



## COURSE OUTLINE

### Section 1:

**Course Title:** Email Management

**Course Code:** CNET-2020

**Course Description:** The study of how to configure, manage, and secure a Microsoft Exchange Server messaging environment. Students follow industry guidelines and best practices to optimize Exchange Server deployment. Alternative messaging technologies to email are also investigated.

**Grade Scheme:** ☐ Pass/Fail ☒ Percentage Minimum Pass Mark: 60%

**Course Value:** Outcome hours OR 2 Credit(s) 45 (15 class + 30 lab) Hours

**Pre-requisites:** CNET-2110 Active Directory Infrastructure

**Co-requisites:** NONE

### Section 2:

#### Learning Outcomes and Competencies

#### 1. Deploy Exchanger Server to meet business and technical requirements.

- 1.1 Identify the major components of an email system and explain their operation.
- 1.2 Identify email formats and protocols.
- 1.3 Install and configure Active Directory for use with Exchange server.
- 1.4 Plan Exchange Server roles.
- 1.5 Identify hardware requirements.
- 1.6 Use the appropriate method to install Exchange Server.
- 1.7 Use the Exchange Best Practices Analyzer to optimize installation.

#### 2. Configure Exchange Server to meet enterprise messaging requirements.

- 2.1 Create, configure, and manage mailboxes to meet business requirements.
- 2.2 Create and configure mail users and mail contacts.

- 2.3 Create and manage address lists.
- 2.4 Configure email address policies.
- 2.5 Create and configure public folders.
- 2.6 Configure client access protocols.
- 2.7 Configure the simple mail transfer protocol (SMTP).
- 2.8 Configure transport rules.
- 2.9 Determine laws affecting e-mail archiving and the implications for storage requirements.
- 2.10 Explain unified messaging.
- 2.11 Configure unified messaging support.

### **3. Secure Exchange Server and its messaging services.**

- 3.1 Describe common security vulnerabilities and how to mitigate.
- 3.2 Configure antispam filters.
- 3.3 Configure antivirus protection.
- 3.4 Explain the use of SSL, TLS, and digital certificates in email security.
- 3.5 Configure SSL and TLS protocol support.
- 3.6 Configure email encryption.
- 3.7 Backup and restore Exchange Server databases.
- 3.8 Restore mailboxes and emails.
- 3.9 Restore Exchange Server roles.
- 3.10 Repair Exchange Server databases.

### **4. Monitor Exchange server to maintain optimal functionality.**

- 4.1 Monitor server performance using system tools.
- 4.2 Monitor server performance using Exchange Server tools.
- 4.3 Monitor email queues.
- 4.4 Monitor client connectivity performance.

### **5. Implement support for mobile access to meet business requirements.**

- 5.1 Describe mobile access technologies.
- 5.2 Configure email servers to support mobile devices.
- 5.3 Explain push email.
- 5.4 Implement and configure push email.

## 6. Investigate alternatives to on-premise email for electronic messaging.

- 6.1 Explain the advantages and disadvantages of using externally hosted email solutions instead of on-premise (in-house) deployment.
- 6.2 Explain the advantages and disadvantages of using instant messaging (IM) for enterprise messaging.
- 6.3 Research emerging communications technologies.

### Section 3:

<b>Assessment Categories:</b>	Theory Tests and Exams	30%
	Labs and Assignments	30%
	Projects	30%
	Professionalism	10%

Research Component? ☐ Yes ☒ No

### Section 4:

(For administrative use only)

Is this course new? ☐ Yes ☒ No

Is this course replacing an existing course(s)? ☐ Yes ☒ No

If this course is replacing another, please record the name and code of the old course:

Course equivalents: NONE

Note: See Quality Procedure [A01](#) for more details.

Catalog Year of Original Course Implementation: 2011

Catalog Year of Current Version Implementation: 2015

Revision level: 3      Version: 3      Date: June/2016      Authorized by: MLGJ

**Accreditation and or Supporting Documents:** National Technology Benchmarks: Canadian Council of Technicians & Technologists; Discipline: Information Technology; Level: Technologist

**Additional Information:** None

**Subject matter expert(s):** Chris Arsenault

Approved by: (Program Manager)

Paul Murnaghan

Date Approved: 2016-06-30

Approved by: (Curriculum Consultant)

Mary Lou Griffin-Jenkins

Date Approved: 2016-06-30