West Los Angeles College
Course Syllabus for
CS972 – Introduction to Cisco Routers

Version 1.4. This syllabus describes the course, course policies and procedures, campus policies and other information. It is subject to change at any time.

Instructor: Al Kami
Section #: 9570  Semester: Fall 2014  Location: CE-104
Class Days/Hours: MWF 6:00 – 9:40PM  Office Hours: 5:00 – 6:00 CE104 (before class)
Final Examination: Friday 10/10/2014
Division Website: http://www.wlac.edu/csit  Email: kamisa@wlac.edu (use of NetSpace preferred)

Course Description
This course covers topics including; networking, network terminology, protocols, network standards, LAN, WAN, the layers of the OSI reference model, cabling, and cabling tools. In addition, this course provides students with their first exposure to Cisco routers, router programming, and routing protocols. Students will be introduced to router startup and setup configuration, the Cisco Internetworking Operating System (IOS), routing protocols, and network management issues. The course utilizes text-base study material, hands-on lab exercises, and demonstrations to reinforce network concepts and theories. This course is equivalence to Semester I & II of the Cisco Network Academy.

This course is a condensed version of CS972 being delivered to a select target audience under a grant for IT training under the H1B program. It is intended to assist students in obtaining the Cisco CCENT certification for job seeking purposes.

Course Objectives
This course introduces and extends your knowledge with design, configuration, and maintenance of switches and routers in LAN/WAN environment. The concepts covered in this course enable you to develop practical experience and skills related to configuring VLANS, Open Shortest Path First (OSPF) routing protocols. Finally, this course help to prepare you for the CCENT certification exam.

Student Learning Outcomes
At the end of the course, If you are successful in this class, you will be able to:

1) explain, define and discuss networking and Ethernet concepts.
2) manage network resources and configure Cisco routers and switches.
3) use the Cisco IOS Command-Line and utilities to perform administrative and troubleshooting tasks.

This course is a 3 unit course so it is not unreasonable to expect around 6 hours per week of work outside of the classroom.
### Schedule of Class Work, Homework, Exams, and Other Activities

