

I. COURSE DESCRIPTION:

This course begins the preparation for certification in a networking area of specialization. At the present time the courses and exams identified as the Microsoft™ Certified IT Professional (MCITP) requirements will be the basis for this course and one other course. Lectures on the important topics will be provided with lab activities designed to develop hands-on skills. Students will use available resources, MCITP exam preparation guides, sample tests and hands-on lab activities to prepare for the specific objectives as published by Microsoft™. The chosen track for this course will be the Microsoft Windows 2008 Server curriculum.

Rationale:

Windows Server 2008 is generating demand all over the world for skilled IT professionals who can support this new Windows Server operating system. IDC, a global analyst firm, estimates that there will be more than 3.5 million deployments of Windows Server 2008 in its first year.

Demonstrating in-depth technology skills: MCITP

The Microsoft Certified IT Professional (MCITP) credential is the leading certification for Windows Server 2008, providing widely recognized, objective validation of your ability to perform critical, current IT job roles by using Microsoft technologies to their best advantage.

The building blocks of the Windows Server 2008 MCITP certification are Microsoft Certified Technology Specialist (MCTS) pre-requisites certifications designed to validate your skills on the features and functionality of key technology areas in Windows Server 2008, leading to the MCITP Certification.

Earn an MCITP: Server Administrator certification to demonstrate your leadership and problem-solving skills in working with Windows Server 2008.

Server administrators are recognized among their peers and managers as leaders in the daily operations management of Windows Server 2008. Demonstrate and communicate your ability to administer Windows Server 2008 systems and increase your organization's return on technology investment by earning the MCITP: Server Administrator certification.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:

1. **Server Deployment**

Potential Elements of the Performance:

- Become aware of the 4 versions of Windows 2008 Server
- Prepare a Virtual Server Environment for Windows 2008
- Plan for a Windows 2008 Server Install including provision for Rollback
- Research BitLocker Drive Encryption with relevance to Windows 2008 Server
- Become familiar with Windows 2008 Upgrade options and procedures
- Analyze the Windows Automation and Installation Kit
- Research and work with single and multiple Activation Keys
- Install and Activate Windows 2008
- View the installation log
- Contrast Authentication VS Authorization
- Secure the Server using Service packs, patches and Firewall
- Configure Static IP Addressing
- Configure Active Directory
- Install and configure a DNS Server

2. **Server Management**

Potential Elements of the Performance:

- Create a Backup Administrator account for 2008 Server
- Perform User Access Control practices using Lab activities
- Elevate a user privilege on the network
- Become familiar with Desktop Windows Manager
- Learn and work with authentication protocols specifically Kerberos
- Research and apply Domain and Domain Controller Group Policies
- Work with Security Templates
- Utilize the Security Wizard to optimize your Network environment
- Apply Security Defender as part of a lab activity
- Assign Disk Quotas for users on the network
- Install Network and IP Based Printers on your Server

3. Monitoring and Maintaining ServersPotential Elements of the Performance:

- Work with the Windows Sidebar to manage the Server
- Utilize the Event Viewer to diagnose Network Issues
- Apply Performance Monitoring features to analyze the Network
- Analyze Windows 2008 Server performance using Task Manager
- Work with Application, Process, Performance and Networking Tabs
- Filter Files using the Explorer utility
- Utilize Microsoft Network Monitor

4. Planning Application and Data ProvisioningPotential Elements of the Performance:

- Invoke and populate the Microsoft Management Console
- Install and configure the IIS Web Server software
- Populate your DNS Server to active IIS and prepare for Exchange Server
- Work with Application Virtualization
- Allocate resources appropriately to balance Network Application performance

5. Planning for Business Continuity and High AvailabilityPotential Elements of the Performance:

- Prepare a Disaster Recovery Plan
- Plan Storage solutions including SAN, Clustering and Disk Management strategies
- Implement backup procedures including automated backups
- Contrast and work with Normal, Differential, and Incremental backups
- Implement Shadowed Copies on Shared Folders

III. TOPICS:

1. Server Deployment
2. Server Management
3. Monitoring and Maintaining Servers
4. Planning Application and Data Provisioning
5. Planning for Business Continuity and High Availability

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Textbook: *Hands-On Microsoft Windows Server 2008*

ISBN: 0-4239-0234-3

Author: Michael Palmer

Publisher: Course Technology

V. EVALUATION PROCESS/GRADING SYSTEM:

| | |
|------------------------------|------|
| Tests (3 @ 15% each) | 45 % |
| LMS Quizzes | 20 % |
| Participation and Attendance | 10 % |
| Lab Assignments | 25 % |

Note: This evaluation scheme is subject to change if circumstances warrant. Any changes will be discussed with students and reported in writing before implementation.

