



Computer Networks I Introduction

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Malin Bornhager

- **Instructor: CCNA, CCNP, Wireless LANs and Fundamentals of Unix**
- **Teaching courses in Computer Networks**
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- **<http://www.hh.se/staff/maol>**

Computer Networks I

- **Instructors**
- **What is Cisco Networking Academy (CNAP)?**
- **Cisco Certified Network Associate (CCNA) 1-4**
- **Academy Connection**

Instructors

- **Malin Bornhager (course responsible, lectures, laborations)**
 - **Malin.Bornhager@hh.se**
- **Philip Heimer (lectures, laborations, exercises)**
 - **Philip.Heimer@hh.se**

What is Cisco Networking Academy

- **Cisco Networking Academy (CNAP)**
- **E-learning program**
- **Cisco Systems**
- **Cisco Academy Training Center (CATC)**
- **Regional Academies (RA), *Halmstad University***
- **Local Academies (LA)**
- **Students**

Curriculum

- **CCNA 1 through 4**
- **CCNP 1 through 3**
- **CCNA Security**
- **IT Essentials I and II (PC Hardware and Software, Network Operating Systems)**
- **IP Telephony**
- **Wireless LANs**
- **Fundamentals of UNIX**
- **Java Programming**

CCNA – Cisco Certified Networking Associate

- **Discovery**
- **Exploration**
 - **Network Fundamentals (Computer Networks 1)**
 - **Routing Protocols and Concepts (Computer Networks 1)**
 - **LAN Switching and Wireless (Computer Networks 2)**
 - **Accessing the WAN (Computer Networks 2)**

CCNA 1: Network Fundamentals

- **Introduction to fundamental networking concepts and technologies**
- **OSI Model**
- **TCP/IP**
- **Network devices**
- **Addressing**
- **Cabling**

CCNA 2: Routing Protocols and Concepts

- **Understand how a router learns about remote networks**
- **Best path to networks**
- **Static routes and Routing protocols**
- **Configuration, verification and troubleshooting**
- **Routing table**

Course Literature

- **Online Curriculum**
 - <http://cisco.netacad.net>
- **Textbook:**
 - “Network Fundamentals, CCNA Exploration Companion Guide”, ISBN 1587132087
 - ”Routing Protocols and Concepts, CCNA Exploration Companion Guide”, ISBN 1587132060
 - <http://www.pearsoned.co.uk/bookshop/>
- **Laborations and Additional Course material**
 - **Course web page:**
<http://www.hh.se/computernetworks1>

Academy Connection

- **<http://cisco.netacad.net>**
- **User account**
 - **E-mail with username and password**
 - **Log in and change the password**
- **Use your University e-mail**

Academy Connection – Log In

The screenshot shows the Cisco Networking Academy website in a Windows Internet Explorer browser. The address bar displays <http://www.cisco.com/web/learning/netacad/index.html>. The page features a blue navigation bar with the Cisco logo and links for Products & Services, Support, How to Buy, Training & Events, and Partners. A search bar is located on the right side of the navigation bar.

The main content area is titled "Cisco Networking Academy" and features a large banner for "World's Largest Classroom" celebrating 1 million students. The banner includes a video player with a play button and a "Read Leader Profiles" button. Below the banner are three sections: "Become a Student", "Become an Instructor", and "Become an Academy".

On the right side of the page, there is a "Academy Connection" section with a "Log In" button and a "How do I get a login?" link. Below this is a "Regional Sites" section with a world map and a "Select A Region" dropdown menu. Further down is an "Academy Locator" section with a "Find an academy near you." link and social media icons for Facebook, Twitter, YouTube, and LinkedIn.

The bottom of the page features a "Global News & Events" section with several news items, including "Networking Skills Competition Showcases Talent in Asia Pacific Region" (Nov 8), "Cisco Helps Transform Education in Vietnam by Investing in Next Generation" (Oct 19), and "Giving Africa's Neediest Communities IT Skills... and Hope" (Aug 23).

The browser's taskbar at the bottom shows the Start button, several open applications (Zimbra, Cisco Networking Academy, HT2011, Student_Introduction...), and the system tray with the time 13:19.

Academy Connection – Student Home

Academy Connection - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print Mail

Address http://cisco.netacad.net/cnams/dispatch

My Profile | Contacts & Feedback | Help | Logout

CISCO SYSTEMS NETWORKING ACADEMY

ACADEMY CONNECTION

STUDENT HOME

Student Home

Headlines [View Recent Headlines](#) [View Headlines Archive](#)

Networking Academy Program Headlines

[New Look for Cisco Networking Academy Program Resources](#)
(08/18/2005)

[CCHA 2 Students: We Need Your Input!](#)
(06/29/2005)

[Academy Connection Enhancements Planned mid-March](#)
(03/10/2005)

Learn

My Classes [View Historical Class List](#)

Halmstad University ([View Information](#))

Class Name	Start Date
CCNP3_v05	02/21/2005

[Benefits Available to You](#)

Career Development

[Become an Instructor](#) [Industry Certifications](#)
[Career Path Mapping](#) [Career Connection](#)
[Education Resources](#)

VIEW REPORTS

Forums & Chat

Join the discussions

If you have successfully completed at least one course (previously called semester) of a curriculum, you are eligible to participate in the Alumni Connection forums and chats. Simply click the "Alumni Home" link on the left and proceed with the Alumni registration process if you have not already done so. Be sure to select "Yes" in your profile to participate in Forum & Chat "Community" features. Your Alumni Home Page will provide you with Forums & Chat links.

