#### CS 84.13 Course Outline as of Fall 2021

## **CATALOG INFORMATION**

Dept and Nbr: CS 84.13 Title: IT SUPPORT

Full Title: IT Support Last Reviewed: 9/14/2020

Units		Course Hours per Week		Nbr of Weeks	<b>Course Hours Total</b>	
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	3.00	Lab Scheduled	1.00	6	Lab Scheduled	17.50
		Contact DHR	0		Contact DHR	0
		Contact Total	4.00		Contact Total	70.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00 Total Student Learning Hours: 175.00

Title 5 Category: AA Degree Applicable

Grading: Grade or P/NP

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly: CIS 66.54

## **Catalog Description:**

This course introduces students to the knowledge necessary to support information technology (IT) solutions and users of such systems. Topics include introduction to IT support, resolving service calls, installing and configuring computer hardware, software applications, networks, security, client-server and mobile computing, web applications, multimedia resources, communications systems, and the planning and management of the technology lifecycle.

## **Prerequisites/Corequisites:**

## **Recommended Preparation:**

#### **Limits on Enrollment:**

#### **Schedule of Classes Information:**

Description: This course introduces students to the knowledge necessary to support information technology (IT) solutions and users of such systems. Topics include introduction to IT support, resolving service calls, installing and configuring computer hardware, software applications, networks, security, client-server and mobile computing, web applications, multimedia resources,

communications systems, and the planning and management of the technology lifecycle. (Grade or P/NP)

Prerequisites/Corequisites:

Recommended:

Limits on Enrollment: Transfer Credit: CSU;

Repeatability: Two Repeats if Grade was D, F, NC, or NP

# **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

AS Degree: Area Effective: Inactive: CSU GE: Transfer Area Effective: Inactive:

**IGETC:** Transfer Area Effective: Inactive:

**CSU Transfer:** Transferable Effective: Fall 2007 Inactive:

**UC Transfer:** Effective: Inactive:

CID:

## **Certificate/Major Applicable:**

Certificate Applicable Course

## **Approval and Dates**

Version: 05 Course Created/Approved: 3/19/2007 Version Created: Course Last Modified: 3/9/2020 12/30/2023 Submitter: Sujan Sarkar Course last full review: 9/14/2020 **Version Status:** Approved (Changed Course) Prereq Created/Approved: 9/14/2020 **Version Status Date:** 9/14/2020 Semester Last Taught: Fall 2023

Version Term Effective: Fall 2021 Term Inactive:

## **COURSE CONTENT**

#### **Student Learning Outcomes:**

At the conclusion of this course, the student should be able to:

- 1. Troubleshoot, solve, and document common end user and network security problems.
- 2. Install, configure, and troubleshoot a variety of software and hardware computer systems.

## **Objectives:**

At the conclusion of this course, the student should be able to:

- 1. Compare and contrast differences among the various types of software support environments.
- 2. Interpret the desktop support technician's role in an organization's tier structure.
- 3. Troubleshoot and formulate solutions for common end user problems.
- 4. Compose documentation of problems and solutions of software and hardware for computer systems.
- 5. Configure and troubleshoot network and cloud based services.
- 6. Install and configure computer common hardware and software applications.
- 7. Troubleshoot and develop solutions for network security problems.
- 8. Demonstrate IT professionalism and excellent customer service skills.

## **Topics and Scope:**

- I. Introduction to Desktop Application Support
  - A. Historical overview
  - B. Technician's role in an organization
- II. Approaches and Processes for Resolving a Service Call
  - A. Types of common end user requests
  - B. Customer service
  - C. Troubleshooting and the identification of solution
- III. Installing and Configuring Software Applications
  - A. Common software installation problems
  - B. Troubleshooting software applications
- IV. Installing and Configuring Computer Hardware and Mobile Devices
  - A. Common installation problems
  - B. Troubleshooting hardware
- V. Supporting Software
  - A. Cloud services
  - B. Web browsers
  - C. Apps and Mobile Devices
  - D. Desktop software applications
- VI. Networks and Security
  - A. Protecting the organization
  - B. Network security and security permissions
  - C. Computer virus and malware support
- VII. Project Planning and Management
  - A. Fundamentals of project management
  - B. Implementation of an IT System
  - C. Soft Skills in IT
  - D. Ethics in IT

All topics are covered in the lecture and lab portions of the course.

# **Assignment:**

Assignments will include:

- 1. Weekly reading assignments of 5-20 pages
- 2. Weekly written assignments approximately five pages in length
- 3. Oral presentations regarding troubleshooting
- 4. Objective exams (3-5)
- 5. Case study analysis
- 6. Role-play and simulation activities
- 7. Lab related activities include skill demonstrations (install, configure, and troubleshoot computer hardware, mobile devices and various software applications)

#### Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Writing Written assignments and analysis of case studies 15 - 25% **Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or noncomputational problem solving skills. Problem solving Oral presentations 10 - 20% Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams. **Skill Demonstrations** Lab-related activities 25 - 40% **Exams:** All forms of formal testing, other than skill performance exams. Exams Objective exams 30 - 40%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

Role-play and simulation activities

Other Category 5 - 10%

## **Representative Textbooks and Materials:**

A Guide to Computer User Support for Help Desk and Support Specialists. 6th ed. Beisse, Fred. Cengage Learning. 2015 (classic)

# **OTHER REQUIRED ELEMENTS**

#### STUDENT PREPARATION

Matric Assessment Required: X Exempt From Assessment

Prerequisites-generate description: NP No Prerequisite Advisories-generate description: NA No Advisory

Prereq-provisional: N NO

Prereq/coreq-registration check: N No Prerequisite Rules Exist

Requires instructor signature: N Instructor's Signature Not Required

## BASIC INFORMATION, HOURS/UNITS & REPEATABILITY

Method of instruction: 02 Lecture

04 Laboratory

72 Internet-Based, Delayed Interaction

71 Internet-Based, Simultaneous Interaction

Area department: CS Computer Studies
Division: 72 Arts & Humanities

Special topic course:

Not a Special Topic Course

Program status:

1 Certificate Applicable Course

Repeatability: 00 Two Repeats if Grade was D, F, NC, or NP

Repeat group id:

#### **SCHEDULING**

Audit allowed: Y Auditable

Open entry/exit: N Not Open Entry/Open Exit

Credit by exam: N Credit by examination not allowed

Budget code: Program: 0000 Unrestricted

Budget code: Activity: 0701 Computer & Information Science

#### OTHER CODES

Discipline: Computer Information Systems

Basic skills: Not a Basic Skills Course

Level below transfer: Y Not Applicable

CVU/CVC status: Y Distance Ed, Not CVU/CVC Developed

Distance Ed Approved: Y Exclusively online or other technology

based instruction

Emergency Distance Ed Approved: N

Credit for Prior Learning: N Agency Exam

N CBE

N Industry Credentials

N Portfolio

Non-credit category: Y Not Applicable, Credit Course Classification: Y Career-Technical Education

SAM classification: C Clearly Occupational TOP code: 0708.20 Computer Support

Work-based learning: N Does Not Include Work-Based Learning

DSPS course:

N Not a DSPS Course
In-service:

N Not an in-Service Course

Lab Tier: 21 Credit Lab - Tier 1