WOR-WIC
COMMUNITY COLLEGE

Technology Department
Wor-Wic Community College
Introduction to Operating Systems
CMP 120
Syllabus

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OFFICE HOURS
See www.worwic.edu

COURSE DESCRIPTION
This course introduces the fundamentals of computer operating systems. The focus is on the administration, configuration, use and maintenance of operating systems. This course differentiates various operating system characteristics with a major concentration on Linux and Windows, and covers structure, memory management, and file systems. Prerequisite: CMP 107 or permission of the department head. This course requires a $15 laboratory fee. This course is usually offered in the spring.

REQUIRED MATERIALS
TEXT – Helmke, Hudson, Hudson (2011) **Ubuntu Unleashed, 2011**, 6th Edition, SAMS/Pearson, Indianapolis, IN

Blackboard is being used as a supplementary tool for this course. To access course content in Blackboard you need to have access to a computer with an Internet connection. Computers are available on campus in MTC 200, AAB 217, HH 100, GH 204 and WDC 305.

Please follow these directions to access course syllabi and other materials posted:

Login Information:
1. *From Wor-Wic home page, point to "Quick Links" (top-right) and select "Blackboard Login".*
2. *Enter your Wor-Wic user ID and password (same as your Wor-Wic email user ID and password).*

COURSE OBJECTIVES :*Each student will be able to :*

1. **Explain Operating system theory, history, types, how they work (GEO 1,2,3)**
   a. **Given a specific operating system, describe the history, the components and the various types available today.**

   Assessment Strategy: Exam questions, quizzes, and graded lab exercises.

2. **Describe Operating System Hardware components (GEO 1,2,3)**
   a. **Given a specific operating system, list the various hardware components required.**

   Assessment Strategy: Exam questions, quizzes, and graded lab exercises.

3. **Explain file system functions common to all Operating Systems (GEO 1,2,3)**
   a. **List the system functions common to all operating systems.**

   Assessment Strategy: Exam questions, quizzes, and graded lab exercises.

4. **Install and Upgrade operating systems (GEO 1,2,3,4,7)**
   a. **Using the Linux operating system, install the operating system on a computer.**

Assessment Strategy: Exam questions, quizzes, and graded lab exercises.

5. **Configure Input and Output Devices (GEO 1,2,3,4,7)**
    a. **Given specific input or output devices, describe the configuration process for that particular device.**

   Assessment Strategy: Exam questions, quizzes, and graded lab exercises.

6. **Describe popular storage devices including Hard Drives, removable media, CD, DVD (GEO 1,2,3)**
    a. **List current popular storage devices available for data storage.**
    b. **Explain when a particular device would be the choice for storing different types and amounts of data.**

   Assessment Strategy: Exam questions, quizzes, and graded lab exercises.

7. **Configure Operating Systems for communication between computers and over the internet (GEO 1,2,3,4,7)**
    a. **Given a specific communication media, describe the characteristics of that media and when using that media is appropriate.**

   Assessment Strategy: Exam questions, quizzes, and graded lab exercises.

8. **Explain network topologies and protocols. (GEO 1,2,3)**
    a. **List the different network topologies and explain why one would choose that topology for their network.**
    b. **Given a specific protocol, describe when using that protocol would be appropriate.**

   Assessment Strategy: Exam questions, quizzes, and graded lab exercises.

9. **Describe sharing of computer resources in a networked environment. (GEO 1,2,3)**
    a. **List types of shared network resources and how they are shared.**

   Assessment Strategy: Exam questions, quizzes, and graded lab exercises.

10. **Develop standard operating and maintenance procedures. (GEO 1,2,3)**
    a. **Explain the components of an effective backup policy.**
    b. **Given a specific operating system, discuss appropriate maintenance procedures.**

   Assessment Strategy: Exam questions, quizzes, and graded lab exercises.

11. **Explain basics of Computer Security, viruses, attack, protection (GEO 1,2,3)**
    a. **Identify various types of security attacks.**
    b. **Given a specific type of attack, identify appropriate countermeasures.**

   Assessment Strategy: Exam questions, quizzes, and graded lab exercises.

12. **Install and use various open source software (GEO 1,2,3,4,7)**
    a. **Given a specific task, find appropriate open source software to address the need.**
    b. **Compare GPL/LGPL versus Commercial software licenses'.**

   Assessment Strategy: Exam questions, quizzes, and graded lab exercises.

Note: Assessment Strategy: There is a required, graded Electronic Database Assignment

COURSE GUIDELINES

The course will be 2 lecture hours and 2 laboratory hours per week. The lecture portion will be a study of operating systems in general to give the student the theory behind the structure of operating systems. The laboratory portion will focus the student on using the Windows and the Linux operating systems used on the Intel microprocessor The student will analyze various real life problems and present workable solutions based on material learned. The student will do significant internet research to find current solutions to lab problems.

