

SUPPLEMENT #44

ASSOCIATE OF APPLIED SCIENCE IN INFORMATION TECHNOLOGY ONLINE

The Associate of Applied Science degree in Information Technology program with an emphasis in Networking Administration prepares students for entry level employment in the IT and Networking fields. The program prepares students with the skills needed to set up, maintain, troubleshoot and repair computers and a variety of computer networks. Graduates will leave the program with the hands-on experience, customer service skills, and A+, Net+, & CCNA certifications expected by today's employers. The Associate of Applied Science degree in Information Technology program prepares graduates to advance in into specialized areas of the IT field. Graduates can expect to obtain such positions such as Network Technician, Help Desk Analyst, IT Technician, Desktop Support Specialist, and Technical Support Specialist. Upon completion of this program an Associate of Applied Science degree is awarded.

COURSE NUMBER	COURSE TITLE	THEORY/LAB HOURS/ EXTERNSHIP	QUARTER CREDIT HOURS
OLINT100	Computer Hardware Essentials Online	45/45/0	6.5
OLINT101	Computer Software Essentials Online	45/45/0	6.5
OLINT102	Windows Fundamentals Online	45/45/0	6.5
OLINT103	Introduction to Networking Online	45/45/0	6.5
OLINT104	Network Security Fundamentals Online*	45/45/0	6.5
OLINT105	Network Analysis and Design Online*	45/45/0	6.5
OLINT106	Server Administration Online*	45/45/0	6.5
OLINT208	Enterprise Routing and Switching Online*	45/45/0	6.5
OLINT209	Client Network Implementation Online*	45/45/0	6.5
OLINT210	Windows Server Security Online*	45/45/0	6.5
OLGED201	Introduction to College Mathematics Online	90/00/0	9.0
OLGED202	Introduction to Computer Science Online	45/00/0	4.5
OLGED203	Introduction to Psychology Online	45/00/0	4.5
OLGED204	English Composition I Online	45/00/0	4.5
OLGED205	English Composition II Online*	45/00/0	4.5
OLINT212	Information Technology Capstone Online	45/45/0	6.5
		765/495/00	98.5

TOTAL CLOCK HOURS: 1260

ESTIMATED COMPLETION TIME: 80 weeks

***Indicates prerequisites exist. Students must complete prerequisite courses prior to entry into this course.**

COURSE DESCRIPTION

OLINT100 COMPUTER HARDWARE ESSENTIALS ONLINE

CONTACT HOURS: THEORY—45 LAB-45 (90 HOURS)

TOTAL QUARTER CREDIT HOURS: 6.5

PREREQUISITES: NONE

In Computer Hardware Essentials, the student will develop a working knowledge of the parts of a computer utilizing a hands-on approach to the material. The course covers computer components, installation, configurations, maintenance and troubleshooting of computer hardware, peripherals, and laptops. Computer safety will also be discussed. Upon the completion of IT100 and IT101, students will be eligible to sit for and obtain CompTIA A+ certification.

OLINT101 COMPUTER SOFTWARE ESSENTIALS ONLINE

CONTACT HOURS: THEORY—45 LAB-45 (90 HOURS)

TOTAL QUARTER CREDIT HOURS: 6.5

PREREQUISITES: NONE

In Computer Software Essentials, the student will learn the fundamental concepts and gain the hands-on, real world experience necessary to support software, operating systems, basic security, and virtual aspects of computer maintenance and repair. The student will also learn and apply proper troubleshooting theory and procedure. Upon the completion of IT101 and IT100, students will be eligible to sit for and obtain CompTIA A+ certification.

OLINT102 WINDOWS FUNDAMENTALS ONLINE

CONTACT HOURS: THEORY—45 LAB-45 (90 HOURS)

TOTAL QUARTER CREDIT HOURS: 6.5

PREREQUISITES: NONE

In Windows Fundamentals, the student will be instructed in the key features of Windows operating systems. The goal is for each student to develop a working knowledge of management of a Windows OS, and its file systems, directories, and interfaces. Troubleshooting, customization, deployment, monitoring, and task management will also be covered.

OLINT103 INTRODUCTION TO NETWORKING ONLINE

CONTACT HOURS: THEORY—45 LAB-45 (90 HOURS)

TOTAL QUARTER CREDIT HOURS: 6.5

PREREQUISITES: NONE

Introduction to Networking is based on the CompTIA Network+ and portions of the Cisco Certified Network Administrator (CCNA) certification exams. The course provides an introduction to networking and the Internet using tools and hardware commonly found in home and small business environments. The goal is to teach fundamental concepts and provide the hands-on, real world experience necessary to understand and support basic network infrastructure and devices. Additionally, the course covers all physical aspects of installing network system components and cabling. Upon the completion of IT103 AND IT105 the student will be eligible to sit for and obtain CompTIA Network+ certification.

OLINT104 NETWORK SECURITY FUNDAMENTALS ONLINE

CONTACT HOURS: THEORY—45 LAB-45 (90 HOURS)

TOTAL QUARTER CREDIT HOURS: 6.5

PREREQUISITES: INT100-INT103

In Network Security Fundamentals, the student will learn about security components, protocols, common vulnerabilities and defenses, and virtualization, as well as topics of increasing importance in the industry as a whole. Data and host security, as well as wireless security components will be covered. The student will plan, administer, and evaluate workstation and network security as a part of the course.

