Baton Rouge Community College Computer Science / Engineering Department Introduction to PC Operating Systems

CNET 173 Section 01 CRN: 20005 1:00 - 2:15 TR Room: 206 Cypress Bldg

SYLLABUS

Spring 2016

INSTRUCTOR: David L. Sylvester, Associate Professor

> 247 Cypress Building sylvesterd@mybrcc.edu

(225) 216-8152

Office Hours: 11:15 - 2:30 Monday

10:15 – 10:30; 11:45 – 1:00 Tuesday 10:15 – 2:15 Wednesday

11:45 - 1:00 R

Credit Hours 3 Contact Hours 3

Course Description: Presents an in-depth study of the current operating systems used on personal computers. Studies the theory and concepts of operating systems and will practice the tools provided by the operating systems. Topics include the nature of the personal computer operating systems, control of the systems through the commands, file handling, backup/restore, system tuning and utilities.

Required Course Material:

Book: Operating System Concepts

ISBN: 978-0-470-12872-5

Author(s): Abraham Silberschatz, Peter B. Galvin, Greg Gagne

Students must have regular access to a personal computer system that is Microsoft Windows-based and has an Internet connection.

Students must regularly check their BRCC E-mail and CANVAS accounts

(http://mybrcc.instructure.com). BRCC's Website: www.mybrcc.edu Class Website: www.syl9.com

Prerequisites: CSCI 101 or CSCI 190

Co-requisites: None

Suggested Enrollment Cap: 20

Learning Outcomes: Upon successful completion of this course, the student will be able to:

- Install, configure, and maintain the operating system
- Perform basic file management operations
- Organize and allocate primary and secondary storage
- Access and control peripheral devices
- Demonstrate the use of utilities
- Describe Operating Systems functions, services, and command structures
- Use specific commands used to control hardware and software setup options
- Know the differences between popular Operating Systems

Assessment Measures: Learning outcomes will be accessed through computer-based projects and writing assignments. Students will complete a pre-post survey and:

- Instructor prepared tests, quizzes and final exam
- Student participation
- Homework assignments
- Hands-on applications
- Projects and Report(s)
- Presentation(s)

GENERAL INFORMATION:

Disability Statement: If any student in this class has a need for accommodations because of a documented disability, please feel free to discuss them with me privately. The college has professionals to guide, counsel, and assist students with disabilities. The Office of Disability Services, located in the Student Center in Room 241, will evaluate and meet with you to discuss your accommodation needs.

- Student Conduct in Class Policy: Any acts of classroom disruption that go beyond the normal rights of students to question and discuss with instructors the education process relative to subject content will not be tolerated. Any issues needed to be resolved must be done first by setting up an appointment or meeting with the instructor immediately after class. If not resolved; then set up a meeting with the Department Chair, followed by a meeting with the Dean. If after evaluating this classroom environment (instructor, fellow students, lab conditions, etc), you feel uncomfortable in ways that may allow you not to perform as a student in a respectful matter toward others, you are advised to make previsions to find another class setting.
- Grading: Students are expected to take or submit assignments/tests on the specified due date or as per the instructor's request. Late work will not be accepted.

Students must have backup copies of assignments at all times. Back-up copies will prevent loss of work due to viruses, damaged disks, etc. All assignments are to be typed and printed, except otherwise specified. All assignments must include a cover page that consists of student's name, course name, class day/time, instructors name, assignment name and specified due date. The next page should consists of the assignment instructions, followed by the assignment and if need be, work cited.

No makeup tests. In unavoidable situations, a student may pre-arrange to take a regularly scheduled test at an earlier date.

- *Communication:* All course and college communication will be via BRCC email addresses. Students are responsible for regularly checking their email. Immediately contact the IT Help Desk in Governor's 229 if there are problems with your email.
- Safety Concerns: A student's safety is important in the learning process. Please report any suspicious activity to the Office of Public Safety at 216-8888 and use the red telephones in the halls and classrooms, the outdoor blue light pole phones, or the garage emergency phones located on all floors.

All students are encouraged to sign up for BRCC's emergency notification system. **BRCC Connect Emergency Notification** provides enhanced emergency communication through text alert, phone messages, emails, and social media updates. Students can register for BRCC Connect through the student login portal at https://brcc.bbcportal.com/.

The URL for BRCC's safety information is: http://www.mybrcc.edu/index.php?option=com content&view=article&id=202&Itemid=195

If necessary, please exit quickly, and once outside continue to a safe distance away from the building. Take your possessions with you.

• Library/Learning Resources: Since the development of the total person is part of our mission, assignments in the library and/or the Learning Resources Center should be included to assist students in enhancing skills and in using resources. Students should be encouraged to use the library for reading enjoyment as part of lifelong learning.

