Bossier Parish Community College Master Syllabus

Course Prefix and Number: CTEC 114 Credit Hours: 3-3-1

Course Title: IT Software Support

Course Prerequisites: None

Textbook(s): Andrews, Jean, Dark, Joy, and West, Jill. MindTap for Andrews/Dark/West's CompTIA A+ Core 2 Exam: Guide to Operating Systems and Security,1 term Instant Access, 10th Edition. Cengage Learning, 2019. ISBN: 9780357108505

Software: An electronic textbook is included with the MindTap ® PC Repair printed access card. Simulations and assignments will be completed in MindTap ®. Students must get access to MindTap ® to complete this course.

Course Description: This course covers the fundamentals of supporting Information Technology software. Skills will be covered in the installation and configuration of PC operating systems as well as configuring common features for mobile OS Android, Apple OS, and Windows mobile. The class is conducted in a laboratory setting where hands-on learning is emphasized. This course, along with CTEC 112 - IT Hardware Support, will help students gain the skills required for the nationally recognized CompTIA A+ certification exam.

Learning Outcomes:

At the end of this course, the student will:

- A. install, configure, upgrade and maintain Microsoft Windows operating systems;
- B. recognize fundamental concepts related to other operating systems and technologies;
- C. apply security concepts related to information technology;
- D. use troubleshooting theory to apply basic software and mobile device troubleshooting skills: and
- E. appropriately employ information technology operational procedures.

To achieve the learning outcomes, the student will or will be able to:

(The letter designations at the end of each statement refer to the learning outcome(s).)

- 1. compare and contrast various features and requirements of Microsoft Operating Systems; (A)
- 2. install Windows PC operating systems using appropriate methods; (A)
- 3. apply appropriate Microsoft command line tools; (A)
- 4. use appropriate Microsoft operating system features and tools; (A)
- 5. use Windows Control Panel utilities; (A)
- 6. install and configure Windows networking on a client/desktop; (A)
- 7. perform common preventive maintenance procedures using the appropriate Windows OS tools; (A)

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- 8. identify common features and functionality of the Mac OS and Linux operating systems; (B)
- 9. set up and use client-side virtualization; (B)
- 10. identify basic cloud concepts; (B)
- 11. summarize the properties and purposes of services provided by networked hosts; (B)
- 12. identify basic features of mobile operating systems; (B)
- 13. install and configure basic mobile device network connectivity and email; (B)
- 14. summarize methods and data related to mobile device synchronization; (B)
- 15. identify common security threats and vulnerabilities; (C)
- 16. compare and contrast common prevention methods; (C)
- 17. compare and contrast differences of basic Windows OS security settings; (C)
- 18. deploy and enforce security best practices to secure a workstation; (C)
- 19. compare and contrast various methods for securing mobile devices; (C)
- 20. use appropriate data destruction and disposal methods; (C)
- 21. secure Small Office/Home Office (SOHO) wireless and wired networks; (C)
- 22. troubleshoot PC operating system problems with appropriate tools; (D)
- 23. troubleshoot common PC security issues with appropriate tools and best practices; (D)
- 24. troubleshoot common mobile OS and application issues with appropriate tools; (D)
- 25. troubleshoot common mobile OS and application security issues with appropriate tools; (D)
- 26. use appropriate safety procedures; (E)
- 27. given a scenario with potential environmental impacts, apply appropriate controls; (E)
- 28. summarize the process of addressing prohibited content/activity, and explain privacy, licensing and policy concepts; (E)
- 29. demonstrate proper communication techniques and professionalism; (E) and
- 30. explain the troubleshooting theory. (E)

Course Requirements:

- 1. The student must successfully complete the course with an average of 70% or above on the combined learning outcomes.
- 2. Each student is expected to attend classes regularly; excessive unexcused absences constitute grounds for suspension (refer to student handbook for attendance policies).
- 3. Each student must have access to a reliable Internet connection to complete online only MindTap ® assignments.

Course Grading Scale:

A = 90 - 100

B = 80 - 89

C = 70 - 79

D = 60 - 69

F = 0 - 59

Attendance Policy: The college attendance policy is available at http://www.bpcc.edu/catalog/current/academicpolicies.html

Course Fees: This course is accompanied with an additional non-refundable fee for supplemental

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materials, laboratory supplies, software licenses, certification exams, and/or clinical fees.

Nondiscrimination Statement: Bossier Parish Community College does not discriminate on the basis of race, color, national origin, gender, age, religion, qualified disability, marital status, veteran's status, or sexual orientation in admission to its programs, services, or activities, in access to them, in treatment of individuals, or in any aspect of its operations. Bossier Parish Community College does not discriminate in its hiring or employment practices.

COORDINATOR FOR SECTION 504 AND ADA

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Equity/Compliance Coordinator Teri Bashara, Director of Human Resources Human Resources Office, A-105 6220 East Texas Street Bossier City, LA 71111

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