

COMPUTER TECHNOLOGY DEPARTMENT

GREENVILLE TECHNICAL COLLEGE Greenville, South Carolina

COURSE SYLLABUS

Course Number: CPT 268

Course Title: Computer End User Support

Lecture hours per week: 3.0 **Semester credit hours:** 3.0

Prerequisite: Placement into MAT 101 or completion of MAT 032

Catalog Course Description: This course prepares students to train and support end-users. Topics include end user support functions, developing training modules and strategies to provide ongoing technical support. Emphasis is on solving problems with users (needs analysis, troubleshooting, and interaction with users).

Purpose of the Course: To provide students with knowledge and basic skills that can be used as they enter the user support industry.

Required text(s) or other materials:

1. The Complete PC Upgrade and Maintenance Guide, 16th Edition; Mark Minasi, Faithe Wempen, Quentin Docter; Sybex; ISBN: 0-7821-4431-4
PC toolkit
USB flash memory drive
2. All students must access CampusCruiser regarding final course grades/transcripts, information postings, financial records, etc. Students in traditional classes must access CampusCruiser for postings regarding assignments, grades, and e-mail. Students in online classes must access WebCT for specific course information regarding assignments and due dates, test dates, and e-mail correspondence; online courses require weekly participation.

SPECIAL NOTE TO ONLINE STUDENTS: Online students will be REQUIRED to come to the Barton Campus to complete hands-on labs. The number of required on-campus meetings will vary from class to class. Students should plan on at least 3 to 4 meetings. Online students will be required to complete the labs to satisfactorily complete the course. Also, the final examination for online students will be administered on the Barton Campus. The final examination will be scheduled at a time determined by the administration

Students for Whom the Course is Intended: This course is intended for students who desire to learn more about the kinds of knowledge, skills, and abilities needed in the IT support industry.

| | |
|------------------------|----------------------|
| Instructor: _____ | Telephone Ext: _____ |
| Office Location: _____ | Office Hours: _____ |

Approved by: Mark Krawczyk

Mark Krawczyk
Computer Technology/Networking Department Head
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Date: January 8, 2007

Approved by: Susan McDonald

Susan McDonald
Dean of Technical Business
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Date: January 8, 2007

STUDENT/INSTRUCTION POLICY AGREEMENT

TECHNICAL BUSINESS DIVISION ATTENDANCE POLICY – TRADITIONAL CLASSES

It is the student's responsibility to be present for all scheduled classes and labs. Any student missing more than 10 percent of the class meetings **may be** administratively withdrawn by the instructor. It is the student's responsibility to notify the faculty when absences are/were necessary due to illness or a death in the student's immediate family. Each student's situation will be judged on an individual basis and the final decision rests with the faculty. Entering a class more than 10 minutes late or leaving more than 20 minutes early shall constitute an absence. The faculty will be responsible for making a reasonable attempt to notify the student of intent to administratively withdraw; however, failure to notify the student will not prevent the faculty from proceeding with the administrative withdrawal.

TECHNICAL BUSINESS DIVISION ATTENDANCE POLICY – ONLINE CLASSES

To be successful, it is imperative that students commit themselves to online classes and participate regularly. Students who stop sending weekly e-mails, or bulletin board postings and/or stop submitting work will be assumed as not "attending" class and will be marked absent. Consistent absences will make a student **eligible** for being dropped from the course or denied access to the course. Students should not assume that they will be administratively withdrawn if they stop participating, even if they have been denied access to the course. A student who believes that he/she is unable to complete the course or finds him/herself falling behind should contact the instructor. It is up to the student to process the paperwork for withdrawing.

Attendance for online students means having continuous communication with the instructor by e-mail, bulletin board postings, and turning in assignments. In other words, if a student simply accesses the course but doesn't communicate, then it doesn't count as "attendance;" and if the student does not withdraw, he or she may receive a final grade of "FA," meaning "failed due to lack of attendance." Such a grade can affect a student's financial aid status.

WITHDRAWAL FROM CLASSES

If a student finds it necessary to withdraw from one or more classes, the student is responsible for completing the required paperwork for the withdrawal. The student must complete the required student update form and process it at the Office of Student Records located at the McAlister Square facility. Requests for withdrawal cannot be processed by an instructor or staff member. Failure for the student to process the paperwork will require a grade assignment at the end of the semester based on the portion of coursework completed.

