Course Outline

Title: SYSTEMS PROGRAMMING

Code: ITECH3220

Formerly: CP703

Faculty / Portfolio: Faculty of Science

Program Level:

	AQF Level of Program					
	5	6	7	8	9	10
Level						
Introductory						
Intermediate						
Advanced			✔			

Pre-requisites: (CP707 or ITECH3218)

Co-requisites: Nil

Exclusions: (CP703)

Progress Units: 15

ASCED Code: 020103

Learning Outcomes:

Knowledge:

K1. explain important UNIX development utilities;
K2. describe the underlying UNIX model;
K3. explain the use of UNIX file systems;
K4. describe UNIX process management;

Skills:

S1. write small programs demonstrating inter-process communication on UNIX;
S2. incorporate basic curses functionality into programs;
S3. communicate technical information relating to systems level UNIX programming;
S4. discover new ways to approach tasks in UNIX programming;

Application of knowledge and skills:

A1. design, develop, test and debug program solutions for systems programs based on program specifications provided

Values and Graduate Attributes:

Values:

V1. Develop a professional approach to systems programming

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ITECH3220 SYSTEMS PROGRAMMING

Graduate Attributes:

Attribute	Brief Description	Focus
Continuous Learning	In a blended learning approach facilitated by the use of a development environment requiring planning, development and implementation of software solutions, students will continue to develop their knowledge and skills.	High
Self Reliance	Students will participate in a self-directed and collaborative learning environment to develop their theoretical and technical expertise in the field of software development.	Medium
Engaged Citizenship	Students will produce System design solutions which meet industry standards.	Medium
Social Responsibility	Students will use industry standard development environments.	Medium

Content:

Topics may include:

- UNIX files.
- UNIX process management.
- UNIX inter-process communications.
- UNIX shells.
- Use of important systems calls.
- Use of the curses library.
- Understanding UNIX internals.
- Use of UNIX tools (including development tools and UNIX shell).
- General issues such as portability and performance.

Assessment:

Learning Outcomes Assessed	Assessment Task	Assessment Type	Weighting
K1, K2, K3, K4, S1, S2, S3, S4, A1	Participation in lectures, tutorials and lab classes	Assignments and/or laboratory class work	40 - 50%
K1, K2, K3, K4, S1, S2, S3, S4, A1	Participation in lectures, tutorials and lab classes	Examination(s) and/or Laboratory Tests	50 - 60%

Adopted Reference Style:

APA

Presentation of Academic Work:

https://federation.edu.au/students/assistance-support-and-services/academic-support/general-guide-for-the-presentation-of-academic-work