<table>
<thead>
<tr>
<th>Date</th>
<th>Lecture Topics</th>
<th>Homework Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wednesday</td>
<td>Ch 1 – Exploring the Network</td>
<td>Ch 1 – Quiz &amp; Exam</td>
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<tr>
<td>9/3/14</td>
<td>Ch 2 – Configure a Network OS</td>
<td>Ch 2 – PT 2.2.3.3 &amp; 2.3.2.5 – Quiz &amp; Exam</td>
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<tr>
<td>Friday</td>
<td>Ch 8 – IP Addressing</td>
<td>PT 8.2.5.3 &amp; 8.3.2.5 (PDF) – Quiz &amp; Exam</td>
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<tr>
<td>9/5/14</td>
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<tr>
<td>Monday</td>
<td>Ch 9 – Subnetting IP Networks</td>
<td>PT 9.1.4.6 &amp; 9.2.1.5 – Quiz &amp; Exam</td>
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<tr>
<td>9/8/14</td>
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<tr>
<td>Wednesday</td>
<td>Ch 3 – Protocols and Communications</td>
<td>PT 3.2.4.6 (PDF) - Q&amp;E</td>
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<td>9/10/14</td>
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<tr>
<td>Friday</td>
<td>Ch 4 – Network Access</td>
<td>PT 4.2.4.5 - Q&amp;E</td>
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<tr>
<td>9/12/14</td>
<td>Ch 5 – Ethernet</td>
<td>PT 5.2.1.7 (PDF) –Q&amp;E</td>
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<tr>
<td>Monday</td>
<td>Ch 6 – Network Layer</td>
<td>PT 6.4.1.2 &amp; 6.4.3.3 –Q&amp;E</td>
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<td>9/15/14</td>
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<tr>
<td>Wednesday</td>
<td>Ch 7 – Transport Layer</td>
<td>Ch 7–Q&amp;E</td>
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<tr>
<td>9/17/14</td>
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<tr>
<td>Friday</td>
<td>Ch 10 – Application Layer</td>
<td>Ch 10 Q&amp;E</td>
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<tr>
<td>9/19/14</td>
<td>Ch 11 – It’s a Network</td>
<td>Ch 11 – Q&amp;E</td>
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<tr>
<td>Monday</td>
<td>Intro Networks Final (Course #1)</td>
<td>PT 1.3.1.3 –Q&amp;E</td>
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<tr>
<td>9/22/14</td>
<td>Ch 1 – Intro to Switched Networks</td>
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<tr>
<td>Wednesday</td>
<td>Ch 2 – Basic Switch Concepts &amp; Config</td>
<td>PT 2.2.1.4 &amp; 2.2.4.9 – Q&amp;E</td>
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<td>9/24/14</td>
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<tr>
<td>Friday</td>
<td>Ch 3 – Implementing VLAN Security</td>
<td>PT 3.2.1.7 &amp; 3.2.2.4 &amp; 3.4.1.2 –Q&amp;E</td>
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<tr>
<td>9/26/14</td>
<td>Ch 4 – Routing Concepts</td>
<td>PT 4.1.3.5 &amp; 4.1.4.5 –Q&amp;E</td>
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<tr>
<td>Monday</td>
<td>Ch 5 – Inter-VLAN Routing</td>
<td>PT 5.1.3.6 &amp; 5.4.1.2 –Q&amp;E</td>
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<td>9/29/14</td>
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<tr>
<td>Wednesday</td>
<td>Ch 6 – Static Routing</td>
<td>PT 6.2.4.4, 6.3.3.6, 6.4.1.6 – Q&amp;E</td>
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<td>10/1/14</td>
<td>Ch 7 – Dynamic Routing</td>
<td>Ch 7 Q&amp;E</td>
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<td>Friday</td>
<td>Ch 8 – Single Area OSPF</td>
<td>PT 8.2.2.7 &amp; 8.4.1.2 – Q&amp;E</td>
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<td>10/3/14</td>
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<tr>
<td>Monday</td>
<td>Ch 9 – Access Control Lists (ACLs)</td>
<td>PT 9.4.2.8 &amp; 9.5.2.6 –Q&amp;E</td>
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<td>10/6/14</td>
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<tr>
<td>Wednesday</td>
<td>Ch 10 – DHCP</td>
<td>PT 10.1.3.3 &amp; 10.3.1.2 - Q&amp;E</td>
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<tr>
<td>10/8/14</td>
<td>CH 11 – NAT</td>
<td>PT 11.4.1.2 – Q&amp;E</td>
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<tr>
<td>Friday</td>
<td>Routing &amp; Switching Essentials</td>
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<tr>
<td>10/10/14</td>
<td>Final (Course #2)</td>
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Other assignments as needed by the professor to ensure that you are understanding the assigned material.
**Recommended Supplies**

All course content will be available online through the Cisco Network Academy website: [http://www.netacad.com](http://www.netacad.com)

Blank Flash Drive (1 GB or larger)

**CSIT Division Web Site** - [http://www.wlac.edu/CSIT](http://www.wlac.edu/CSIT)

Division Announcement, Scholarship and Internship Opportunities

Instructor Office Hour and Computer Lab Open Hour

Petition for Degree & Certificate

Petition for Prerequisite Challenge

Declare a Major – to be eligible for scholarship and internship

Discount Voucher for CompTIA A+ Network+ Security+ Linux+

Free Software Download (Windows 7, Server 2008, VMWare, Microsoft ACCESS and Visio Studio)

**Requirement for AA/AS degree and Certificate of Achievement in the following:**

- Degree and Certificate in Computer Science (10 major courses)
- Degree and Certificate in Computer Network and Security Management (10 major courses)
- Degree and Certificate in Computer Web Support and Database Administration (10 major courses)
- Certificate of Achievement in Computer Network Management (requires 6 courses)
- Certificate of Achievement in Information System Security (requires 6 courses)
- Certificate of Achievement in Business Application and Database Management (requires 6 courses)
- Certificate of Achievement in Web Support and Administration (requires 6 courses)
- Certificate of Achievement in Legal Secretary (requires 6 courses)

**Important dates to remember:**

- Last day to drop class w/o a “W” is 9/15/2014
- Drop a Class w/o a Fee is 9/7/2014
- Last day to file a pass/no pass grade option is 9/8/2014
- Last day to drop a class with a “W” is 10/3/2014

**CAMPUS CLOSED ON THE FOLLOWING HOLIDAYS**

- Labor Day, Monday September 1

**Attendance**

You are required to attend all class sessions and to stay for extra lab time whenever needed to complete work on time (see schedule below). Missing more than 2 class meetings could cause you to be excluded from the class or seriously jeopardize your grade. This is not to say that you cannot catch up. The bulk of the homework assignments must be completed before the due date, but machine-graded homework such as multiple-choice, true-false and grader projects may be repeated until the end of the semester and highest score recorded.

