

IT 480 – Network Design

Course Syllabus and Calendar – Fall 2010

Professor Don Colton

Brigham Young University Hawaii

1 Course Details

- **Course Number:** IT 480
- **Title:** Network Design
- **Web:** <http://byuh.doncolton.com/courses/it480/>
- **Course Description:** ...
- **Required Text:** CCNA, Lammle, 6e
- **Classroom:** GCB 101
- **Start/End:** Sep 15 to Dec .., 2010
- **Section 1:** MWF 11:00 – 12:00 Noon
- **Section 2:** MWF 8:40 – 9:40 AM
- **Final Exam:** ...

1.1 The Instructor

- **Instructor (me):** Don Colton
- **My email:** doncolton2@gmail.com
- **Website:** <http://byuh.doncolton.com/>
- **My Office:** GCB 128
- **Office Hour:** MWF 9:50 – 10:50 AM

2 Objective

The main objective for this course is to prepare you to function as a network administrator for an organization with many computers, switches, routers, and other network equipment. We will strive to achieve a level of learning that would prepare you to pass the Cisco(R) Certified Network Associate (CCNA(R)) Examination.

There are three certifications that I hear a lot about. CCNA is one of them. The other two are A+ and MCSE. There are other certifications that I don't hear much about. CCNA is one of the major certifications that employers will recognize by name.

I earned my CCNA certification on Sep 8, 2010. My score was 860 out of 1000. The score required to

pass was 825. Before taking the exam, I studied extensively for about three weeks including reading about half of the textbook we are using and taking numerous practice tests. I also prepared over the past years by having an active interest in networking, teaching the introductory networking course here at BYUH, and team-teaching this CCNA course three years ago. (I was the junior instructor. My son Joseph was the senior instructor. I was mostly just along for the ride and to learn what I could. He did the heavy lifting.)

I believe that you too can earn your CCNA by the end of this semester. To do so will require more than three credits worth of work on your part. If you put in the nominal three credits of effort we all know and love, you will not pass the CCNA, but you will still be able to get a good grade in the class. If you want to take the CCNA later, there may be a chance for you to take another IT class like IT 495 where you can earn credits for the time and effort you put into it.

3 Textbook

The book I have selected is “CCNA, Cisco Certified Network Associate” by Todd Lammle (pronounced lamb-lee). We will use the sixth edition, copyright 2007. The publisher is Sybex. The ISBN-13 number is: 978-0-470-11008-9. The book is available on Amazon for just under \$32.

The book was updated in 2007 to keep pace with the changing CCNA exam. As networking develops and improves, some older skills are not needed as much and other newer skills take their place. For example, Wi-Fi has become a much bigger deal in the past five years and it is covered in 6e better than in previous editions.

If you do not have 6e at this time, you should order it. In the mean time, you can survive with an older copy for the first few weeks. Older copies should be available for free or really cheap.

There are two main textbooks in this market. We are using Lammle. The other one is by Wendell Odom who writes for Cisco Press. Odom has a good reputation for highly reliable and carefully written material. Lammle has a good reputation for making things understandable. Pick your poison. I decided on Lammle because I think most of us need understandable at this point, and can fine tune our understanding later. You may find parts of Lammle where he has simplified a concept so much that it is no longer totally accurate. Live with it, I guess.

4 Grading

I am still trying to figure out the best way of grading the course.

If you have a CCNA by the end of the course, that will get you an A.

Few if any will meet that goal. I hope somebody will, but having just taken the test myself, I have to tell you that you don't pass it by accident.

As a substitute, I am putting together tests and labs that will evaluate the key skills you would need to pass the CCNA. I will assign some number of points for each skill. I will test you.

There will be about 10 categories. Each will be worth about 100 points for a total of 1000 points. (Some may be worth more, others worth less.) In each category there may be a test or a lab experience. You may be allowed to repeat the test or lab to improve your score. Your final grade will be based on the total of your scores using this common grading scale.

930+	A
900-929	A-
870-899	B+
830-869	B
800-829	B-
770-799	C+
730-769	C
700-729	C-
670-699	D+
630-669	D
600-629	D-
0-599	F

I may end up adjusting the brackets to be more generous. We will have to wait and see. In the mean time, just do your best.

I have some of the tests ready and others rolling around in my mind.

Generally they will follow the topics in the textbook, but I will try to follow the percentages that appear on the official Cisco CCNA Practice Test.

