

COSC301 Course Outline

Week 1

Lecture 1 Introduction, Operating Systems

Lecture 2 Network Hardware

Laboratory 1 Introduction, Operating Systems

Week 2

Lecture 3 Basic System / Network Administration

Laboratory 2 Ethernet Practical

Lecture 4 IPv6 Bootcamp

Laboratory 3 Basic Interface Management

Week 3

Lecture 5 Wireless Networking

Laboratory 4 IPv6 Bootcamp

Lecture 6 Scripting Technique

Laboratory 5 Wireless Networking

Week 4

Lecture 7 Filesystems

Laboratory 6 VIM

Lecture 8 System Installation

Laboratory 7 Shell scripting

Week 5

Lecture 9 Post-Installation

Laboratory 8 Filesystems

Lecture 10 Scheduled Tasks and Log Management

Laboratory 9 System Installation

Week 6

Lecture 11 The Domain Name System (DNS)

Laboratory 10 Post Installation

Lecture 12 Address Assignment and Service Discovery

Laboratory 11 Scheduled tasks and Log management

Week 7

Lecture 13 Electronic mail

Laboratory 12 Catchup lab

Lecture 14 World Wide Web

Laboratory 13 The Domain Name System (DNS)

Week 8

Lecture 15 Transaction Layer Security (TLS)

Laboratory 14 Address assignment and the rendezvous problem

Lecture 16 Remote Terminal Services

Laboratory 15 Remote Terminal Services

Week 9

Lecture 17 FTP and Web caching

Laboratory 17 WWW practical test

Lecture 18 Network Security

Laboratory 17 Electronic mail

Week 10

Lecture 19 Internal Routing

Laboratory 18 Catchup Lab

Lecture 20 Management Tools & Protocols

Laboratory 19 Virtual LANs & Internal Routing

Week 11

Lecture 21 Firewalls

Laboratory 20 Virtual LANs & Internal Routing (cont)

Lecture 22 Diagnostics & Ethics

Laboratory 21 Subnetting Tutorial

Week 12

Lecture 23 Network Accounting & Visibility

Laboratory 22 Firewalls

Lecture 24 Exterior Routing

Laboratory 23 Firewalls (cont)

Week 13

Lecture 25 Guest Lecture

Laboratory 24 Catchup lab

Lecture 26 Revision

Laboratory 25 Final Lab

Extra labs for experts

Laboratory 24 FTP and Caching

Laboratory 25 SNMP

Laboratory 26 IPv6 Firewalls

Laboratory 27 Netflow