# Business and Technology Division Computer Technology Course Syllabus Operating Systems CPT 257

Credit/Contact Hours Prerequisite Co-requisite Course Description Purpose of Course Required Texts Additional Materials Course Outcomes Program Student Learning Outcomes Greenville Technical College Core Competencies Instructional Agreement Grading Scale Course Policies

**Credit/Contact Hours:** 

3.0

# Prerequisite:

Placement into MAT 101

#### **Co-requisite:**

#### None

# **Course Description:**

This course examines the theory of operating systems and how the operating system theory is implemented in current operating systems. *Computer Technology students must obtain a minimum grade of* "*C*" *in all CPT and IST courses.* 

#### **Purpose of Course:**

- 1. To provide a comprehensive introduction to managing and maintaining computer software.
- 2. To learn operating system installation, maintenance, optimization, and troubleshooting.

- 3. To learn current technology, techniques, and industry standards in the dynamic field of PC repair and information technology.
- 4. To learn operating system security, virtualization, and cloud computing
- 5. To introduce Windows, Linux, Mac OS, and mobile device environments.

# **Required Texts:**

1. <u>A+ Guide to IT Technical Support (Hardware and Software), 9th Edition;</u>

Jean Andrews, Ph.D.; Course Technology/Cengage Learning;

ISBN-10: 1305266439 | ISBN-13: 9781305266438

2. Blackboard portal website via gvltec.edu:

Students in traditional classes must access Blackboard for course-related information.

Students in blended classes will access their online content through Blackboard.

# **Additional Materials:**

**SPECIAL NOTE FOR ALL STUDENTS**: The final examination for traditional class and hybrid class students will be administered on the Barton Campus. The final examination will be scheduled at a time determined by the administration.

#### **Course Outcomes:**

Students who successfully complete this course will have demonstrated the skills required to accomplish the following objectives with a minimum competence level of 70 percent.

- 1. Define terms associated with operating systems.
- 2. Explain operating system functions and features.
- 3. Install and maintain a desktop operating system.
- 4. Administer and troubleshoot a desktop operating system.
- 5. Describe basic skills expected of technical support professionals: customer service, troubleshooting strategies, roles and responsibilities.

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

Upon successful completion of the Computer Technology Degree students will be able to:

- 1. Install computer and network hardware.
- 2. Install computer operating systems and application software.
- 3. Design, create and test computer programming solutions.
- Demonstrate the ability to take initiative, assume responsibility, and work under pressure with minimum supervision by successfully completing "hands-on" computer assignments.
- 5. Analyze, troubleshoot, and correct computer related technical problems.

Revised August 2012

#### **Greenville Technical College Core Competencies:**

**Communication Core Competency:** Students will demonstrate effective written and oral communication skills to convey information, ideas, or opinions.

- Written Communication: Students will demonstrate effective written communication skills to convey information, ideas, or opinions.
- Oral Communication: Students will demonstrate effective oral communication skills to convey information, ideas, or opinions.

**Critical Thinking Core Competency:** Students will demonstrate effective reasoning, problem solving, or quantitative skills to develop an opinion or conclusion.

- Critical Reasoning: Students will employ inquiry, analysis, and synthesis of information to formulate and/or evaluate an opinion or conclusion.
- Problem Reasoning: Students will design and formulate a strategy to answer a question or achieve a desired goal.
- Quantitative Reasoning: Students will be able to analyze numerical information or observable facts resulting in informed conclusions.

**Information Literacy Core Competency:** Students will be able to locate, evaluate, and use information effectively from diverse sources.

**Professionalism Core Competency:** Students will demonstrate conduct and etiquette appropriate to the community and chosen career.

- Professionalism: Students will display professional conduct and work habits.
- Teamwork: Students will collaborate with others to accomplish a shared goal.