CLASSROOM CONDUCT *Refer to the 2006 College Catalog/Student Handbook, pages 59-66, for additional information.*

It must be assumed by all students that classroom conduct and manners are founded in courtesy and respect for others. Discussion and expression of all views relevant to the subject matter are recognized as necessary to the education process, but students have no right to interfere with the freedom of instructors to teach or the rights of other students to learn. The instructor sets the standards of acceptable behavior for their classroom. Unacceptable behavior will not be tolerated and could result in dismissal from the class as outlined in the *College Catalog/Student Handbook*.

Devices such as beepers/pagers and personal cellular phones are permitted on campus; however, they MUST NOT be activated in classrooms or labs. Students MUST leave the classroom or lab to answer or return calls.

ACADEMIC HONESTY *Refer to the 2006 College Catalog/Student Handbook, pages 12 & 60, for additional information.*

Students should know what activities constitute cheating, plagiarism and collusion as defined in the Student Code for South Carolina Technical Colleges. A student involved in any of these activities will, at a minimum, receive a grade of "0" for that portion of the course*. This grade will be computed in the final course grade. Any student who is suspended or expelled due to an act of academic dishonesty will have the right to due process as explained in the Student Code for South Carolina Technical Colleges. The following is the Student Code for Academic Dishonesty:

1. **CHEATING** on tests is defined to include the following: copying from another student's test paper; using materials during a test not authorized by the person giving the test; collaborating with any other person during a test without permission; knowingly obtaining, using, buying, selling, transporting, or soliciting in whole or in part the contents of an unadministered test; bribing any other person to obtain tests or information about tests; and substituting for another student or permitting any other person to substitute for oneself.
2. **PLAGIARISM** is defined as the appropriation of any other person's work and the unacknowledged incorporation of that work in one's own work offered for credit.

* **Note:** Refer to the Department Academic Honesty Policy under the Grading Information for specific information.

POLICY FOR REPEATING A COURSE *Refer to the 2006 College Catalog/Student Handbook, page 16, for additional information.*

A student may register for a class a maximum of three times including withdrawals. There is an appeal process for extenuating circumstances.

STUDENT WITH DISABILITIES *Refer to the 2006 College Catalog/Student Handbook, page 45, for additional information.*

All students who have a disability and need accommodations should visit, call, or e-mail Student Disability Services at the beginning of each semester. Students are strongly encouraged to obtain their accommodation forms within the first 2 weeks of class to ensure appropriate services. The office is located at the Barton Campus in the Student Center, Room 124, and can be reached by phone at 250-8202 or 250-8408 or by email at sharon.bellwood@gvltec.edu. The Disability Service Counselor is available to meet with students on satellite campuses by appointment.

The above information is only a portion of the College's policies and procedures for which each student is responsible. For the most current information, please direct your attention to www.greenvilletech.com for the most current student handbook information. The information is listed under *Current Student* and then under *Student Resources*.

CPT/NETWORK ADMINISTRATION PROGRAM COMPETENCIES

Upon successful completion of the CPT/Network Administration program, the graduate will be able to:

1. Demonstrate the knowledge and ability to evaluate, configure, maintain, and troubleshoot microcomputer hardware and software.
2. Demonstrate an understanding of data communication concepts, network devices, network operating systems, network cabling, and LAN topologies.
3. Demonstrate the knowledge and skills necessary to install, configure, and maintain network operating systems such as Windows and Unix.
4. Demonstrate the knowledge and skills necessary to interconnect various network devices to include routers, switches, hubs, and workstations.
5. Demonstrate the skills needed to effectively administer a Windows local area network to include the set up of users, groups, shares, permissions, and print sharing.
6. Demonstrate an understanding of network security concepts and technologies to include authentication, network security topologies, and devices and encryption methods.
7. Demonstrate the knowledge and skills necessary to secure a network to include configuring software and hardware solutions.
8. Demonstrate the knowledge and skills necessary to implement a wireless network to include an understanding of current standards and technologies.
9. Demonstrate the ability to take initiative, assume responsibility, and work under pressure with minimum supervision by successfully completing "hands-on" lab assignments.
10. Demonstrate the use of a minimum of three business application software packages.
11. Design, create, test, and document the logical programming solution to prescribed specifications following established standards and using programming languages.

CPT 268 TERMINAL OBJECTIVES

Students who successfully complete the above course will have demonstrated the skills necessary to accomplish the following objectives with a minimum competency level of 76 percent:

1. Describe and follow good troubleshooting procedure.
2. Explain and practice setting up, maintaining, and troubleshooting computers.
3. Explain and practice installing, configuring, and troubleshooting computer peripherals.
4. Utilize operating system utilities and third-party software in setup and troubleshooting.
5. Explain and practice analyzing network connections by using network test equipment.

