COURSE DISCIPLINE : CS/IS

COURSE NUMBER : 101

COURSE TITLE (FULL) : Introduction to Computer and Information Systems

COURSE TITLE (SHORT) : Intro Computer Info

CALIFORNIA STATE UNIVERSITY SYSTEM C-ID : BUS 140 - Business Information Systems, Computer Information Systems

CATALOG DESCRIPTION

CS/IS 101 is designed to present the concepts and technology of processing information to students who plan to continue their studies in business information systems or computer science or who plan to work in the field. This course has a hands-on component in which the student learns basic system and application software, Web site development, Internet, and networking. Information competency skills are introduced. Students will focus on the application of concepts and methods through hands-on projects, developing computer-based solutions to business problems.

Total Lecture Units: 5.00

Total Laboratory Units: 0.00

Total Course Units: 5.00

Total Lecture Hours: 90.00

Total Laboratory Hours: 0.00

Total Laboratory Hours To Be Arranged: 0.00

Total Contact Hours: 90.00

Total Out-of-Class Hours: 180.00

Recommended Preparation: ENGL 100, CABOT 105, or ESL 151.

ENTRY STANDARDS

	Subject	Number	Title	Description	Include
1	ESL	151	Reading And Composition V	revise writing to eliminate errors in syntax, and grammatical constructions;	Yes
2	ENGL	100	Writing Workshop	read, analyze, and evaluate contemporary articles and stories for the comprehension of difficult content and the identification of main ideas and (topic-based) evidence;	Yes
3	ENGL	100	Writing Workshop	write an argumentative essay that integrates the ideas of others (i.e., authors) through paraphrasing, summarizing, and quoting with correct citation techniques;	Yes
4	CABOT	105	Introduction To Office Correspondence	analyze and classify topics and ideas to formulate well-organized responses to entry-level case studies and other expository composition related to business;	No
5	CABOT	105	Introduction To Office Correspondence	solve problems and accomplish tasks through written communication;	No
6	CABOT	105	Introduction To Office Correspondence	initiate entry-level correspondence and respond to correspondence initiated by others;	No
7	CABOT	105	Introduction To Office Correspondence	evaluate and critique composition per standards of effective business writing;	No
8	CABOT	105	Introduction To Office Correspondence	paraphrase and summarize information;	No
9	CABOT	105	Introduction To Office Correspondence	formulate summaries, and opinions as essay responses to works in business-related fields;	No
10	CABOT	105	Introduction To Office Correspondence	proofread, edit, and revise composition;	No
11	CABOT	105	Introduction To Office Correspondence	use library databases to gather research materials related to a business topic;	No
12	CABOT	105	Introduction To Office Correspondence	identify parts of a business letter.	No

EXIT STANDARDS

1   Explain the concept of a network; identify hardware and software needed to create a network; compare and contrast wired vs. wireless networks; describe network security issues;

2   describe the Internet and Internet services; describe the evolution of e-business and understand how to do business on the Internet; identify Web development tool and authoring systems; create a simple Web page using Hypertext Markup Language (HTML);

3   demonstrate the importance of the technology infrastructure in an organization; identify major hardware components of a computer system; explain how to evaluate hardware components; compare open vs. proprietary platforms;

4   describe distinctions between system software and application software; explain common functions of system software; identify types of application software; understand how to evaluate software when planning a system; compare open vs. proprietary software;

5   describe ethical concerns associated with information systems including privacy, access, reliability, legal, ethical, and accuracy; identify types of computer crime; select, access, and use appropriate sources;

6   use a spreadsheet software package to solve common business problems; demonstrate effective spreadsheet design through correct usage of formulas and functions including absolute vs. relative cell addressing; use financial, logical, date and statistical functions; use lists and data management functions; create appropriate charts and printed reports; work with multiple worksheets;

7   use a database software package to solve common business problems; design and build a database (define fields and properties, enter records); design and build simple forms, queries and reports.

STUDENT LEARNING OUTCOMES

1   Describe information systems concepts and how rapid changes in technology affect organizations;

2   Solve practical business problems with exercises in Internet technologies, spreadsheet development and database software;

3   Describe ethical, legal, privacy and security concerns associated with information systems.

COURSE CONTENT WITH INSTRUCTIONAL HOURS

	Description	Lecture	Lab	Total Hours
1	Overview	2	0	2
2	Hardware • Input and output • Processing and storage • Digital representation of data • System configuration, security and troubleshooting	8	0	8

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3	Application Software Integration and Information Competency • Locating and evaluating information using search engines and online databases applications • Search Engines: strategy, advanced searching techniques, evaluating sources, intellectual property, plagiarism, and citing sources Online Databases: Visible versus invisible Web	12	0	12
4	Capturing, and formatting information using text editors and spreadsheet applications • Text Editor: Manipulate data into appropriate format • Spreadsheet: Import data set for analysis	12	0	12
5	Analyzing and organizing information using spreadsheets and databases applications • Spreadsheet: translating data into information, preparation for export to a database • Database: structuring data for access, updating and reporting	10	0	10
6	Sharing and publishing information using cloud storage, presentation and Web site development applications • Cloud Storage: tools, services, access, security, and privacy • Presentation: tools, formats, and access • Web Site Development: tools, formats, access, and limitations	10	0	10

7	Programming Languages • Categories • Program development life cycle • Introduction to programming with HTML and JavaScript	6	0	6
8	Communications and Networks	4	0	4
9	Internet and World Wide Web	6	0	6
10	Databases • Data hierarchy • Data models • Database administration • Web databases	4	0	4
11	Information Systems Analysis and Design	4	0	4
12	E-commerce • Business strategies • Technologies • Integration with conventional business	4	0	4
13	Computers and Society • Security • Ethics • Privacy • Careers	8	0	8
				90

OUT OF CLASS ASSIGNMENTS

1   written and hands-on computer activities (e.g. Internet searches for business);
2   lab assignments (e.g. databases, spreadsheets, slide presentations);
3   research projects (e.g. researching recent technology changes in e-commerce).

METHODS OF EVALUATION

1   quizzes;
2   midterm examinations;
3   final examination.

METHODS OF INSTRUCTION

☑ Lecture

☐ Laboratory

☐ Studio

☑ Discussion

☑ Multimedia

☐ Tutorial

☐ Independent Study

☑ Collaboratory Learning

☑ Demonstration

☐ Field Activities (Trips)

☐ Guest Speakers

☐ Presentations

TEXTBOOKS

Title	Type	Publisher	Edition	Medium	Author	IBSN	Date
Computing Essentials 2021	Required	McGraw-Hill Publishing		print	O'Leary, T.	9781260323993	2020