

# Course Directive IN715 Networks Three Semester Two, 2014

# Description

The aim of this paper is to extend the students' knowledge of comuter networks, network architecture, and administration. Students will set up and operate elements of medium to large scale network infrastructure.

# **Course Information**

• 15 Credits

• Prerequisites: IN515 Introduction to Networks

### Lecturer

Tom Clark

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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

#### Resources

There is no required text for this paper. Suggested and required readings will be available online or in electronic format on the I: drive.

Lab documents, slides, and other material is available on Github at https://github.com/tclark/op-papers. Hands on exercises will be performed using virtual machines on the Polytech's vCloud system.

# Course Content and Schedule

This schedule is subject to change based on needs of the class.

Week	Week Start	Topics	Assessment Due
1	21 Jul	Introduction, review, IPv6	
2	28 Jul	Intro to BSD, Windows Server, DHCP	
3	4 Aug	DHCP	
4	11 Aug	DHCP	
5	18 Aug	DNS	DHCP
6	25 Aug	DNS	
7	1 Sep	DNS	
8	8 Sep	DNS	
9	15 Sep	Security Intro, Penetration Testing	DNS
10	22 Sep	Penetration testing	
H1	29 Sep	Holiday	
H2	6 Oct	Holiday	
11	13 Oct	Firewalls	
12	20 Oct	Firewalls	
13	27 Oct	Intrusion Detection	
14	3 Nov	Security Exercise	Security
15	10 Nov	Revision	
16	17 Nov	Exam and SBA	

# Assessment

Assessments are weighted as follows:

Assessment	Weighting
DHCP Implementation	10%
DNS Implementation	20%
Security Exercise	20%
Theory Exam	30%
Skills Based Assessment	20%

# Criteria for Passing

You must receive and overall average mark of 50% or higher to pass this paper.

# Course Requirements and Expectations

#### Attendance

This paper is composed of a mix of lectures and self-paced project work. Attendence is at your discretion. However, you are responsible for keeping up with events that take place in class and completing work on schedule.

#### 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.