5 Standard Statements

All syllabi are encouraged or required to address certain topics. These are generally considered to be common sense, but we find that it is useful to mention them explicitly anyway.

5.1 Dress and Grooming Standards

The dress and grooming of both men and women should always be modest, neat and clean, consistent with the dignity adherent to representing The Church of Jesus Christ of Latter-day Saints and any of its institutions of higher learning. Modesty and cleanliness are important values that reflect personal dignity and integrity, through which students, staff, and faculty represent the principles and standards of the Church. Members of the BYUH community commit themselves to observe these standards, which reflect the direction given by the Board of Trustees and the Church publication, "For the Strength of Youth." The Dress and Grooming Standards are as follows:

Men. A clean and neat appearance should be maintained. Shorts must cover the knee. Hair should be clean and neat, avoiding extreme styles or colors,

and trimmed above the collar leaving the ear uncovered. Sideburns should not extend below the earlobe. If worn, moustaches should be neatly trimmed and may not extend beyond or below the corners of mouth. Men are expected to be clean shaven and beards are not acceptable. (If you have an exception, notify the instructor.) Earrings and other body piercing are not acceptable. For safety, footwear must be worn in all public places.

Women. A modest, clean and neat appearance should be maintained. Clothing is inappropriate when it is sleeveless, strapless, backless, or revealing, has slits above the knee, or is form fitting. Dresses, skirts, and shorts must cover the knee. Hairstyles should be clean and neat, avoiding extremes in styles and color. Excessive ear piercing and all other body piercing are not appropriate. For safety, footwear must be worn in all public places.

5.2 Accommodating Special Needs

Brigham Young University Hawaii is committed to providing a working and learning atmosphere which reasonably accommodates qualified persons with disabilities. If you have any disability that may impair your ability to complete this course successfully, you are invited to contact the Students With Special Needs Coordinator at 808-675-3518. Reasonable academic accommodations are made for all students who have qualified documented disabilities.

5.3 Plagiarism

<http://en.wikipedia.org/wiki/Plagiarism> has a wonderful article on plagiarism. Read it if you are not familiar with the term. Essentially, plagiarism is when you present the intellectual work of other people as though it were your own. This may happen by cut-and-paste from a website, or by group work on homework. In some cases, plagiarism may also create a violation of copyright law. If you borrow wording from someone else, identify the source.

Intentional plagiarism is a form of intellectual theft that violates widely recognized principles of academic integrity as well as the Honor Code. Such plagiarism may subject the student to appropriate disciplinary action administered through the university Honor Code Office, in addition to academic sanctions that may be applied by an instructor.

Inadvertent plagiarism, whereas not in violation of the Honor Code, is nevertheless a form of intellectual carelessness that is unacceptable in the academic community. Plagiarism of any kind is completely contrary to the established practices of higher education, where all members of the university are expected to acknowledge the original intellectual work of others that is included in one's own work.

On exams you are required to work from personal memory, using only the resources that are normally present on your computer. This means the exams are closed book and closed notes unless otherwise stated. Students caught cheating on any exam will receive a grade of F for the semester, no matter how many points they may have earned, and they will be reported to the Honor Code office.

Faculty are responsible to establish and communicate to students their expectations of behavior with respect to academic honesty and student conduct in the course. Observations and reports of academic dishonesty shall be investigated by the instructor, who will determine and take appropriate action, and report to the Honor Code Office the final disposition of any incident of academic dishonesty by completing an Academic Dishonesty Student Violation Report. If the incident of academic dishonesty involves the violation of a public law, e.g., breaking and entering into an office or stealing an examination, the act should also be reported to University Police. If an affected student disagrees with the determination or action and is unable to resolve the matter to the mutual satisfaction of the student and the instructor, the student may have the matter reviewed through the university's grievance process.

5.4 Sexual Harassment

BYUH's policy against sexual harassment complies with federal Title IX of the Education Amendments of 1972 to protect university students from student-to-student sexual harassment both in and out of the classroom setting. Any incidents of such student-to-student harassment should be reported to either the Director of Human Resources (675-3713) or the Honor Code Office (675-3531). Allegations of sexual harassment are taken seriously. Upon receiving a report of sexual harassment, the Director of Human Resources will take appropriate action to resolve and

correct conditions resulting from individual perceptions or from inappropriate behavior.

5.5 Syllabus is Subject to Change

It is possible that I will revise aspects of the course as we go along. Any changes I make are likely to be to your advantage. If any of my changes seems unfair to you, let me know. I will try to correct it.