THE UNIVERSITY OF THE WEST INDIES
ST. AUGUSTINE, TRINIDAD AND TOBAGO

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

FACULTY OF SCIENCE AND TECHNOLOGY

INFO 2603 - PLATFORM TECHNOLOGIES I

Semester 1, Undergraduate, Year 2, Level 2

Pre/Co-requisites: **INFO 1600 or COMP 1600**
Course Type: **Core**
Credits: **3**
Mode of Delivery: **Face-to-Face**

1. Course description

This course provides the student with an introductory understanding of the terminology and concepts of operating systems, computer architecture, and computer networking. The technical foundation of operating systems' installation, configuration, administration and troubleshooting are introduced to students. The course will be delivered using a combination of face-to-face lectures and interactive hands-on computer lab sessions, along with eLearning activities using various online resources. There are 5 units in this course: Unit 1: Hardware review, Unit 2: Operating System Concepts, Unit 3: Operating Systems in Practice, Unit 4: System Administration, Unit 5: Network Operating System Concepts. Assessments will take the form of written examinations, practical lab examinations and a group presentation. This course has 100% coursework and no final written exam.

2. Rationale

A computer platform generally refers to the operating system and computer hardware only. Operating systems are central to all computing activities and act as intermediaries between computer users and a computer's hardware and software. Computer platforms however conform to a set of standards that enable software developers to produce software applications for specific platforms. This course therefore bridges the knowledge gap between how computer platforms work with all other software systems and application code to produce a working environment for users. It merges theoretical content with practical, real-world application of computer platforms in business settings. It also prepares students for further courses on computer systems such as computer networks.

3. Course Aims

INFO 2603 aims to develop practical operating system administration, management and troubleshooting skills in undergraduate students while promoting an understanding of the theory behind these operations relevant to computer architecture and networking concepts. This addresses the need for students to be able to configure and manipulate basic computer systems for a variety of platforms with a clear understanding of the implications of these tasks for business setting

4. UWI Graduate Outcomes

This course concentrates on the following qualities of the distinctive UWI Graduate:

1. A critical and creative thinker
2. An effective communicator with good interpersonal skills
3. IT-skilled and information literate

5. Course Learning Outcomes

On successful completion of this course, students will be able to:

1. Examine the basic hardware and architectural requirements used by modern operating systems.
2. Discuss operating system and networking terms and concepts as they apply to a business scenario.
3. Recommend an operating system and features to meet the needs of a business.
4. Design an installation strategy for operating systems, the features and software to ensure the most economical use of hardware resources and time.
5. Configure an operating system and its features so that it can perform a specific task on a company network
6. Perform administration of an operating system allowing ongoing user access to the required resources on a network.
7. Troubleshoot errors and problems with computers and the network to ensure the systems are available at all times.
8. Utilise command line environments to manage file and directories, and perform administrative tasks in order to increase administrative performance.
9. Recommend a network configuration to suit real-world business environments.

6. Programme Goals and Course Learning Outcomes Matrix

Programme Level Learning Outcomes **At the end of the programme, students will be able to:**	**Course Learning Outcomes** **At the end of the course, students will be able to**								
	1	2	3	4	5	6	7	8	9
Advise an organization on the utility of new technologies through anticipation of changes and trends.	x	x	x						x
Recommend evaluated information technology systems, software and hardware to address an organization's specific goals and objectives.		x	x	x					x
Adapt successfully to new work-place challenges and environments.					x	x	x	x	
Implement an IT-based system, component, process or solution designed for a specific environment					x	x		x	

Programme Level Learning Outcomes At the end of the programme, students will be able to:	Course Learning Outcomes At the end of the course, students will be able to								
	1	2	3	4	5	6	7	8	9
Create a systems or technology project plan to address a specific information technology problem.			x	x					x
Articulate the impact of technology on individuals, organizations and society including ethical, legal and policy issues when making IT related decisions	x	x	x						x
Apply current technical concepts and practices during the design and implementation of systems, processes or components.			x	x	x	x	x	x	x
Manage processes, systems, and human resources in alignment with an organization's structure (or needs).					x	x			
Conduct research necessary to successfully complete an assigned project.			x	x					x
Demonstrate effective written and oral communication techniques when completing reports and presentations.	x	x	x						x
Demonstrate inter-personal skills, teamwork, and efficient use of appropriate programme-specific technology.	x		x	x					x

7. Course Assessment Descriptions

In this course, assessments are designed to test student knowledge and practical skills through a combination of written and practical exams. In addition, students will be assessed through a group presentation which requires research and preparation of strategies to address a particular topic or problem in a given domain.

