

**Course Outline**

**T101 Network Fundamentals**

## Programme

Bachelor of Information and Communications Technology (Applied)

## Faculty

Humanities and Business

## School

Business and ICT

## Semester / Year

Semester Two, 2019

**Lecturer**

Simon Burt

**Moderator**

Sandra Cleland

## Course Aim

## To provide an introduction to the fundamentals of computer networks as they currently exist in industry and to enable students to describe, test and troubleshoot local area networks.

## Learning Outcomes

On successful completion of this course the student will be able to:

1. Describe the operation of current network technologies.
2. Select the most appropriate network technologies for a given scenario.
3. Apply testing and troubleshooting techniques to networking problems.

## Lecturer

|  |  |  |  |
| --- | --- | --- | --- |
|  | Simon Burt |  | s.burt@ucol.ac.nz |
|  | UCOL Extension 70987 | Image result for location icon | Room 1-1-32 |

## Classes

Each week you will attend one two-hour lesson and one two-hour practical lab in 8-0-11.

## Blended and Self-Directed Learning

It is imperative that you regularly check the course Moodle site for up-to-date resources, communication, and activities to be undertaken during self-directed study times. Outside of timetabled classes students should complete 6 self-directed learning hours each week. Resources can be found under the appropriate week or topic section. Each week will contain resources such as: lecture material, exercises, web links, any notes pertaining to that week’s topic, and online assessment tasks.

## Assessments

This course will consist of the following assessments

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| --- | --- | --- |
| **Assessment** | Weighting | Learning Outcomes Assessed |
| Chapter Tests | 10% | 1, 2 and 3 |
| Skills Based Assessment | 45% | 1, 2 and 3 |
| Online Final Exams | 45% | 1, 2 and 3 |

## Pass Criteria

In order to pass you must gain 50% or more of the total marks available for the course. The student handbook outlines the grading system.

In addition, to move on to other courses offering the Cisco Academy Programme, you must pass each of the following assessments with a mark of 50% or more:

Intro to Networks - Skills Based Assessment

Intro to Networks - Online Final Exam

To receive a congratulatory letter signed by John Chambers in addition to a certificate of course completion, students must pass the course and receive a 75% or higher in the Online Final Exam for Cisco ITN.

## Extensions

Extensions for an assessment can only be granted prior to the assessment due date and only in exceptional circumstances as defined by UCOL Academic Statute. Consideration of exceptional circumstances will be made in accordance with the UCOL Assessment Procedure. Evidence of the circumstances may be required.

An application for an extension must be submitted in written form using the Request for Assessment Extension Form (provided in the programme’s Student Handbook) or in electronic form (email) to the subject lecturer. An application made in electronic form must include all the information required by the Request for Assessment Extension Form.

Where an extension has been granted, and the extension deadline has been met, no penalties will apply. The student will be assessed, and feedback provided, in the same way as if the assessment was undertaken on the original date and time.

## Late Submission

The following conditions apply to all late submissions of assessments that do not have an approved extension:

* All assessment work received after the due date and time, and not subject to a lecturer-approved extension, will attract a penalty.
* The penalty for late submission is the deduction of 10% of the mark achieved for each day beyond the due date for submission.
* The penalty is applied for a maximum of five (5) days.
* An assessment received after one week from the due date for submission will be returned unmarked and a zero (0) grade will be entered.
* No late submissions may be accepted after marked assessments have been returned to students, unless it can be determined that there will be no advantage to the student submitting the late assessment or disadvantage to students who have submitted the work on time.

## Delivery Plan

|  |  |  |
| --- | --- | --- |
| **Week** | **Topic** | **Assessments** |
| 1 | Chapter 1: Introduction and Exploring the Network |  |
| 2 | Chapter 2: Configuring a Network Operating System |  |
| 3 | Chapter 3: Network Protocols and Communications |  |
| 4 | Chapter 4: Network Access |  |
| 5 | Chapter 5: Ethernet |  |
| 6 | Chapter 6: Network Layer | **Chapter tests 1-5 complete** |
| 7 | Chapter 7: IP Addressing |  |
| 8 | Chapter 8: Subnetting IP Networks |  |
| 9 | Chapter 8: Subnetting IP Networks (VLSM) |  |
| 10 | Chapter 8: IPv6 |  |
| **Break 1st October to 12th October** | | |
| 11 | Chapter 9: Transport Layer Chapter 10: Application Layer  **Practice Skills Based Assessment** | **Chapter tests 6-8 complete** |
| 12 | No lesson or lab on Monday (Labour Day). Thursday labs as normal **Practice Skills Based Assessment** |  |
| 13 | Chapter 11: Build a Small Network **Practice Skills Based Assessment** |  |
| 14 | **Skills Based Assessment Sessions** | **SBA** |
| 15 | **Skills Based Assessment Sessions Practice Online Final Exam** | SBA Chapter tests 9-11 complete |
| 16 | **Exam Week** | **Online Final Exam** |