

SAN DIEGO COMMUNITY COLLEGE DISTRICT  
CONTINUING EDUCATION  
COURSE OUTLINE

**SECTION I**

**SUBJECT AREA AND COURSE NUMBER**

COMP 638

**COURSE TITLE**

TECHNICAL SUPPORT SPECIALIST

**TYPE COURSE**

NON-FEE

VOCATIONAL

**CATALOG COURSE DESCRIPTION**

This course is designed to provide the knowledge and skills that are necessary for a technical support specialist (help desk personnel). This course will benefit both the student that is starting out in the user support industry as well as those who are experienced professionals. Students learn problem-solving and communication skills in addition to the technical aspects of user support. (FT)

**LECTURE HOURS**

50

**LABORATORY HOURS**

125

**ADVISORIES**

NONE

**RECOMMENDED SKILL LEVEL**

Tenth grade reading level, communicate effectively in the English language, and possess basic computer skills.

**INSTITUTIONAL STUDENT LEARNING OUTCOMES**

1. Social Responsibility  
SDCE students demonstrate interpersonal skills by learning and working cooperatively in a diverse environment.
2. Effective Communication  
SDCE students demonstrate effective communication skills.

INSTITUTIONAL STUDENT LEARNING OUTCOMES (CONTINUED)

3. Critical Thinking

SDCE students critically process information, make decisions, and solve problems independently or cooperatively.

4. Personal and Professional Development

SDCE students pursue short term and life-long learning goals, mastering necessary skills and using resource management and self advocacy skills to cope with changing situations in their lives.

COURSE GOALS

This course is designed to provide the knowledge, skills, and abilities that are necessary for employment as a technical support specialist. Through hands-on exercises and case projects students will learn the problem-solving and communication skills that are valuable when providing user support as well as the technical aspects of the job.

COURSE OBJECTIVES

Upon successful completion of the course, the student will be able to:

1. Classify end users.
2. Define what computing resources end users need.
3. Demonstrate the ability to use the tools needed to troubleshoot computer problems.
4. Describe the major types of end-user applications software.
5. Define common problems end users may encounter.
6. Demonstrate/describe the knowledge, skills, and abilities needed to qualify for a technical support position.
7. Build and communicate understanding through effective speaking in a support interaction.
8. Develop call management strategies.
9. Identify and apply the troubleshooting processes and critical thinking skills required for successful troubleshooting.
10. Develop and apply personal problem-solving strategies.
11. Define the incident management process.
12. Manage a user support project.
13. Apply the ethical principles that guide the professional behavior of support workers.
14. Define how organizations develop and implement product standards.
15. Demonstrate/describe the major steps an analyst undertakes to analyze and assess a user's needs.
16. Install end-user computer systems.
17. Define the goals and main steps of training computer users.
18. Write end user documentation.
19. Define the major types of computer facilities and their management tools and procedures for dealing with common end-user problems.

## **SECTION II**

### **COURSE CONTENT AND SCOPE**

1. Introduction to End-User Computing
  - 1.1. End-user classifications
  - 1.2. Resources end users need
  - 1.3. End-user applications software
  - 1.4. Problems in end-user computing
2. Introduction to Computer User Support
  - 2.1. Need for user support employees
  - 2.2. How organizations organize the user support function
  - 2.3. Informal peer support
  - 2.4. User support services
  - 2.5. Position descriptions for user support staff members
3. Customer Service Skills for User Support
  - 3.1. Communication skills and customer service
  - 3.2. Develop a call management strategy
  - 3.3. Strategies for difficult calls
  - 3.4. Comprehensive customer service
4. Troubleshooting
  - 4.1. Problem-solving skills
  - 4.2. Critical-thinking skills
  - 4.3. Decision making skills
  - 4.4. Tools troubleshooters use
  - 4.5. Developing a personal problem-solving philosophy
5. Common End-User Problems
  - 5.1. Hardware problems
  - 5.2. Software problems
  - 5.3. User problems
  - 5.4. Documentation problems
  - 5.5. Vendor problems
  - 5.6. Facilities problems
6. Help Desk Operation
  - 6.1. The incident management process
  - 6.2. Help desk technology and tools
  - 6.3. Trends in help desk operations
7. User Support Management
  - 7.1. Managerial concerns: mission, performance, staffing, and training
  - 7.2. Managing a user support project
  - 7.3. User support certification
  - 7.4. User support as a profession
8. Product Evaluation Strategies and Standards
  - 8.1. How product standards emerged
  - 8.2. Methods for evaluating and selecting computer products
  - 8.3. Computer product standards

