Tompkins Cortland Community College

Master Course Syllabus

Course Discipline and Number: CIS 215 **Year: 2021-2022**
Course Title: Operating Systems **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
An introduction to computer operating systems. Operating system theory and a comparison of major operating systems in use are discussed, along with the technical and operational trade-offs among them. Prerequisites: CIS 132; 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. (3 Lec.) Fall semester.

Course Context/Audience
This is a required course for the Computer Forensics, Computer Information Systems, and Computer Support Specialist degree programs.

Basic Skills/Entry Level Expectations

Writing: W2 If required, the student must have successfully completed ENGL 099. 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 If required, the student must have successfully completed RDNG 099. The course requires reading of some shorter pre-college materials and some beginning college-level materials that will also be covered in class.

Course Goals
This course has two primary goals:
1. To introduce the student to the theory of operating systems and their function.
2. To give students an overview of current operating systems.

Course Objectives/Topics

Objective/Topic	# Hours
User accounts, computer accounts, group accounts, permissions, security features	11 Hours
Compare and contrast a minimum of 3 commonly used operating systems.	5 Hours
Device management functions of an operating system.	9 Hours

File management functions of an operating system.	11 Hours
System management functions of an operating system.	9 Hours

General Education Goals - Critical Thinking & Social/Global Awareness

CRITICAL THINKING OUTCOMES	**HOW DOES THE COURSE ADDRESS THE OUTCOMES** (Include required or recommended instructional resources, strategies, learning activities, assignments, etc., that must or could be used to address the goal/outcomes)
Students will be able to ➢ develop meaningful questions to address problems or issues. ➢ gather, interpret, and evaluate relevant sources of information. ➢ reach informed conclusions and solutions. ➢ consider analytically the viewpoints of self and others.	Students use a variety of sources (textbook readings, online searches, hands-on labs, classroom discussions, etc.) to solve problems and make informed conclusions. Module discussions with directed and open-ended discussion topics give students the opportunity to express their viewpoints, receive comments on their viewpoints, and make comments on the viewpoints of others. Students are required to complete labs using various operating systems from various vendors.
SOCIAL/GLOBAL AWARENESS OUTCOMES	**HOW DOES THE COURSE ADDRESS THE OUTCOMES** (Include required or recommended instructional resources, strategies, learning activities, assignments, etc., that must or could be used to address the goal/outcomes)
➢ Students will begin to understand how their lives are shaped by the complex world in which they live. ➢ Students will understand that their actions have social, economic and environmental consequences.	Online virtual labs provide hands-on experience with the latest technology features including social, security, ethical, privacy, accessibility, and/or eco-friendly features.

Instructional Methods
This course can be taught with lecture/demonstration of current operating system software. Students can also benefit from exploring the operating systems on their own.

Methods of Assessment/Evaluation

Method	**% Course Grade**
Exams/Tests	20%
Projects and assignments	60%
Case Studies-Group Work/Discussions/Reports/Papers	20%

Text(s)
Guide to Operating Systems 4th Edition (w/DVD), Palmer, ©2012: Course Technology, Inc. ISBN: 9781111306366

Bibliography

Deitel, Harvey M. Operating Systems, 3rd edition, © 2003: Prentice Hall.

Silberschatz, Abraham. Operating System Concepts, 6th edition, © 2002: Wiley.

Stallings, William. Operating Systems, 5th edition, © 2004: Prentice Hall.

Other Learning Resources

Audiovisual

No resources specified

Electronic

Virtual Labs: http://technet.microsoft.com/en-us/virtuallabs

Other

Fedora DVD that is included with the textbook or download here: http://fedoraproject.org/en/download-splash?file=http://download.fedoraproject.org/pub/fedora/linux/releases/17/Live/i686/Fedora-17-i686-Live-Desktop.iso

iPads are made available via library reserve, as needed.