The objectives of the CPT 268 course are intended to meet the CPT/Networking Administration program competencies numbered 1, 2, and 9 above.

Business Division Student Lab Rules

The following lab rules are in addition to those mandated by the college as outlined in the Computing Facilities Use Policy (*College Catalog/Student Handbook, pages 56-57*). By signing the Syllabus Acknowledgement Form for this course, you agree to follow all of the guidelines specified by both the college and the division. Failure to comply with all computer policies will result in the loss of privileges involving campus computer facilities.

- Children are **not** allowed in labs and classrooms nor left in hallways (*College Catalog/Student Handbook, page 56*).
- Food and drinks are **not** allowed in computer labs.
- Labs are to be used only for students enrolled in Computer/Business Program courses and for educational purposes only and may not be used for commercial or personal purposes.
- A Student ID is required. You may be asked to show your student ID and also a copy of your current class schedule.
- **You must log into the computer when you arrive. You will enter your first and last names and your CampusCruiser ID. You will then receive a listing of courses for the current semester, and you will need to select the course for which you are completing work. Remember to log out of the computer before you leave the computer and the lab.**
- Inappropriate or unethical use of the Internet is strictly prohibited (i.e., chat rooms, pornographic web site access, etc.) On the first offense, a written warning will be issued. Lab privileges will be revoked upon the second offense.
- **Printing in the Business Division Student Lab is now available.** Students will need to purchase a pay-to-print card (one is located in the lab), and the student will be charged per page for printing. Printing from the Internet is allowed; however, all regulations regarding the use of the Internet also apply to printing from the Internet.
- Printing in the lab classrooms may only be done at the request of the instructor during class time. Then only one copy of the final assignment may be printed for submission. No other printing is permitted in these labs.
- Lab assistants are on duty to handle hardware/software problems; they do not provide tutoring.
- The Lab Assistant's office and telephone are not to be used by students; a pay phone is located in the canteen.
- All equipment malfunctions are to be reported to the lab assistant; do not attempt repairs.
- Labs are **closed** to all students **during exam days** (except for scheduled exam use), holiday breaks, and between semesters.
- Copying of any software programs and applications which are licensed or protected by copyright is theft.
- Copying of computer programs, documents, spreadsheets, databases, presentations, computer codes, etc. is not tolerated.
- You must keep the labs neat and clean by picking up after yourself.
- Labs are occasionally reserved for classes; adhere to posted signs.
- **You must leave the lab and/or classroom to answer or return cell phone calls. Please put your cell phone on manner-mode or vibrate when in the lab and/or classroom; disruptive and loud ring tones are not acceptable. Students may be asked to change inappropriate ring tones that are disruptive to the learning environment in the lab and/or classroom.**
- The lab assistant may be asked to perform corrective activity for a disk, but it is done so at your own risk with no guarantees that data will not be lost.
- **Loading of ANY software onto campus computers is prohibited.**
- **Internet downloading is prohibited!**
- **Use of personal laptops is not permitted in the lab.** Only computers owned by the College may be plugged into any College network.
- Instant messaging is prohibited.
- All students must use the Business Division Student Lab to complete work outside of the scheduled course times. Students will not be allowed to remain in the classroom to complete work after the class is over. Instructors will ask all students to leave the classroom and report to the Student Lab if they desire to continue working on a computer.

The Business Division Student Lab is located on the Barton Campus in the Engineering Building (103), Room 115.

You will be required to sign in and out when using this lab. Be sure to keep your student ID and class schedule with you; you may be asked to show your current student ID and/or your current class schedule.

***Lab Hours: Monday – Friday 8:00 am to 9:00 pm ▪ Saturday 8:00 am to 1:00 pm ▪ Sunday Closed**

CPT 268 – Computer End User Support

GRADING POLICY

| | |
|--------------|------------|
| Laboratories | 10 percent |
| Assignments | 10 percent |
| Unit Tests | 60 percent |
| Final | 20 percent |

NOTE: ALL TESTS AND EXAMS ARE RETAINED BY THE INSTRUCTOR.