COURSE CONTENT AND SCOPE (CONTINUED)

9. User Needs Analysis and Assessment
  - 9.1. User need analysis steps and tasks
  - 9.2. Needs analysis and assessment tools
10. Installing End-User Computer Systems
  - 10.1. Site preparation
  - 10.2. Site management notebook
  - 10.3. Hardware installation tools
  - 10.4. Common hardware installation steps
  - 10.5. Common operating system and network installation steps
  - 10.6. Common steps to install applications software
  - 10.7. Wrap-up tasks
11. Training Computer Users
  - 11.1. The training process
12. Writing for End-Users
  - 12.1. Types of user documentation
  - 12.2. How technical writing differs from other writing
  - 12.3. Documentation planning
  - 12.4. The technical writing process
  - 12.5. Technical writing strategies
  - 12.6. Common problems in technical writing
  - 12.7. Common problems in technical writing
  - 12.8. Technical writing tools
  - 12.9. Documentation evaluation criteria
13. Computer Facilities Management
  - 13.1. Common facilities management problems
  - 13.2. Facilities management tools and procedures

APPROPRIATE READINGS

Appropriate readings may include, but are not limited to, textbooks, supplemental reading assignments, relevant industry periodicals, reference manuals, and computer manuals.

WRITING ASSIGNMENTS

Appropriate writing assignments may include, but are not limited to, maintaining a portfolio of class assignments and projects, providing answers to selected textbook questions, writing appropriate text while editing images.

OUTSIDE ASSIGNMENTS

Outside assignments may include, but are not limited to, reading texts, reference resources or handouts; research as needed to complete projects; and organizing and preparing written answers to assigned questions.

### APPROPRIATE ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING

Assignments which demonstrate critical thinking may include, but are not limited to, analysis and evaluation of reading assigned text and computer based training on CD-ROMS (CBT), Web based training (WBT) materials; and to utilize this analysis in classroom discussions, writing assignments, and in performing laboratory activities. Students must select and use appropriate methods and materials needed to complete laboratory assignments.

### EVALUATION

A student's grade will be based on multiple measures of performance. The assessment will measure development of independent critical thinking skills and will include evaluation of student's ability to:

1. Apply theory to assignments.
2. Complete all lessons, which may include CBT, WBT, and laboratory assignments.
3. Successfully complete all exams, including any online exams.
4. Perform on written, oral, or practical examinations.
5. Contribute to class discussions.
6. Maintain attendance per current policy.
7. Demonstrate ability to work independently and as a team member.
8. Demonstrate troubleshooting skills.
9. Demonstrate ability to help others learn.

Upon successful completion of each individual course a Certificate of Course Completion will be issued. Upon successful completion of all courses included in the program a Certificate of Program Completion will be issued.

### METHOD OF INSTRUCTION

Methods of instruction will include, but not be limited to, lecture, self-paced lab, demonstration, individualized study, use of audio-visual aids, tutorials, group/team work and other unique instructional strategies such as, field trips, job shadowing, volunteering and guided student job assignments may be utilized.

TEXTS AND SUPPLIES

Recommended text in most recent version:

*A Guide to Computer User Support for Help Desk & Support Specialists*, Fred Beisse,

Supplies:

Pen, journal (composition book), notebook paper and a soft 3-ring binder, or a one-subject 110-sheet college ruled notebook, and a media storage device.

Web Sites:

<http://www.askusforfree.co.uk>

<http://www.pcguides.com/ts/index.htm>

<http://support.microsoft.com/support/windows/tshoot/default.asp>

<http://www.remedy.com>

<http://www.baronsoftware.com>

<http://www.software-helpdesk.com>

<http://www.helpdesk200.org>

PREPARED BY: Dea L. Brite & Cynthia Scott DATE: October 4, 2001

REVISED BY: Dea Brite DATE: April, 2007

REVISED BY Instructional Services/SLO's Added DATE May 30, 2013

Instructors must meet all requirements stated in Policy 3100 (Student Rights, Responsibilities and Administrative Due Process), and the Attendance Policy set forth in the Continuing Education Catalog.

REFERENCES:

San Diego Community College District Policy 3100  
California Community Colleges, Title 5, Section 55002  
Continuing Education Catalog