC Major Requirements

No Value

GCC General Education Graduation Requirements

No Value

Repeatability

Not Repeatable

Justification (if repeatable was chosen above)

No Value

Resources

Did you contact your departmental library liaison?

No

If yes, who is your departmental library liason?

No Value

Did you contact the DEIA liaison?

No

Were there any DEIA changes made to this outline?

No

If yes, in what areas were these changes made:

No Value

Will any additional resources be needed for this course? (Click all that apply)

- No

If additional resources are needed, add a brief description and cost in the box provided.

No Value