

Grade 12 - Computer Networking TEN4M1

<p>Course Description:</p> <p>Computer technology course includes aspects of computer hardware and software; computer interfacing, programming, analog and digital electronics; and robotics with the emphasis and application to networking.</p> <p>Network technicians, technologists, and engineers work in every sector of society, in careers ranging from helpdesk support to network architect.</p> <p>This course examines computer networks and computer systems and its role in controlling and providing digital communication. Students will assemble computers and networks by installing and configuring appropriate hardware and software. Students will develop knowledge and skills in electronics, robotics, programming of network devices, and will build networks that use computer programs and network interfaces to control device excess and traffic. Students will develop an awareness of related environmental and societal issues, and will learn about programs leading to careers in computer networking.</p> <p>Current computer networking course prepare students for successful study at college or university, as well as gives an industry certifications to enter into the workplace.</p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border-bottom: 1px solid black;">Level:</td> <td>Mixed (University/College)</td> </tr> <tr> <td style="border-bottom: 1px solid black;">Credit Value:</td> <td>1.0</td> </tr> <tr> <td style="border-bottom: 1px solid black;">Pre-requisite:</td> <td>TEN3M1</td> </tr> <tr> <td style="border-bottom: 1px solid black;">Department:</td> <td>Technology</td> </tr> <tr> <td>Course Fees:</td> <td>None</td> </tr> </table>	Level:	Mixed (University/College)	Credit Value:	1.0	Pre-requisite:	TEN3M1	Department:	Technology	Course Fees:	None
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Department:	Technology										
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<p>Textbooks & Resources:</p> <ul style="list-style-type: none"> • Growing Success: Assessment, Evaluation and Reporting in Ontario Schools • The Ontario Curriculum, Grades 11 and 12: Technological Education, 2009 (revised) • All resources can be found at http://cisco.netacad.net. There is no text-book for this course. Examples, exercises, assignments and other electronic resources will be placed online if they are not on the main Cisco website. Students will need a binder for notes and handouts, and a USB memory for saving backup copies of their work.

<p>Course Evaluation: Student Evaluation consists of three components...</p>									
<p>1) Learning Skills & Work Habits: Students are evaluated on 6 Learning Skills & Work Habits. They are:</p> <ul style="list-style-type: none"> • Responsibility • Organization • Independent Work • Collaboration • Initiative • Self-Regulation 	<p>These six attributes are evaluated on a scale of Excellent (E), Good (G), Satisfactory (S) & Needs Improvement (N) and reported on the report card. They are not included in the course mark, unless specified in the curriculum expectations.</p>								
<p>2) Term Mark (Assessment of Learning): Student performance standards for knowledge and skills are described in the curriculum Achievement Chart. The curriculum is assessed in four categories:</p> <ul style="list-style-type: none"> • Knowledge and Understanding 25% • Thinking and Inquiry 25% • Communication 10% • Application 40% 	<p>Evaluation of these four categories generates the term mark. The term mark accounts for 70% of the final mark.</p> <p>It is the student's responsibility to submit evidence of learning.</p>								
<p>3) Final Evaluation (Assessment of Learning): The final evaluation, administered at or towards the end of the course is based on the evidence shown to the right. The final evaluation accounts for 30% of the final mark.</p>	<p>The final evaluation consists of:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td>Semester 3 Final Lab</td> <td style="text-align: right;">10%</td> </tr> <tr> <td>Semester 3 Final</td> <td style="text-align: right;">5%</td> </tr> <tr> <td>Semester 4 Final Lab</td> <td style="text-align: right;">10%</td> </tr> <tr> <td>Semester 4 Final</td> <td style="text-align: right;">5%</td> </tr> </table>	Semester 3 Final Lab	10%	Semester 3 Final	5%	Semester 4 Final Lab	10%	Semester 4 Final	5%
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<p>Final Mark = 70% Term Mark + 30% Final Evaluation</p>									
<p>For a detailed description on Course Evaluation, see "How Did I Get That Mark!" at www.satec.on.ca</p>									

Please retain this page in the front of your notebook for future reference.



**Scarborough Academy for Technology,
Environment & Computers @ WA Porter CI**

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Course Conduct Policies: See Student Agenda.

Course Outline:

Unit	Description	Approximate Length	Major Unit Evaluation
1	Chapter 1: Introduction to Scaling Networks Chapter 2: LAN Redundancy Chapter 3: Link Aggregation	2-3 weeks	Hands on lab Quizzies Unit Test
2	Chapter 4: Wireless LANs Chapter 5: Adjust and Troubleshoot Single-Area OSPF Chapter 6: Multiarea OSPF	2-4 weeks	Hands on lab Quizzies Unit Test
3	Chapter 7: EIGRP Chapter 8: EIGRP Advanced Configurations and Troubleshooting Chapter 9 IOS Images and Licensing	2-4 weeks	Hands on lab Quizzies Unit Test
4	Semester 3 Final Exam and Final Hands on Lab	1 week	Hands on lab Quizzies Unit Test
5	Chapter 2: Connecting to the WAN Chapter 3: Point-to-Point Connections Chapter 4: Frame Relay	3-4 weeks	Hands on lab Quizzies Unit Test
6	Chapter 5: Network Address Translation for IPv4 Chapter 6: Broadband Solutions Chapter 7: Securing Site-to-Site Connectivity	2-3 weeks	Hands on lab Quizzies Unit Test
7	Chapter 8: Monitoring the Network Chapter 9: Troubleshooting the Network	2-3 weeks	Hands on lab Quizzies Unit Test
8	Semester 4: Final Exam and Final Hands on Lab	1 week	Sem. 4 Hands on lab Sem. 4 Exam Quizzies

Note: The order of the units of study may change due to student needs and resources available during the course.

General Information:

Your teachers can be located in IT2 and IT3 or by email.

CCNA Routing and Switching: Scaling Networks
- Industry recognized certificate

CCNA Routing and Switching: Connecting Networks
- Industry recognized certificate

This course meets ICT SHSM program requirements.