COURSE EVALUATION

The grade will be based on 1000 points which will be divided as follows:

Weekly Quizzes	=	100 points
Final Exam	=	250 points
Electronic Lab Assignment	=	100 points
Project	=	100 points
Laboratory	=	350 points
Class Participation	=	100 points
	TOTAL	**1,000 points**

Letter grade will be assigned as follows:

A = 900-1000 points – Excellent – An 'A' denotes intellectual initiative as well as high academic achievement.

B = 800-899 points – Good – A 'B' denotes above average completion of course requirements.

C = 700-799 points – Average – A 'C' denotes a satisfactory understanding of course principles and techniques.

D = 600-699 points – Poor – A 'D' denotes marginal understanding of course principles and techniques.

F - Less than 600 points – Unacceptable – An 'F' denotes that course requirements and standards were not met.

I do not GIVE you a grade, you EARN a grade.

Attendance Policy

Absence / Lateness - NOT ALLOWED

If absolutely necessary with a very good reason please:

NOTIFY ME AT (410) 334-2835

Or email to: jkelley@worwic.edu

ARRANGE TO GET NOTES FROM ANOTHER STUDENT SET UP A MEETING WITH ME DURING OFFICE HOURS OR BY APPOINTMENT.

School is like a job. It is a commitment and absence or lateness will not be tolerated as it would not be tolerated in the workplace. If you miss or are late for classes you miss important material and you will fall behind. It is YOUR RESPONSIBILITY to make up any missed lecture notes or laboratory time. . If you arrive in class after attendance is taken you will be marked absent and reported as absent.

ASSIGNMENT POLICY

All Homework, Lab Exercises and Reading Assignments MUST be submitted on time. **NO CREDIT FOR LATE WORK**. If you do not do your homework and reading, you will not be able to keep up with the class. I will not slow down to pick up students who are not committed to making every class and doing reading and homework as assigned. I cannot check that you have done your reading but that will show in your work and ability to keep up.

QUIZZES and TESTS

All Tests will be based on the Text, Labs and Lecture Material. . A final assessment will be a teacher made comprehensive final exam (summative).

The Final exam will be given at a testing center for online classes or at the scheduled day and time in the classroom and will last two hours. There will be two components to each test. The first component is a Closed Book exam, usually multiple choice questions similar to the Tutorial Quizzes. The second component is an open book exam that will test the students programming skills. This use of a computer MAY NOT be required.

ACADEMIC HONESTY POLICY
Students are expected to maintain a high level of academic performance. Cheating and plagiarism are defined in Wor-Wic's Student Conduct Policy (appendix of College Catalog).

What is Obvious and Malicious Plagiarism?

1. **Cut & Paste from a source (not on Works Cited at all);** whole sentences and / or paragraphs not cited/quoted.
2. **Source information is not cited and no attempt has been made to cite it (in-text or on Works Cited/References page);** some information from other sources is cited, but some is not (not on Works Cited/References page either)
3. **Source information is obviously used (paraphrased or quoted) but there are NO in-text citations AT ALL;** either quoted material or material that obviously is not common knowledge.
4. **Submitting another student's paper as one's own;** This is also a serious Violation of Academic Values for Cheating (A), Facilitating Academic Dishonesty (C), and Violations of Civil Conduct for Disorderly Conduct, all as defined in the College Catalog (see current version). Therefore, increased penalties may be applied.

ELECTRONIC LAB ASSIGNMENT
The Electronic Lab Assignment (ELA) will be assigned at the first class meeting. You will be assigned a topic and a due date at that time. You are responsible to complete this assignment on time and failure to do so may result in the failure of the course. The ELA is a requirement for all courses by Wor-Wic Community College.

If you need help in writing your ELA, please utilize the writing center at Wor-Wic. You can schedule an appointment online. Go to the Wor-WIc Web Site at www.worwic.edu and the Click on Current Students. Then select Learning Resources and the Writing Conferences. Limited time slots are available so an appointment is required.

INSTRUCTOR ACCESS
The instructor may be contacted at any time via email at jkelley@worwic.edu or leave a message on voicemail at 410-334-2834. In case of emergency contact the Technology Department at: 410 – 334-2870 during school business hours. Use these numbers to report problems with WebCT access and any other problems with the course.

COMPUTER LAB POLICY – Room AAB309
At no time, are open foods or beverages allowed in the computer lab. Adequate breaks will be giving to allow snacks to be purchased and consumed outside the classroom. Access to computer systems is granted as a privilege, and as such, imposes certain responsibilities and obligations. By using the college's computing resources, users agree to abide by these policies and procedures. Specific information about violations and sanctions can be found in the appendix of the course catalogue.

H1N1 STATEMENT FOR SYLLABUS

In the event of a flu epidemic or other emergency that results in the suspension of classes, faculty will be communicating with students about their courses and course requirements, such as assignments, quiz and exam dates, and class and grading policies, via faculty websites or Blackboard. Students will be responsible for completing all these assignments in accordance with class policies. Information about the resumption of classes will be communicated via the College's website and email system.