**Make-up Policy**

There are no make-up exams available for this course.

**Examinations and Grading**

Your final course grade will consist of a composite of the following:

- Chapter Exams & Final Exams in NetSpace 70%
- Packet Tracer and assigned labs 30%

A=90%+, B=80-89.9%, C=70-79.9%, D=60-69.9%, F=<60%
**Incomplete Policy**
Incomplete will not be given for this course.

**First Day Drop Policy**
This instructor reserves the right to drop no-shows after the first hour of the first class meeting if no prior arrangements were made for the absence.

**Academic Honesty Policy**
This instructor follows the West Los Angeles College policy on cheating and plagiarism. Cheating and plagiarism are violations of college policy and these policies are found in the Schedule of Classes. Any student unclear on the meaning of academic dishonesty and plagiarism should meet the instructor during office hours for clarification.

Activities that are considered to be CHEATING include, but are not limited to, the following: communication with another person during an exam, accessing materials electronic or otherwise without the instructors express permission. Violation of any of these rules (i.e. cheating) could result in a lowering of the exam grade or the course grade (e.g. a “Fail”), and the violator’s name and student I.D. number will be sent, with a description of the violation, to the Division Chair and to the Dean of Instruction to be kept on record for future reference. The Dean of Student Activities may also be contacted for disciplinary action, if necessary.

**Academic Integrity**
The work you do and submit is expected to be the result of your effort ONLY. You are encouraged to discuss the high level (general) solution of an assignment. However, cooperation should not result in one or more students having possession of any part of an assignment written by another student. Incidents of academic dishonesty or lack of integrity will be reffered to the Dean of Instruction’s office.

Students are responsible for the honest completion and representation of their work, for the appropriate citation of sources, and for respect of others’ academic endeavors. When there is evidence of cheating or plagiarism in classroom work, the instructor may assign a failing grade, “F,” or zero points to the examination or assignment in which the alleged cheating or plagiarism occurred. Before a substandard grade is issued the instructor will provide the student with supporting documentation of the plagiarism or cheating charge. Instructors have the authority to use plagiarism detecting instruments such as “Turn It In” to detect academic dishonesty.

**Class Rules**
Failure to follow any of the below class rules will result in loss of attendance credit for that day. No further warning will be issued.

- Be on time
- Electronic Device Policy: Turn cell phones OFF BEFORE entering the classroom—no making/taking calls, no texting no checking messages at anytime during the class session. Use your phone during the break only or during class-time independent work sessions.
- Use of recorders (audio and/or video) is allowed with instructor permission only.
- No eating or drinking in class; however re-sealable water bottles are allowed
- Please return chairs, throw away your trash, etc.
- Attendance will be taken at the beginning of class

**Issues or Complaints:**
Please address any issues you may have that are relative to this course with your instructor, either in person, by phone or e-mail at the contacts listed above. If you and the instructor cannot resolve the issue you will be referred to the division chair, Anna Chiang, chianga@wlac.edu, 310-287-4253.
**Professional Conduct in Our Classroom Community**

The West LA College faculty, staff and administrators are dedicated to maintaining an optimal learning environment and will not tolerate any disruptive behavior in or outside of the classroom or any academic dishonesty. These standards apply to all students.

**Dropping the Class**

Student wanting to drop the class should drop online at [http://www.wlac.edu](http://www.wlac.edu) click “For Students,” then click the blue “SIS add/drop” button. Students who stop attending class are responsible for withdrawing from the class to prevent being issued a failing “F” grade in the class.

**Special Instructional Accommodation**

If there are special accommodations that you require to be successful in this course, please discuss your situation with the instructor. To receive accommodations for a special need or disability, students must register with the Office of Disabled Student Program and Services at the HLRC. Tape recording of lectures and discussions will not be permitted without the consent of the instructor.

**Forms of Behavior which Violate Academic Integrity**

**Cheating:** Using any materials or devices or strategies which provide undue advantage on any exam, assignment, activity or other method of assessment for a course. This includes, but is not limited to, looking at another student’s exam, using phones or other communication systems to text message during exams, taking pictures or images of exams, talking with others during exams, using Internet to find information, or any other system of inappropriate "help." Exams are to be measures of what YOU, as an individual, have learned.

