

**Tompkins Cortland Community College**  
**Master Course Syllabus**

**Course Discipline and Number: CSS 212**  
**Course Title: Help Desk and User Support**

**Year: 2022-2023**  
**Credit Hours: 3**

**Attendance Policy:** *To maintain good grades, regular attendance in class is necessary. Absence from class is considered a serious matter and absence never excuses a student from class work. It is the responsibility of all instructors to distribute reasonable attendance policies in writing during the first week of class. Students are required to comply with the attendance policy set by each of their instructors. Students are not penalized if they are unable to attend classes or participate in exams on particular days because of religious beliefs, in accordance with Chapter 161, Section 224-a of the Education Law of the State of New York. Students who plan to be absent from classroom activity for religious reasons should discuss the absence in advance with their instructors. See college catalog for more information.*

**Services for Students with Disabilities:** *It is the College's policy to provide, on an individual basis, appropriate academic adjustments for students with disabilities, which may affect their ability to fully participate in program or course activities or to meet course requirements. Students with disabilities should contact the Coordinator of Access and Equity Services, to discuss their particular need for accommodations. All course materials are available in alternate formats upon request.*

### **Course Description**

This course covers user support, help desk management, and troubleshooting techniques. The Help Desk and User Support Specialist will provide technical support to other employees, vendors and business customers for computers (hardware), applications (software), and peripherals. These technical support personnel investigate, analyze, troubleshoot, and document both first level and second level (complex) problems. Students use established process and procedures including documenting and tracking trouble tickets using database systems. Prerequisites: CSS 112; MATH 095 and RDNG 099 if required by placement testing; ENGL 099 or prior completion or concurrent enrollment in ESL 120, 121, and 122 (or prior completion of ESL 103) if required by placement testing. 3 Cr. (2 Lec., 2 Lab.) Fall semester.

### **Course Context/Audience**

This is a required course for the Computer Support Specialist (CSS) major. Students interested in gaining knowledge of computer hardware and software troubleshooting or general user support techniques may take the course as an elective.

### **Basic Skills/Entry Level Expectations**

**Writing:** W2 Student should have completed ENGL 099 (if needed). The course requires short written responses and/or short papers without documentation, particularly personal reflection or narrative.

**Math:** M4 Completed MATH 095(if needed) - Course requires the use of basic mathematical skills plus basic algebra skills.

**Reading:** R2 Before taking this course, students must have a C or better in RDNG 099 or assessment indicating that RDNG 099 was not required.

### **Course Goals**

This course has four primary goals:

1. To help students develop customer service skills to achieve high customer satisfaction.
2. To help students develop technical writing skills for successful documenting and tracking.
3. To help students develop troubleshooting skills including diagnostic and testing skills.
4. To help students develop problem management skills including learning how to both solve and prevent problems.

## Course Objectives/Topics

Objective/Topic	# Hours
The student will recognize the importance and increased need for user support.	3 Hours
The student will be able to describe the similarities and differences between software and hardware problems.	3 Hours
The student will be able to perform a needs assessment.	3 Hours
The student will be able to provide training on computer systems and applications.	6 Hours
The student will be able to effectively document and track trouble tickets.	5 Hours
The student will be able to perform software installations and upgrades.	5 Hours
The student will be able to demonstrate communications skills including listening carefully, building understanding and speaking effectively.	7 Hours
The student will be able to demonstrate troubleshooting skills using problem-solving, critical-thinking and decision-making skills.	8 Hours
The student will be able to list and describe diagnostic and repair tools.	3 Hours
The student will be able to describe business technology ethics & legal issues including software licensing.	3 Hours
The student will be able to create documents for end users.	3 Hours
The student will be able to list and describe backup, restore and disaster recovery procedures.	4 Hours
The student will create inventory documentation to track assets.	3 Hours
The student will list and describe help desk communication tools including white boards, electronic reader boards, instant messaging and remote administration.	4 Hours

## General Education Goals - Critical Thinking & Social/Global Awareness

<b>CRITICAL THINKING OUTCOMES</b>	<b>HOW DOES THE COURSE ADDRESS THE OUTCOMES</b> (Include required or recommended instructional resources, strategies, learning activities, assignments, etc., that must or could be used to address the goal/outcomes)
<p>Students will be able to</p> <ul style="list-style-type: none"> <li>➤ develop meaningful questions to address problems or issues.</li> <li>➤ gather, interpret, and evaluate relevant sources of information.</li> <li>➤ reach informed conclusions and solutions.</li> <li>➤ consider analytically the viewpoints of self and others.</li> </ul>	<p>Scenarios will be presented for the student to develop meaningful questions for the customers/clients. Help desk calls and trouble tickets will be developed.</p> <p>The student will use both software and hardware vendor supplied documentation, in addition to company provided documentation for problem resolution.</p> <p>The student will use both software and hardware vendor supplied documentation, in addition to company provided documentation for problem resolution. The student must apply both technical knowledge and previously practiced problem analysis and resolution skills.</p> <p>Students interview a technical support person by phone, email, or in person. Students research and evaluate current user support position descriptions.</p> <p>The problem solving process in this course requires that the student look at alternative solutions to a problem and evaluate those solutions for the most effective solution.</p>

<b>SOCIAL/GLOBAL AWARENESS OUTCOMES</b>	<b>HOW DOES THE COURSE ADDRESS THE OUTCOMES</b> (Include required or recommended instructional resources, strategies, learning activities, assignments, etc., that must or could be used to address the goal/outcomes)
<ul style="list-style-type: none"> <li>➤ Students will begin to understand how their lives are shaped by the complex world in which they live.</li> <li>➤ Students will understand that their actions have social, economic and environmental consequences.</li> </ul>	<p>Scenarios will present interaction with customers of various cultures and languages.</p> <p>Different solutions may affect the cost/benefit of the organization.</p> <p>Discussion of the use of resources. Research and document local computer and electronic recycling options.</p>

### Instructional Methods

Technical terminology and concepts should be communicated through class lecture and discussion. Hands-on troubleshooting and problem solving should be included. Students should participate in mock help desk calls including ticket entry and tracking. Students are required to complete a 25-hour field work/shadowing assignment.

### Methods of Assessment/Evaluation

<b>Method</b>	<b>% Course Grade</b>
Discussions	20%
Minimum of 5 projects to include: data collection/analysis, troubleshooting, documentation/tracking, and ability to articulate orally	70%
Field Work / Shadowing: minimum 25 hours	10%

### Text(s)

Guide to Computer User Support (w/2 CDs), Beisse, 5<sup>th</sup> edition, © 2013: Course Technology  
ISBN: 9781133187820

### Bibliography

A Guide to Computer User Support for Help Desk & Support Specialists, Fred Beisse, Latest Edition, © 2004: Course Technology.

Introduction to Help Desk Concepts and Skills, Sanderson, Susan, 1st edition: Career Education.

How to Manage the IT Helpdesk - A Guide for User Support and Call Center Managers (Computer Weekly Professional), 2nd edition, © 2002: Butterworth-Heinemann.

Helpdesk Practitioner's Handbook, Czegel, Barbara, 1998: Wiley.

### Other Learning Resources

<b>Audiovisual:</b> No resources specified
<b>Electronic:</b> Microsoft Project (trial edition provided with textbook and available at www.microsoft.com)
<b>Other:</b> No resources specified