Departmental Policy for the Submission and Grading of Assignments

- All assignments (i.e., labs, projects, research papers, etc.) for this course must be completed and submitted to the instructor by the due date established in order to receive full credit for the assignment.
- Assignments not submitted by the due date can receive up to a maximum of 80 percent credit if it is submitted within one week of the due date.
- Assignments submitted after one week of the due date will have a zero (0) grade recorded for the assignment.
- In the event that an assignment is made less than one week prior to the end of the course, the assignment must be submitted by the last day of class prior to the beginning of the final exam period and will not be accepted late.

Departmental Test Policy for Computer Technology Courses

- A minimum of three (3) tests and a Comprehensive Final Exam will be given.
- Test dates will be announced in class and posted on *CampusCruiser*.
- Periodic announced and unannounced quizzes may be given to encourage attendance; make-ups are not allowed.
- The student assumes responsibility for materials and announcements missed when absent.
- **Tests must be taken on the announced day. Early tests may be arranged at the instructor's discretion.**
- **Each student will only be granted one make-up test for the course. The date and time of the make-up test will be at instructor's discretion. If the first missed test is prior to the last date to withdraw for the course, the test must be completed prior to the withdrawal date. Bonus options will not be allowed on the make-up test. If a second test is missed, the student will automatically receive a failing grade for the course.**
- A comprehensive final exam must be taken as scheduled with no exemptions or exceptions.

Exceptions to the Departmental Test Policy will be made on an individual basis as a result of a decision involving the department head, instructor, student, and/or the Dean of Technical Business.

Departmental Academic Honesty Policy for Cheating and Plagiarism

Cheating and Plagiarism will not be tolerated in any Computer Technology course. If cheating and/or plagiarism are found, the following grading penalty will be assessed:

1st Offense – A grade of zero (0) will be assessed for the assignment/test on which the incident occurred.

2nd Offense – A grade of zero (0) will be assessed for the entire assignment/test portion for the course in which the incident occurred. For this course the penalty would be 12 percent of the final grade for assignments and 60 percent of the final grade for tests.

Departmental Grading Scale

Final letter grades will be issued as follows:

| | | |
|---|---|-----------------|
| A | = | 93 - 100 points |
| B | = | 86 - 92 points |
| C | = | 76 - 85 points |
| D | = | 70 - 75 points |
| F | = | 0 - 69 points |

INCOMPLETES: An INCOMPLETE ("I") will only be approved if ALL of the following conditions exist:

- The student must have no more than 3 weeks (15-week term) or 1.5 weeks (8-week/10-week term) remaining to complete the course.
- The student must have a validated, documented reason why he/she cannot complete the course by the prescribed end date (illness, work situation, death, etc.).
- The student must be up to date with all work up to the point of the request for an Incomplete (no untaken tests or un-submitted labs, homework, etc.), and the student must have a passing grade average (C or higher) for all work submitted.

CPT 268 – Computer End User Support
Tentative Schedule of Topics and Class/Lab Meetings

Tutoring is now available in the Business Division Student Lab located on the Barton Campus in the Engineering Building (#103), Room 115. The hours for tutoring are posted in the lab (ET 115); no appointment is necessary. There are no fees required for this service.

Week 1

Course Introduction

Chapter 4 - Good Troubleshooting Practice, Preventive Maintenance

- Heat and Thermal Shock
- Dealing with Dust
- Magnetism
- Avoiding Water and Other Liquids

Week 2

Chapter 25 - Troubleshooting PC Problems

- General Troubleshooting Rules
- Six Steps to Troubleshooting Success
- Common Problems – and Solutions

Week 3

Chapter 30 - Notebook/Laptop Computers

- Memory Upgrades
- Hard Disk Upgrades
- Other Upgrades
- Working with Laptop Batteries

Week 4

Chapter 24 - Using the Internet for Hardware Support

- Problems with Traditional Support
- Advantages of Online Support
- Using the World Wide Web for Support

Review for Test 1 – PC System Troubleshooting

Week 5

Test 1 – PC System Troubleshooting

Chapter 12 - Partitioning, Formatting, and Managing Drives

- Partitioning and Formatting Overview
- How to Partition and Format a Drive
- Enabling Ultra DMA Support in Windows
- Working with NTFS File System Features
- Performing Disk Tasks with Disk Management
- Managing Disk from the Recovery Console

Week 6

Chapter 13 - Protecting and Maintaining Hard Disks and Data

- Protecting Your Hard Disk
- Protecting Your Data
- Preparing Boot Disks
- Emergency Repair Disks and Automated System Recovery
- Recovery Console
- Checking Disks for Errors
- Defragmenting the File System
- Dealing with Dead Disks

