Microsoft Server Administration IV   2023-2024 Catalog

[ARCHIVED CATALOG]

SVAD 246 - Microsoft Server Administration IV

PREREQUISITES/COREQUISITE: SVAD 241 - Microsoft Server Administration III

PROGRAM: Cloud Technologies
CREDIT HOURS MIN: 3
LECTURE HOURS MIN: 2
LAB HOURS MIN: 2
DATE OF LAST REVISION: Fall 2021

Students will learn the knowledge and skills to design, plan and implement a Microsoft server infrastructure. Students will describe and demonstrate the successful completion of a server infrastructure for Microsoft environment, the implementation of network infrastructure services for Microsoft server, and the logical/physical Active Directory Services infrastructure for the Microsoft environment. Students are required to demonstrate course objectives through the appropriate Microsoft certification exam preparation materials and the fee for the exam is assessed upon enrollment in the course.

MAJOR COURSE LEARNING OBJECTIVES: Upon successful completion of this course the student will be expected to:

1. Design an automated server installation strategy.

2. Plan and implement a server deployment infrastructure.

3. Plan and implement server upgrade and migration.

4. Plan and deploy Virtual Machine Manager services.

5. Plan and implement file and storage services.

6. Design and maintain a Dynamic Host Configuration Protocol (DHCP) solution.

7. Design a name resolution solution strategy.

8. Design and manage an IP address management solution.

9. Design a VPN solution.

10. Design a DirectAccess solution.

11. Implement a scalable remote access solution.

12. Implement a network protection solution.

13. Design and implement a forest and domain infrastructure.

14. Design a Group Policy strategy.

15. Design an Active Directory sites topology.

16. Design a domain controller strategy.

17. Design and implement a branch office infrastructure.

COURSE CONTENT: Topical areas of study include -

- Windows Assessment and Deployment Kit (ADK)
- DirectAccess deployment
- Multicast Deployment
- Role Migration
- Server Consolidation Strategy
- Virtual Machine Manager
- Manage Logical Networks
- iSCSI SANs
- Fibre Channel SANs
- Virtual Fibre Channel
- Storage Spaces
- Storage Pools
- Data De-duplication
- DHCP Solutions
- DNSSEC
- DNS Socket Pool
- Cache Locking
- Disjoint Namespaces
- DNS Interoperability
- IPv6
- Single-Label DNS Name Resolution
- Zone Hierarchy
- Zone Delegation
- Connection Manager Administration Kit (CMAK)
- Active Directory Object Security

GRADING POLICY
A..............90-100

B................80-89

C................70-79

D................60-69

F................0-59

CERTIFICATION ASSOCIATED COURSE:

This course has been identified as appropriate preparation for a nationally recognized, vendor certification that closely reflects the objectives of the course. In order to help students obtain the certification, a voucher for the actual certification exam has been added to the cost of the course as a consumable fee.   Each voucher has an expiration date and should be taken before the voucher expires. In most, if not all cases, the voucher's expiration date will exceed the duration of the course. The intention is to provide students additional time outside the confines of the course to prepare for the certification exam. Students should familiarize themselves with the voucher's expiration date in order to preserve the opportunity to sit for the certification exam.

In addition to a textbook, certification preparation materials have also been incorporated into the course for purchase at the bookstore to acclimate students to the manner and rigor of the actual certification exam. Preparation materials will consist of TestOut's LabSim and/or some kind of practice test software such as ExamForce, Transcender or other equally appropriate software and will make up no less than 20% of the final grade.

CERTIFICATION/LICENSURE DISCLAIMER:

Ivy Tech cannot guarantee that any student will pass a certification or licensing exam. Your success will be determined by several factors beyond the instruction you are given in the classroom including your test-taking skills, your willingness to study outside of class, and your satisfactory completion of appropriate practice exams. Certification exam questions are drawn from databases of tens of thousands of possible questions and no two people are asked exactly the same progression of questions. Therefore, a thorough understanding of the subject matter is required. The goal of Ivy Tech in providing a certification exam studies class is to assist you in understanding the material sufficiently to provide a firm foundation for your studies as you prepare for the exam.

Course Addendum - Syllabus (Click to expand)