Course Directive
IN515 Introduction to Networks
Semester Two, 2014

Description

This course will introduce you to fundamental networking concepts and technologies. You will cover the basics of network theory and develop the skills needed to implement a simple network. This course follows the curriculum for CCNA1 and is the first of four courses covering the material for the CCNA qualification.

Course Information

- 15 Credits
- No prerequisites

Lecturers

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Course Dates

Term 1 (10 weeks)	21 July - 26 September
Mid semester break	27 September - 12 October
Term 2 (6 weeks)	13 October - 21 November

Learning Outcomes

On completion of this paper you will be able to:

1. Use network protocol models to explain the layers of communications in data networks;
2. Design, calculate, and apply subnet masks and addresses;
3. Build a simple Ethernet network using routers and switches;
4. Employ basic cabling and network designs to connect devices;
5. Perform basic router and switch configuration and verification;
6. Analyse the operations and features of the transport and network layer protocols and services.

Resources

- Course readings, exercises, quizzes and exams are available on the course web site at http://www.netacad.com
- Lab exercise documents are available on the I: drive. You may print these yourself as needed or purchase a printed copy from the Polytech.
- Hardware and software required for labs and assessment are provided in the D312 and D313 labs.
- *Packet Tracer* a Cisco network simulation tool is used for some activities. You may obtain a copy for your own computer either on the I: drive or from the Cisco Web site.

Course Content and Schedule

This schedule is pretty firm, although as always it is subject to change based on the needs of the class.

Week	Week Start	Topics	Chapter	Exam
1	21 Jul	Introduction, Exploring the Network	1	1
2	28 Jul	Configuring a Network Operating System	2	2
3	4 Aug	Network Protocols	3	3
4	11 Aug	Network Access	4	4
5	18 Aug	Ethernet	5	5
6	25 Aug	Network Layer	6	6
7	1 Sep	Transport Layer	7	7
8	8 Sep	IP Addressing	8	*
9	15 Sep	IP Addressing, Subnetting	8/9	8
10	22 Sep	Subnetting	9	9
H1	29 Sep	Holiday		
H1	6 Oct	Holiday		
11	13 Oct	Application Layer	10	10
12	20 Oct	Networks	11	*
13	27 Oct	Networks	11	11
14	3 Nov	Revision, Practice Exams		
15	10 Nov	Theory Exam, SBA		
16	17 Nov	SBA		

Assessment

You are expected to take the chapter tests during the second class of the scheduled week. We will have final exams during the last two weeks of class time. A student may resit or make two chapter exams. All theory tests are closed book assessments - no notes or books are permitted.

A student who resits the Final Theory Exam or Skills Based Assessment and passes it will be given a grade of 70% on it.

Assessments are weighted as follows:

Assessment	Weighting
Chapter Exams	20%
Final Theory Exam	30%
Configuration Skills Based Assessment	10%
Subnetting Skills Based Assessment	10%
Final Skills Based Assessment	30%

Criteria for Passing

Cisco has its own grading scale, which is different to the grading scale used in the OP BIT. Your grade will be converted to the OP grading scale as shown in the following table:

If your Cisco Weighted Score is	Then your Grade is	And your BIT Score is
90.0 100	A+	95.0
87.5 89.9	A	87.5
85.0 87.4	A-	82.5
82.5 84.9	B+	77.5
80.0 82.4	B	72.5
77.5 79.9	B-	67.6
75.0 77.4	C+	62.5
72.5 74.9	C	57.5
70.0 72.4	C-	52.5

You must also obtain a passing mark (70% or higher) on the Final Theory Exam in order to pass this paper.

Course Requirements and Expectations

Attendance

- Students are expected to attend all classes, both lectures and labs.
- If you miss a class you should get notes from another student.
- If you cannot attend for two or more consecutive sessions, contact the lecturer.
- You must be present for assessments on the due date at the correct time.

Communication

Important announcements and discussions about the course, assessments, and scheduling may take place during class sessions. It is your responsibility to be informed about them. If you cannot attend a class session, be sure to check with another student.

Your student email is an official communication channel. It is your responsibility to regularly check your student email for important course related material, including changes to class scheduling or assessment details. Not checking will not be accepted as an excuse.

You can manage your email at the Student Hub and download the instructions for forwarding your email at http://www.op.ac.nz/students/student-hub/

Polytechnic Closure

In the event that the Polytechnic is closed or has a delayed opening because of snow or bad weather, you should not attempt to attend class if it is unsafe to do so. It is possible that your instructor will not be able to attend either, so classes will not physically be meeting. However, this does not become a holiday. Rather, material will be available on the Cisco Academy web site covering the material for classes affected by the closure. You are responsible for any material presented in this manner. Information about closure will be posted on the Otago Polytechnic facebook page https://www.facebook.com/OtagoPoly.

Group Work and Originality

Students in the Bachelor of Information Technology degree are expected to hand in original work. Students are encouraged to discuss assignments with their fellow students. However, all assignments are to be completed as individual works unless group work is explicitly involved. Failure to submit your own unique work will be treated as plagiarism.

Referencing

Appropriate referencing is required for all work. Referencing standards will be specified by your instructor.

Plagiarism

Plagiarism is submitting someone else's work as your own. Plagiarism offences are taken seriously and an assessment that has been plagiarised may be awarded a zero mark. A definition of plagiarism is in the Student Handbook, available online or at the school office.

Submission Requirements

All assignments are to be submitted by the time, date, and method given when the assignment is issued.

Extensions

Extensions are only available for unusual circumstances. These must be applied for, and approved, prior to the submission deadline.

Impairment

In case of sickness contact your lecturer or year co-ordinator as soon as possible, preferably before the test or assignment is due. The policy regarding the granting of a mark that considers impaired performance requires a medical certificate and a medical practitioners signature on a form. You may should refer to the guide on impaired performance on the student handbook.

Appeals

If you are concerned about any aspect of your assessment, please approach the lecturer in the first instance. We support an open door policy and aim to resolve issues promptly. Further support is available from the Programme Manager and Head of School. Otago Polytechnic has a formal process for academic appeals if necessary.

Other Documents

Regulatory documents relating this course can be found on the Polytechnic website.

Special Resources and Requirements

If you have any special needs, whether they relate to the course material, the exercises, the assessment, or anything in the course - then *please* let your instructor know as soon as possible.