There are five assessments in this course: 1 theoretical exam, 2 mixed practical and theoretical exams, 1 fully practical exam, and 1 group presentation. As mentioned before, this course is 100% coursework.

8. Course Assessment Type and Course Learning Outcome Matrix

Assessment	Learning Outcomes									Weighting %	Assessment Description	Duration
	1	2	3	4	5	6	7	8	9			
Written Exam	✓	✓	✓	✓						25	Problems & Short Answer	2 hrs
Lab Exam 1	✓	✓	✓	✓	✓	✓	✓	✓	✓	20	Scenario-based Problems & Practical Exercises	2 hrs
Lab Exam 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	20		
Lab Exam 3	✓	✓	✓	✓	✓	✓	✓	✓	✓	20		
Groupwork	✓	✓	✓	✓						15	Presentation	15 mins
TOTAL %										100		

9. University Grading Scheme (Undergraduate Level)

Grades	Ranges
A-to A+	*(A- : 75 to 79; A: 80 to 89; A+: 90 to 100)*
B-to B+	*(B-: 60 to 64; B: 65 to 69; B+: 70 to 74)*
C-to C+	*(C-: 50 to 54; C+: 55 to 59)*
F1 to F3	*(F1 40 to 49; F2: 30 to 39; F3: 0 to 29)*

10. Teaching Strategies

Method	Description
Interactive Lectures	Face to face lectures twice weekly
Directed Discussions	Online and during lectures and lab sessions
Writing exercises	At-home worksheets, in-class practice exercises
Inquiry-based Learning	Practical lab sessions and activities
Problem-based Learning	Exercises/activities from lectures, labs and worksheets

11. Readings/Learning Resources

Required/Essential (Online and print)

- *Understanding Operating Systems, Ana McIver McHoe and Ida M. Flynn, CEngage Learning, 8th edition, 2018*

Highly Recommended (Online and print)

- *Modern Operating Systems, Global Edition by Andrew Tanenbaum and Herbert Bos, Prentice-Hall 2014*
- *Computer Organisation and Architecture, 7th edition by William Stallings, Prentice-Hall 2006*

12. Course Calendar (Approximate)

Week	Topic	Required Readings/ Learning Resources	Learning Activities	Assessment	Assessment Date
1.	Unit 1	Chapter 1 (Stallings) Chapter 1 (McHoe & Flynn)	Lectures, Labs, Worksheets	X	X
2.	Units 1-2	Chapters 2, 3 (McHoe & Flynn)	Lectures, Labs, Worksheets	Group Presentation	TBD
3.	Unit 2	Chapters 4, 7, 8 (McHoe & Flynn)	Lectures, Labs, Worksheets	X	X
4.	Revision: Units 1-2	See Weeks 1-3	Review Lecture, Written exam	Coursework Exam #1	Week 4
5.	Unit 3	Chapters 13, 15 (McHoe & Flynn)	Lectures, Labs, Worksheets	X	X
6.	Unit 3	Chapters 14 (McHoe & Flynn)	Lectures, Labs, Worksheets	X	X
7.	Revision Units 1-3	See Weeks 1-6	Review Lecture, Written/ Practical lab exam	Coursework Exam #2	Week 7
8.	Unit 4	Chapters 13, 15 (McHoe & Flynn)	Lectures, Labs, Worksheets	X	X
9.	Unit 4	Chapters 14 (McHoe & Flynn)	Lectures, Labs, Worksheets	X	X
10.	Revision Units 1-4	See Weeks 1-9	Review Lecture, Written/ Practical lab exam	Coursework Exam #3	Week 10
11.	Unit 5	Chapter 9 (McHoe & Flynn)	Lectures, Labs, Worksheets	X	X
12.	Unit 5	Chapter 9 (McHoe & Flynn)	Lectures, Labs, Worksheets	X	X
13.	Revision Units 1-5	See Weeks 1-12	Review Lecture, Practical lab exam	Coursework Exam #4	Week 13

13. University Policies and Expectations

a. Academic Integrity

You are required to submit your own work for all assessments in this course. Plagiarism or copying of any form will not be tolerated. Cite sources fully when preparing presentations and reports. For all practical exams, you are expected to do your own work without the assistance of the internet or personal notes. Since there are multiple streams each week for lab exams, you are expected to maintain the confidentiality of the exams.

b. Accommodations for students with disabilities

Students should refer to the University of the West Indies St Augustine Campus, Student Disability policy https://sta.uwi.edu/resources/policies/Student_Disability.pdf