OLINT105 NETWORK ANALYSIS AND DESIGN ONLINE

CONTACT HOURS: THEORY—45 LAB-45 (90 HOURS)

TOTAL QUARTER CREDIT HOURS: 9.0

PREREQUISITES: INT100-INT103

Network Analysis and Design expands upon the concepts presented in IT103 by delving into more advanced networking topics including routing and remote access, addressing, and security. Network monitoring and troubleshooting are taught in context. This course prepares the student with the skills necessary to support a small to medium sized business or ISP. By the end of the course, the student will be prepared to sit for the CompTIA

Network+ certification exam. Elements of this course map to portions of the Cisco Certified Network Administrator (CCNA) certification.

OLINT106 SERVER ADMINISTRATION ONLINE

CONTACT HOURS: THEORY-45 LAB-45 (90 HOURS)

TOTAL QUARTER CREDIT HOURS: 6.5

PREREQUISITES: INT100-INT103

In the Server Administration course the student will learn configuring, managing, and troubleshooting networking features and services in a Windows Server environment. The goal of the course is for the student to gain knowledge of server networking, Domain Name Systems, Active Directory, and other services associated with Windows Server network infrastructure. By the end of the course, the student will complete a server virtualization setup.

OLINT208 ENTERPRISE ROUTING AND SWITCHING ONLINE

CONTACT HOURS: THEORY-45 LAB-45 (90 HOURS)

TOTAL QUARTER CREDIT HOURS: 6.5

PREREQUISITES: INT104-INT106

Enterprise Routing and Switching familiarizes the student with the equipment, applications, and protocols installed in enterprise networks. The course also introduces advanced routing protocols such as Enhanced Interior Gateway Routing Protocol (EIGRP) and Open Shortest Path First (OSPF) Protocol. The student will complete a variety of hands-on exercises, including configuration, installation, and troubleshooting. Elements of this course map to portions of the Cisco Certified Network Administrator (CCNA) certification.

OLINT209 CLIENT NETWORK IMPLEMENTATION ONLINE

CONTACT HOURS: THEORY-45 LAB-45 (90 HOURS)

TOTAL QUARTER CREDIT HOURS: 6.5

PREREQUISITES: INT104-INT106

Student will learn the implementation and management of client networks. Topics include types of client networks; installing, configuring, and monitoring a network infrastructure; routing and switching aspects of networks; and Internet protocols. Upon completion of this course, students will be eligible to sit for the Cisco Certified Network Administrator (CCNA) Routing and Switching certification exam.

OLINT210 WINDOWS SERVER SECURITY ONLINE

CONTACT HOURS: THEORY-45 LAB-45 (90 HOURS)

TOTAL QUARTER CREDIT HOURS: 6.5

PREREQUISITES: INT104-INT106

In the Windows Server Security class the student will develop an advanced working knowledge of Windows Server security features, policies, and settings. The student will design, deploy, manage, and troubleshoot security policies, software updates, patches to operating systems, applications, and Public Key Infrastructure. Planning and configuration of wireless networks, Active Directory, encryption, and SSL certificates will be covered.

OLINT212 INFORMATION TECHNOLOGY CAPSTONE ONLINE

CONTACT HOURS: THEORY-45 LAB-45

TOTAL QUARTER CREDIT HOURS: 6.5

PREREQUISITES: INT100-INT106

The Capstone will be a culminating activity that provides a way for the student to demonstrate the working knowledge and skills they acquired during their academic experience with Vista College along with the research, communication and technology skills relevant to today's work environment. Students nearing the end of their program will complete a reflective portfolio, a resume that integrates and demonstrates what they have learned, and 180 hours of externship. (On-line students will demonstrate their ability to apply key working knowledge and skills by planning, completing and presenting a project/portfolio linked to one or more areas of personal/professional interest according to the curriculum objectives.)

OLGED201 INTRODUCTION TO COLLEGE MATHEMATICS ONLINE

CONTACT HOURS: THEORY-90 LAB-00

TOTAL QUARTER CREDIT HOURS: 9.0

PREREQUISITES: NONE

Introduction to College Mathematics Online covers basic math topics such as solving for whole numbers and equations, understanding proper and improper fractions, converting decimals and figuring percentages. Students will learn calculating simple interest, annuities, loan amortization, checkbook reconciliation, and business statistical problems such as mean, median and mode.

OLGED202 INTRODUCTION TO COMPUTER SCIENCE ONLINE

CONTACT HOURS: THEORY-45 LAB-00

TOTAL QUARTER CREDIT HOURS: 4.5

PREREQUISITES: NONE

Student will learn various information and communications technologies and explain how information systems are used to solve problems.

OLGED203 INTRODUCTION TO PSYCHOLOGY ONLINE

CONTACT HOURS: THEORY-45 LAB-00

TOTAL QUARTER CREDIT HOURS: 4.5

PREREQUISITES: NONE

Student will learn about human behavior. It includes the study of the theories and concepts of psychology including the scope of psychology, biological foundations and the brain, sensation, perception, motivation, personality, learning/memory, emotion, states of consciousness, personality theories, cognition, life-span development, and applied psychology.

OLGED204 ENGLISH COMPOSITION I ONLINE

CONTACT HOURS: THEORY-45 LAB-00

TOTAL QUARTER CREDIT HOURS: 4.5

PREREQUISITES: NONE

Student will learn written communication skills with an emphasis on understanding the writing process, analyzing readings, and practicing writing for personal and professional applications.

OLGED205 ENGLISH COMPOSITION II ONLINE

CONTACT HOURS: THEORY-45 LAB-00

TOTAL QUARTER CREDIT HOURS: 4.5

PREREQUISITES: OLGED204

This course builds on lessons learned in English Composition I. In addition to reviewing the writing process, students are introduced to research techniques, citation techniques, documentation formats and critical analysis of written topics.