Search

Academy & Class Locator

Search by Keyword **GO**

Resources

- Tools
- Course Materials
- Library
- Glossary
- Academy Marketplace


Alumni Membership

You may soon be eligible to register as an Alumni. Watch for a link to the Alumni registration process to appear on the left navigation bar when you successfully complete your current course.

Course Catalog

Learn more about the Networking Academy courses. [Read More](#)

Success Stories


 Hamid Swaps Cleaning For Technology [Read More](#)

[Submit your success story](#)

Academy Marketplace

Special discounts for Academies on products and services. [Read More](#)

Academy Connection – Student Class

The screenshot shows a web browser window titled "Academy Connection - Microsoft Internet Explorer". The address bar contains the URL: http://cisco.netacad.net/cnams/home/StudentClass.jsp;jsessionid=1E2F1E00588B59660CC749D62BC0D565.tc_4_2?pageName=Student&classID=3226. The page header includes the Cisco Systems Networking Academy logo and navigation links: "My Profile | Contacts & Feedback | Help | Logout".

The main content area is titled "Student Class" and displays details for the course "CCNP3_vt05".

Class Details

Course Name:	CCNP 3: Multilayer Switching
Language:	English
Version:	3.0
Start Date:	02/21/2005
End Date:	09/30/2005
Class Location:	Halmstad University
Primary Instructor:	Olga Torstensson
Email Address:	olga.torstensson@ide.hh.se
Secondary Instructor:	
Email Address:	

View Official Course Material

- [CCNP 3: Multilayer Switching Version 3.0 English](#)
- [Cisco Pedia](#)
- [Student Lab Manual \(.exe file\)](#)
- [Student Lab Manual \(.zip file\)](#)

[Additional Course Materials](#)

Assessments and Grades

- [Take Assessment](#)
- [Gradebook](#)

Join the Alumni Community Today

[FIND OUT MORE](#)

Search

Academy & Class Locator

Search by Keyword [GO](#)

Resources

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[Submit your success story](#)

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Academy Connection - Gradebook

Academy Connection - Microsoft Internet Explorer

Address: http://cisco.netacad.net/cnams/gradebook/GradeBook.jsp;jsessionid=1E2F1E0058859660CC749D62BC0D565.tc_4_2?classID=3226917&sourceID=5C&

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My Profile | Contacts & Feedback | Help | Logout

Gradebook

View Gradebook

Search: Academy & Class Locator
Search by Keyword: **GO**

Below is your Gradebook for this class. Click an exam name to view details of that exam. Clicking individual exam scores will take you to the individual exam results page, which may contain a Proficiency Report and/or Personalized Feedback for that exam.

[Display Certificates and Letters](#)

CCNP3_vt05

Class Information

Class Name: CCNP3_vt05
Class ID: 3226917
Course: CCNP 3: Multilayer Switching
Version: 3.0

	Module 1 Exam	Module 2 Exam	Module 3 Exam	Module 4 Exam	Module 5 Exam	Module 6 Exam	Module 7 Exam	Module 8 Exam	Module 9 Exam	Module 10 Exam	Final Exam	Practice Certification Exam	Course Feedback	Skills Exam	Case Study	Custom Scores	Weighted Percentage	Grades	Attendance	Eligible for Certificate	Eligible for Letter	Result	
Weight (Totals 100)	7	7	7	7	7	7	7	7	7	7	7	7		7	9	0							
View Item Information	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓													
Your Score	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	-	0.0	-	-				E

VIEW AS CSV

Legend

(*) Regraded
(-) Not Taken

Teaching



- **Lectures**
- **Exercises (2 hours week 37)**
- **Laborations (3 hours/week)**
 - 5 groups
 - Mandatory attendance
- **Extra laborations**
 - Packet Tracer

Examination - Grading

- **Final Exam (2+2 credits)**
 - CCNA 1, Friday 23rd of September
 - CCNA 2, Friday 21st of October
- **Skills Exam (3.5 credits)**
 - Week 43 (25-27 of October)
 - Register on laborations later
- **Laborations**
 - Attendance to qualify for the skills exam
- **50% on EACH part to pass the course**

Important regarding exams

- **Need to pass CCNA1 before continuing to CCNA2**
- **Need to pass Computer Networks 1 to qualify for Computer Networks 2**
- **Need to pass Computer Networks 2 to qualify for Computer Networks 3 ...**

Certificate - CNAP

Academy Connection:

- **Module Exams (self-study)**
 - To be allowed to take the final exam
- **Final Exam (CCNA 1 + 2) > 70%**
- **Skills Exam > 70%**

Schedule



- <http://www.hh.se>
- **Course web page:**
 - www.hh.se/computernetworks1
 - **Link from** www.hh.se/staff/maol

Schedule – lectures



W.35 Tuesday 10.15-12.00: Course Introduction

Thursday 10.15-12.00: OSI Model, TCP/IP

W.36 Tuesday 10.15-12.00: IP Addressing, Subnetting, VLSM

W.39 Tuesday 10.15-12.00: Routing, Routing Table

W.40 Tuesday 10.15-12.00: Routing Protocols

Schedule - laborations

- W.36 Lab 1, Packet Tracer 4.0**
- W.37 Lab 2**
- W.38 Lab 3**
- W.39 Lab 4, Worksheet: Routing Table**
- W.40 Lab 5, Worksheet: VLSM**
- W.41 Lab 6**
- W.42 Self study (preparation for Skills Exam)**

Schedule - exercises



W.37 Monday 13.15-15.00 (Group 1 and 2)

Monday 15.15-17.00 (Group 3 and 4)

Tuesday 08.15-10.00 (Group 5)

Questions

