



MASTER COURSE OUTLINE

A. CPRO2120 Implementing Cloud Services Capstone

B. COURSE DESCRIPTION:

This course teaches the knowledge and skills needed to succeed in networking-related job responsibilities such as network technicians, network administrators, and network engineers. Upon completion of Implementing Cloud Services Capstone students will have a thorough understanding of cloud technology; Domain Name Registration and Management, SaaS (software as a service), Office 365 Business, Microsoft Online Services, Azure Cloud Services, OneDrive for Business, SharePoint, Skype Business, centralized mobile device management and Amazon Web Services. Students will plan, design, implement, and manage cloud technologies most widely used by organizations and business. Through this course students will: register a domain, activate a Microsoft Online Services subscription, and configure the domain to support Microsoft Online Services. Students will implement and administer the following services; Exchange Email, Office 365 for Business, OneDrive for Business, SharePoint, Azure, Skype for Business, mobile device management, and Amazon Web Services. Once the students cloud business infrastructure is in place they will interact with their peer students by implementing common business practices, such as; email, videoconferencing, workspace collaboration, file sharing, social media, Internet marketing, website management. This-online capstone course will provide students with an opportunity to apply network skills through the development of a working business model. Prerequisites: A grade of C or higher in CPRO 1021 (Server Operating Systems) or instructor approval for individuals pursuing professional development.

(6 Cr - 6 lect, 0 lab)

C. **Core theme: Critical Thinking

D. MAJOR CONTENT AREAS:

At the completion of this course students will have knowledge and skills in:

- Cloud Services
- DNS
- Domain Registration
- Domain Management
- Software As a Service
- Microsoft Online Services
- Azure Active Directory
- User Administration
- Identity and Access Management
- Multi-Factor Authentication
- Security Policy Management
- Microsoft Exchange Online

- Messaging Policy and Compliance
- Anti-spam Policy Management
- Mail Flow Policy Management
- Mailbox and Calendar Sharing
- Mobile Device Policy Management
- Microsoft SharePoint Online
- SharePoint Site Administration
- Cloud-based Document Sharing
- Cloud-based Filesharing
- Workspace Collaboration
- OneDrive for Business
- Microsoft Azure
- Azure Rights Management
- Azure Server Virtualization
- Amazon Web Services
- Server Administration
- Skype for Business
- Business Communications
- Videoconferencing
- Office 365 Business
- Internet Marketing
- Social Media Marketing
- Marketing Analysis
- Public Website Creation and Management
- Search Engine Optimization

E. GOAL TYPES, OBJECTIVES, AND OUTCOMES:

| <u>GOAL</u> | <u>OBJECTIVES</u> Students will be able to: | <u>OUTCOMES</u> The student will successfully: |
|----------------------------|---|--|
| <u>**Critical Thinking</u> | imagine and seek out a variety of possible goals, assumptions, interpretations, or perspectives which can give alternative meanings or solutions to given situations or problems. | 1. identify and analyze cloud technologies and services, then use this information to develop a cloud-based business model that meet specific customer requirements. |
| <u>CS</u> | demonstrate knowledge and expertise in Domain Naming Service (DNS) principles, operations, and management. | 1. register a public domain through a private registration authority and configure the DNS zone to support Microsoft Online Services, Exchange Email, and a publicly accessible webpage. |
| <u>CS</u> | demonstrate knowledge and expertise in Microsoft Office Online Services. | 1. create user accounts, configure authentication policies, manage subscriptions and licensing; enable and configure Exchange, SharePoint, OneDrive, and Skype services. |
| <u>CS</u> | demonstrate knowledge and expertise in Exchange Server. | 1. create Mailboxes, assign mailboxes to users, configure mail flow and mail retention |

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|-----------|---|--|
| | | <p>policies, configure and manage anti-spam polices, establish external communications through the Internet.</p> |
| <u>CS</u> | demonstrate knowledge and expertise in SharePoint Services. | <ol style="list-style-type: none"> 1. create team sites and document libraries, configure and manage identity access, document workflow and collaboration; share sites and documents externally through the Internet. |
| <u>CS</u> | demonstrate knowledge and expertise in Skype for Business. | <ol style="list-style-type: none"> 1. enable Skype for Business services, configure and manage communications with external organizations, conduct videoconferencing and online presentations through the Internet. |
| <u>CS</u> | demonstrate knowledge and expertise in Office 365 for Business. | <ol style="list-style-type: none"> 1. install and configure Office 365 on computers, manage licensing and subscriptions, configure Outlook accounts and mail settings; configure and manage mailbox permissions and calendar sharing. |
| <u>CS</u> | demonstrate knowledge and expertise in OneDrive for Business. | <ol style="list-style-type: none"> 1. enable OneDrive services, upload, download, and synchronize files; manage sharing and synchronization issues, share folders and files externally through the Internet. |
| <u>CS</u> | demonstrate knowledge and expertise in Microsoft Azure Services. | <ol style="list-style-type: none"> 1. enable Azure services, create and manage subscriptions and licensing, active directory, virtual servers, networks, storage, and applications. |
| <u>CS</u> | demonstrate knowledge and expertise in Amazon Web Services. | <ol style="list-style-type: none"> 1. enable Amazon Web services, create and manage subscriptions and licensing, directory services, virtual servers, networks, storage, and applications. |
| <u>CS</u> | demonstrate knowledge and expertise in Online Marketing and Search Engine Optimization. | <ol style="list-style-type: none"> 1. create and manage a basic business webpage, implement Bing Places for Business and Google Add Words |
| <u>CS</u> | demonstrate business and interpersonal skills. | <ol style="list-style-type: none"> 1. collaborate with classmates to establish business communications and share data and information over the Internet. |

F. SPECIAL INFORMATION:

This course requires Internet access, the submission of electronically prepared documents and the use of a course management software program. Students who have a disability and need accommodations should contact their instructor or the Student Success Center at the beginning of the semester.

G. COURSE CODING INFORMATION:

Course Code T / Class Maximum 30; Letter Grade.

Revision date: 09/16/2015

AASC Approval date: 10/20/15

| *Riverland Community College Disciplines | MnTC Goal Number |
|---|-------------------------|
| Communication | 1 |
| Natural Sciences | 3 |
| Mathematics/Logical Reasoning | 4 |
| History and the Social & Behavioral Sciences | 5 |
| Humanities and Fine Arts | 6 |

| **Riverland Community College Core Themes | MnTC Goal Number |
|--|-------------------------|
| Critical Thinking | 2 |
| Human Diversity | 7 |
| Global Perspective | 8 |
| Ethical and Civic Responsibility | 9 |
| People and the Environment | 10 |

*These five MnTC Goals have been identified as Riverland Community College Disciplines.

** These five MnTC Goals have been identified as Riverland Community College Core Themes.

***The Minnesota Transfer Curriculum “10 Goal Areas of Emphasis” are reflected in the five required discipline areas and five core themes noted in the Riverland Community College program of study guide and/or college catalog.