CPT 268 – Computer End User Support
Tentative Schedule of Topics and Class/Lab Meetings

Week 7

Chapter 16 - Troubleshooting Inkjet Printers

- Parts of an Inkjet Printer
- How an Inkjet Printer Works
- Common Problems and Possible Solutions
- Common Error Messages
- Preventive Maintenance

Week 8

Chapter 17 - Troubleshooting Laser Printers

- Parts of a Laser Printer
- How a Laser Printer Prints
- Color Laser Printers
- Common Symptoms and Solutions
- Basic Testing
- Advanced Testing and Repair
- Maintenance Issues

Week 9

Chapter 18 - Understanding and Troubleshooting Scanners

- Scanners and How They Work
- Scanner/Computer Interface
- Image Quality Measurement
- Working with a Scanner in Windows
- Optimizing Scan Size and Image Quality
- Installing a Scanner
- Scanner Maintenance

Week 10

Chapter 20 - Video Adapters and Displays

- How a Video Board Works
- Video Board Characteristics
- 3D Video Boards
- Video Monitor Characteristics
- Multiple Displays

Week 11

Chapter 23 - Hardware Management in Windows

- Installing Device Drivers
- Updating a Device Driver
- Rolling Back a Driver Update
- Understanding System Resources
- Working with Device Manager

Review for Test 2 – Supporting Peripherals

Week 12

Test 2 – Supporting Peripherals

Chapter 27 - Installing and Troubleshooting Networks

- Choosing a Network
- Setting Up a Wired Network
- Setting Up a Wireless Network
- Networking Security
- Network Troubleshooting

CPT 268 – Computer End User Support
Tentative Schedule of Topics and Class/Lab Meetings

Week 13

Chapter 28 - Modems and Other Internet Connection Devices

- Selecting a Modem
- Installing and Testing a Modem
- Troubleshooting a Modem
- Broadband Internet Connectivity

Week 14

Chapter 29 - Viruses and Other Nasty Bugs

- Types of Viruses
- Techniques of Attacks
- Virus Hoaxes
- Tips for protecting Your PC against Viruses and Spyware
- Virus Software
- Viral Symptoms

Review for Test 3 – Supporting Networks and Internet Connections

Week 15

Test 3 – Supporting Networks and Internet Connections

Review for Comprehensive Final Examination

FINAL EXAMINATION

Technical Business Division - Important Semester Date Information
Spring 2007 Semester - January 8 through May 7, 2007

| | Classes Begin | Drop/Add Period | Holiday Break - No Classes | Last Day to Withdraw | Last Day of Classes | Exams |
|---|----------------------|------------------------|---|---------------------------------|--------------------------------|-------------------|
| Full Session Courses | January 8 | January 8 - 12 | January 15 - MLK Birthday April 2 - 7 - Spring Break | March 19 | April 30 | May 2 - 7 |
| Weekend Classes - Full Session | January 12 | January 12 - 16 | April 2 - 7 - Spring Break | March 19 | April 28 | May 4 - 5 |
| 1st Session Courses - (8 Week Course) | January 8 | January 8 - 10 | January 15 - MLK Birthday | February 14 | February 28 | March 1 - 2 |
| 2nd Session Courses - (8 Week Course) | March 5 | March 5 - 7 | April 2 - 7 - Spring Break | April 17 | April 30 | May 2 - 7 |
| CPT Department - 10 Week Courses | February 12 | February 12 - 14 | April 2 - 7 - Spring Break | March 29 | April 30 | May 2 - 7 |
| OST Department - 6 Week Courses (OST 101) | January 8 | January 8 - 9 | January 15 - MLK Birthday | February 5 | February 19 | Last Day of Class |
| OST Department - 9 Week Courses (OST 106) | February 21 | February 21 - 23 | April 2 - 7 - Spring Break | April 10 | May 7 | Last Day of Class |
| CPT Department - 4 Week Course (CPT 150 W01) | January 8 | January 8 - 9 | January 15 - MLK Birthday | January 25 | February 5 | Last Day of Class |
| CPT Department - 4 Week Course (CPT 150 W02) | March 5 | March 5 - 6 | None Applicable | March 21 | March 30 | Last Day of Class |

Note: The refund policy has changed. Please refer to the policy as published on Greenville Tech's Website.

— Summer/Fall 2007 Registration Begins: April 9, 2007 ■ Summer 2007 Classes Begin - May 16, 2007 —