The following semester grades will be assigned to students:

| <u>Grade</u> | <u>Definition</u> | <u>Grade Point Equivalent</u> |
|--------------|--|-------------------------------|
| A+ | 90 – 100% | 4.00 |
| A | 80 – 89% | 3.00 |
| B | 70 - 79% | 2.00 |
| C | 60 - 69% | 1.00 |
| D | 50 – 59% | 0.00 |
| F (Fail) | 49% and below | |
| CR (Credit) | Credit for diploma requirements has been awarded. | |
| S | Satisfactory achievement in field /clinical placement or non-graded subject area. | |
| U | Unsatisfactory achievement in field/clinical placement or non-graded subject area. | |
| X | A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course. | |
| NR | Grade not reported to Registrar's office. | |
| W | Student has withdrawn from the course without academic penalty. | |

VI. SPECIAL NOTES:

Course Outline Amendments:

The professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Retention of Course Outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

Prior Learning Assessment:

Students who wish to apply for advance credit transfer (advanced standing) should obtain an Application for Advance Credit from the program coordinator (or the course coordinator regarding a general education transfer request) or academic assistant. Students will be required to provide an unofficial transcript and course outline related to the course in question. Please refer to the Student Academic Calendar of Events for the deadline date by which application must be made for advance standing.

Credit for prior learning will also be given upon successful completion of a challenge exam or portfolio.

Substitute course information is available in the Registrar's office.

Disability Services:

If you are a student with a disability (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your professor and/or the Disability Services office. Visit Room E1101 or call Extension 2703 so that support services can be arranged for you.

Communication:

The College considers **WebCT/LMS** as the primary channel of communication for each course. Regularly checking this software platform is critical as it will keep you directly connected with faculty and current course information. Success in this course may be directly related to your willingness to take advantage of the **Learning Management System** communication tool.

Plagiarism:

Students should refer to the definition of “academic dishonesty” in *Student Code of Conduct*. A professor/instructor may assign a sanction as defined below, or make recommendations to the Academic Chair for disposition of the matter. The professor/instructor may (i) issue a verbal reprimand, (ii) make an assignment of a lower grade with explanation, (iii) require additional academic assignments and issue a lower grade upon completion to the maximum grade “C”, (iv) make an automatic assignment of a failing grade, (v) recommend to the Chair dismissal from the course with the assignment of a failing grade. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

Student Portal:

The Sault College portal allows you to view all your student information in one place. **mysaultcollege** gives you personalized access to online resources seven days a week from your home or school computer. Single log-in access allows you to see your personal and financial information, timetable, grades, records of achievement, unofficial transcript, and outstanding obligations, in addition to announcements, news, academic calendar of events, class cancellations, your learning management system (LMS), and much more. Go to <https://my.saultcollege.ca>.

Electronic Devices in the Classroom:

Students who wish to use electronic devices in the classroom will seek permission of the faculty member before proceeding to record instruction. With the exception of issues related to accommodations of disability, the decision to approve or refuse the request is the responsibility of the faculty member. Recorded classroom instruction will be used only for personal use and will not be used for any other purpose. Recorded classroom instruction will be destroyed at the end of the course. To ensure this, the student is required to return all copies of recorded material to the faculty member by the last day of class in the semester. Where the use of an electronic device has been approved, the student agrees that materials recorded are for his/her use only, are not for distribution, and are the sole property of the College.

Attendance:

Absenteeism will affect a student's ability to succeed in this course. Absences due to medical or other unavoidable circumstances should be discussed with the professor. Students are required to be in class on time and attendance will be taken within the first five minutes of class. A missed class will result in a penalty in your marks unless you have discussed your absence with the professor as described above. The penalty depends on course hours and will be applied as follows:

| Course Hours | Deduction |
|---------------------|------------------|
| 5 hrs/week (75 hrs) | 1% / hr |
| 4 hrs/week (60 hrs) | 1.5% /hr |
| 3 hrs/week (45 hrs) | 2% /hr |
| 2 hrs/week (30 hrs) | 3%/hr |

Absentee reports will be discussed with each student during regular meetings with Faculty Mentors. Final penalties will be reviewed by the professor and will be at the discretion of the professor.

Tuition Default:

Students who have defaulted on the payment of tuition (tuition has not been paid in full, payments were not deferred or payment plan not honoured) as of the first week of November will be removed from placement and clinical activities. This may result in loss of mandatory hours or incomplete course work. Sault College will not be responsible for incomplete hours or outcomes that are not achieved or any other academic requirement not met as of the result of tuition default. Students are encouraged to communicate with Financial Services with regard to the status of their tuition prior to this deadline to ensure that their financial status does not interfere with academic progress.

Contact Information:

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