# Instructional Agreement:

This syllabus is an agreement between the student and instructor concerning course objectives, course content, grading and other policies and procedures particular to the course as well as any posted program, departmental, and divisional policies. It is also the student's responsibility to become familiar with the Student Handbook/College Catalog found in the Student Resource area of Blackboard.

Please refer to the Syllabus Attachment 1 in Blackboard to review the Tentative Course Schedule. Your instructor will provide a detailed, week-byweek plan of instruction along with method of delivery, testing, and assignment submission.

# COURSE OUTLINE (Units):

- 1 Course Introduction
- 2 Survey of Windows Features (Ch 7)
- 3 Installing Windows (Ch 8)
- 4 Virtualization (Ch 20 Part 1)
- 5 Maintaining Windows (Utilities) (Ch 10 Part 1)
- 6 Maintaining Windows (command prompt) (Ch 10 Part 2)
- 7 Optimizing Windows (Ch 11 Part 1)
- 8 Registry editor (Ch 11 Part 2)
- 9 Supporting Customers and Troubleshooting Windows (Ch 12)
- 10 Troubleshooting Windows Startup (Ch 13)
- 11 Connecting to a Network (Ch 14 Part 1)
- 12 Setting up a Network (Ch 14 Part 2)
- 13 Windows Resources on a Network (Ch17)
- 14 Security Strategies (Ch 18)
- 15 Supporting Mobile Operating Systems (Ch 16)
- 16 Linux and Mac OS X (Ch 20 Part 2)
- 17 Mac OS X (Ch 20 Part 3)

# The instructor reserves the right to modify the Plan of Instruction by changing the sequence of text material or testing content.

Revised August 2016

## **CPT 209 – COURSE SPECIFIC REQUIREMENTS**

**SPECIAL NOTE FOR ALL STUDENTS**: The final examination for traditional class and hybrid class students will be administered on the Barton Campus. The final examination will be scheduled at a time determined by the administration.

#### **CPT 209 – EVALUATION AND GRADING INFORMATION**

Assignments 20 percent Laboratories 30 percent Tests 30 percent

Final Exam <u>20 percent</u> (50 percent written test and 50 percent hands-on lab portion)

Total

100 percent

Final letter grades will be issued as follows:

Α	=	90 -	100
В	=	80 -	89
С	=	70 -	79
D	=	60 -	69
F	=	0 -	59

Revised August 2016

# **Disabilities Information**

Students with disabilities, including those who were served in Special Education (resource or tutorial), should contact Student Disability Services (SDS) to discuss their need for services and accommodations. The main SDS office is located on the Barton Campus in the Student Center Building 105, office 113. Staff can be reached by phone at 864 250-8202 or via email to <u>DisabilityServices@gvltec.edu</u>. Appointments are available at all satellite campus locations. Please check the GTC website for more information concerning Student Disability Services: <u>http://gvltec.edu/disability-services/</u>

Efforts have been made to ensure all materials presented in an electronic format are accessible for students with disabilities and the college is committed to this obligation. However, if you experience any difficulty accessing these materials please notify your instructor immediately so a solution can be provided. You may also contact Student Disability Services directly at 864-250-8202 or by email at <u>DisabilityServices@gvltec.edu</u>.

Students who need a PDF reader for accessibility of course documents presented in PDF format may download a free reader at <a href="https://acrobat.adobe.com/us/en/products/pdf-reader.htm">https://acrobat.adobe.com/us/en/products/pdf-reader.htm</a>

#### Starfish

We care about your success! Greenville Technical College is proud to offer Starfish, a software tool designed to promote student success through coordination and communication between students, instructors and support staff.

When you set up your profile in Starfish, you can connect with services, faculty and staff at Greenville Technical College. The link to Starfish is located in Blackboard. Throughout the term, you may receive emails regarding your attendance, course grades or academic performance.

To benefit from this software, it is important that you check your Greenville Technical College Gmail regularly and read the Starfish alerts. If your academic performance begins to drop, you may also be contacted directly by a Success Coach or the Student Success Center.

#### Start, Stay, Succeed!