## CIST 2414 - Microsoft Server Administrator (version 201003L)

Standard Institutionally Developed College: N/A

EDGE Compatible: No

Pre-requisites: All Required

Program Admission Co-requisites: None

**Course Description** 

Provides students with knowledge and skills necessary to install, configure, manage, support and administer Windows Server. Topics include server deployment, server management, monitor and maintain servers, application and data provisioning, and business continuity and high availability.

## **Course Length**

|                        | Minutes | Contact Hour | Semester Credit |
|------------------------|---------|--------------|-----------------|
| Lecture:               | 1500    | 30           |                 |
| Lab 2:                 | 3000    | 60           |                 |
| Lab 3:                 | 0       | 0            |                 |
| Practicum/Internship:  | 0       | 0            |                 |
| Clinical:              | 0       | 0            |                 |
| Total:                 | 4500    | 90           | 4               |
| Semester Credit Hours: |         |              | 4               |

Competencies

| Order | Description  | Lecture | Lab2 | Lab3 | Practicum/<br>Internship | Clinical | Total<br>Minutes | Semester<br>Credit Hrs |
|-------|--|---------|------|------|--------------------------|----------|------------------|------------------------|
| 1     | Server Deployment  | 400     | 800  | 0    | 0                        | 0        | 1200             |                        |
| 2     | Server Management  | 300     | 600  | 0    | 0                        | 0        | 900              |                        |
| 3     | Monitor and Maintain Servers   | 300     | 600  | 0    | 0                        | 0        | 900              |                        |
| 4     | Application and Data Provisioning  | 250     | 500  | 0    | 0                        | 0        | 750              |                        |
| 5     | Business Continuity and High Availability                                      | 250     | 500  | 0    | 0                        | 0        | 750              |                        |
|       | Totals for Course CIST 2414 - Microsoft Server Administrator ( version 201003L |         |      |      |                          |          |                  |                        |
|       | ):   | 1500    | 3000 | 0    | 0                        | 0        | 4500             | 4                      |

## **Learning Outcomes**

#### Server Deployment

| Order | Description  | Learning<br>Domain | Level of<br>Learning |
|-------|--|--------------------|----------------------|
| 1     | Plan and implement server installations and upgrades.  | Psychomotor        | Mechanism            |
| 2     | Plan and implement infrastructure services and server roles including IP address, name resolution, network access, directory services, application services, certificate services, file and print server roles and more. | Psychomotor        | Mechanism            |

### **Server Management**

| Order | Description   | Learning<br>Domain | Level of<br>Learning |
|-------|---|--------------------|----------------------|
| 1     | Plan and implement server management strategies including remote services and server management technologies. | Psychomotor        | Mechanism            |
| 2     | Plan and implement for delegated administration including Active Directory configuration.                     | Psychomotor        | Mechanism            |
| 3     | Plan and implement group policy strategy.   | Psychomotor        | Mechanism            |

#### **Monitor and Maintain Servers**

| Order | Description   | Learning<br>Domain | Level of<br>Learning |
|-------|---|--------------------|----------------------|
| 1     | Implement patch management strategy including Windows Server Update Services (WSUS) and other methods.  | Psychomotor        | Mechanism            |
| 2     | Monitor servers for performance evaluation and optimization.  | Psychomotor        | Mechanism            |
| 3     | Monitor and maintain security including remote access, network access, server security, firewall configuration, authentication and authorization, data security, auditing and more. | Psychomotor        | Mechanism            |

## **Application and Data Provisioning**

| Order | Description  | Learning<br>Domain | Level of<br>Learning |
|-------|--|--------------------|----------------------|
| 1     | Demonstrate an understanding of provisioning applications including virtualization, terminal server infrastructure, resource allocation, application deployment and other options. | Psychomotor        | Guided<br>Response   |
| 2     | Demonstrate an understanding of provision data including shared resources, offline data access and more.   | Psychomotor        | Guided<br>Response   |

# **Business Continuity and High Availability**

| Order | Description   | Learning<br>Domain | Level of<br>Learning |
|-------|---|--------------------|----------------------|
| 1     | Plan and design storage solutions that enhance and support business continuity and high availability. | Psychomotor        | Mechanism            |
| 2     | Plan for high availability and redundancy.  | Cognitive          | Application          |
| 3     | Develop and implement a backup and recovery plan.   | Cognitive          | Application          |

## References

| Order | Reference Type                | Description  |
|-------|-------------------------------|--|
| 1     | Book with Author(s)<br>Listed | Microsoft. (2008). Microsoft server administrator package. (n/a). New York, NY: Wiley & Sons.  |
| 2     | Book with Author(s)<br>Listed | Microsoft. (2008). Microsoft server enterprise administrator package. (n/a). New York, NY: Wiley & Sons.                               |
| 3     | Book with Author(s)<br>Listed | Gibson, D (2008). MCITP Microsoft server adminstrator. (n/a). New York, NY: Wiley & Sons.  |
| 4     | Book with Author(s)<br>Listed | Johnson. (2008). MCITP Microsoft server enterprise administrator. (n/a). New York, NY: Wiley & Sons.                                   |
| 5     | Other                         | Cengage: http://www.cengage.com/search/productOverview.do? Ntt=1423902386  9781423902386&Ntk=all  P_lsbn13&Ns=P_CopyRight_Year 1&N=+16 |