• Plagiarism/Cheating

<u>Plagiarism</u> is defined as using and passing off as one's own ideas, data, or writings of another or presenting as one's own idea or product derived from an existing source.

<u>Cheating</u> is defined as obtaining information through fraud or deceit: either by the use of unauthorized notes, books, or other sources prior to or during examinations, or by using information under false pretenses. It includes premeditated cheating, which is defined as conscious, pre-planned, deliberate cheating with materials prepared in advance.

Students are expected to uphold the school's standard of conduct relating to academic honesty. Students assume full responsibility for the content and integrity shall be that a student's submitted work, examinations, reports, and projects must be that of the student's own work. Students shall be guilty of violating the honor code if they:

- 1. Represent the work of others as their own.
- 2. Use or obtain unauthorized assistance in any academic work.
- 3. Modify, without instructor approval, an examination, paper, record, or report for the purpose of obtaining additional credit.
- 4. Give unauthorized assistance to other students.
- 5. Misrepresent the content of submitted work.

The penalty for violating the honor code is severe. Any student violating the honor code is subject to receive a failing grade for the course and will be reported to the appropriate authority. If a student is unclear about whether a particular situation may constitute an honor code violation, the student should meet with the instructor to discuss the situation.

For this class, it is permissible to assist classmates in general discussions of computing techniques. General advice and interaction are encouraged. Each person, however, must develop his or her own solutions to the assigned projects, assignments, and tasks. In other words, students may not "work together" on graded assignments. Such collaboration constitutes cheating. A student may not use or copy (by any means) another's work (or portions of it) and represent it as his/her own. If you need help on an assignment, contact your instructor.

• Makeup Tests/Assignments

Students are expected to take or submit assignments/tests on the date specified on the syllabus or as per the instructor's request. Late work will not be accepted!!!

Students must have backup copies of assignments at all times. Backup copies will prevent loss of work due to viruses, damaged disks, etc.

• Withdrawing From a Course

It is the student's responsibility to withdraw from a course if he/she fails to meet all course requirements (i.e. passing of all quizzes, assignments, exams, and attendance). The last day to withdraw from courses is Monday, April 4, 2016.

• Classroom Rules

Do not Shut Down computers or Print without the Instructor's Permission

All computers are to be used for CNET 173 course work only. No Games. Students may follow along with the current lesson on the computer. However, no miscellaneous typing on the computers or talking during lecture and instruction time or while another person is reading aloud.

Absolutely no talking during test or exam periods (direct all questions to the instructor). Once the test or exam has started, students that do not have their materials for testing may leave quietly to purchase necessary items.

No eating or drinking in the computer labs.

All cell phones and pagers must be placed on vibrate. Answer all calls outside of the classroom.

Absolutely no audio and/or video recording during class time. Students with disabilities needing to record audio and/or video during class needs to acquire the proper documentation from the Office of Disability Services, then submit approved documentation to the instructor.

The instructor reserves the right to make changes at any time without prior notice in an effort to promote the student's learning and understanding of the subject material.

ATTENDANCE:

All class assignments are to be done in class. Students are expected to arrive to class on time and remain for the entire class period. Quizzes will begin promptly at the start of the class period. **No makeup quizzes.**

GRADING SCALE:		GRADING:
Α	90 - 100	Exams (30%)
В	80 - 89	Quizzes (10%)
C	70 - 79	Final Exam (20%)
D	60 - 69	Projects/Reports (35%)
F	59 and below	Participation (5%)
I	Incomplete	Bonus (10%)
W	Withdrawal	

Statements required by STEM

You have been provided the final exam week schedule. Students should not make travel plans during these days and must take the final exam.

Students are expected to purchase a textbook and any online resources that are needed for the course within the first week of the semester.

All communications with students will be through BRCC email and NOT the student's personal email account. Please check your BRCC email regularly for important information.

CANVAS is being used to manage this course and it is the student's responsibility to check CANVAS daily. The course syllabus and all assignments will be posted to CANVAS. Grades will be posted to CANVAS and every attempt will be made to post grades within seven days of the assignment due date. You must refer to the syllabus to calculate the course average/final grade. Students are expected to check CANVAS daily for regular announcements and assignments.

Expanded Course Outline:

Week 1 Chapter 1 – Introduction Weeks 2 & 3 Chapter 2 - Operating-System Structure Weeks 4 & 5 Chapter 3 – Processes Weeks 6 & 7 Chapter 4 – Threads Weeks 8 & 9 Chapter 5 - CPU Scheduling Weeks 10 & 11 Chapter 6 - Process Synchronization Weeks 12 & 13 Chapter 7 – Deadlocks Week 14 Chapter 8 - Main Memory Chapter 9 - Virtual Memory Week 15 Final