**Collaboration:** Working together on projects, papers, exams or other forms of assessment which are to be completed individually.

**Plagiarism:** Taking anyone else’s work as one’s own. Presenting another’s words, ideas, forms of expression, materials or labor without proper citation, referencing, and declaration that this material originated outside the student's own work. For assistance with classroom projects, papers and assignments, please visit the Learning Skills Center in the HLRC.

**Standard of Student Conduct**

Faculty members are charged with responsibility for building and maintaining a classroom atmosphere conducive to learning. Disruptive, disrespectful, or obstructive behavior will be dealt with in terms in accordance with the LACCD Standard of Student Conduct. Select forms of disciplinary action appropriate to the misconduct may be taken by an instructor when there is evidence that the student’s behavior interferes with classroom instruction.

The following types of disciplinary action may be taken by the instructor:

**Warning**— A verbal or written notice, given to the student by an instructor. Continuation or repetition of the specified conduct will be cause for further disciplinary action.

**Removal by Instructor**— An instructor may remove (suspend) a student from his or her class for the day of the incident and the next class meeting. During this period of removal, the student shall not return to the class from which he or she was removed without the permission of the instructor.

Students may refer to the College Catalog or the online student orientation at [http://www.wlac.edu/services/documents/STUDENTBEHAVIORANDCOLLEGEDISCIPLINE.pdf](http://www.wlac.edu/services/documents/STUDENTBEHAVIORANDCOLLEGEDISCIPLINE.pdf)

**Cell Phone and Other Communication Devices**

If you bring your cell-phone to class, be sure to have it in a mode where it will not ring and disturb others. If you have to answer an emergency phone call, please step out of the classroom. Devices of this type should be placed on vibrate and
should never visible during class time.

**Classroom and Campus Cleanliness**
Please help us keep the classroom and campus grounds clean. No food or beverages, except for water, is permitted inside instructional classrooms/labs. Please use the receptacles to dispose of trash.

**Electronic Mail**
Electronic mail is the official method of communication for delivery of college information. Student email addresses will be recorded in the college’s electronic directories and records. If you need to update an email address, visit [http://www.wlac.edu](http://www.wlac.edu), click “For Students,” then click the blue “SIS” button. Once you log in you can change your email by clicking “edit” at the top of the page next to your email address.

https://student.laccd.edu/sso/ - login to LACCD district wide student E-mail system.
http://www.wlac.edu/services/documents/studentemailinstructions.pdf - Instructions on how to use student E-mail system.
http://www.wlac.edu/online/email.asp - Video explaining how to login & use the student e-mail system.

**Instructional Support and Monitoring**
Monitor your academic progress at [http://www.wlac.edu/graduation/degree_audit.html](http://www.wlac.edu/graduation/degree_audit.html) and click on the DegreeWorks icon, or visit the Counseling Office in A13.
For instructional support and assistance with research projects, visit the Learning Skills Center and Library in HLRC.

**Campus Resources:**

**Office of Disabled Student Programs and Services (DSP&S)**
Heldman Learning Resources Center (HLRC), Room 119 | (310) 287-4450.
West Los Angeles College recognizes and welcomes its responsibility to provide an equal educational opportunity to all disabled individuals. The Office of Disabled Students Programs and Services (DSP&S) has been established to provide support services for all verified disabled students pursuing a college education. DSP&S students may qualify for: priority registration, registration assistance, special parking permits, sign language interpreters and assistive technology (WLAC College Catalog).

**Instructional Support (Tutoring) & Learning Skills Center**
Heldman Learning Resources Center (HLRC) | (310) 287-4486
Improve your reading, language, vocabulary, spelling, math fundamentals and chemistry knowledge with convenient, self-paced computer-aided courses in the Learning Skills Center. Increase your knowledge and learning success: sign up for tutoring in various college subjects (WLAC College Catalog).

**Library Services**
Heldman Learning Resources Center (HLRC) | (310) 287-4269 & (310) 287-4486
The WLAC Library provides instruction on how to use the online catalog, periodical and research databases. In addition to a large collection of books, periodicals and videos the WLAC Library has course textbooks which students may use while in the Library. Web access is available in LIRL as well as meeting rooms. The upper floors provide a beautiful view ideal for study (WLAC College Catalog).

for more information refer to attached link: