

## BUSINESS & INFORMATION TECHNOLOGY – ACADEMY COURSES – 2009-2010

### **A+ LEVEL 1 (862226) Year-long**

**Grades: 10, 11, 12      Credit: one**

**Prerequisite: Computer related course or equivalent skill**

#### *Marshall Academy*

Students enter the world of computer technology and gain practical experience in assembling a computer system, installing an operating system, troubleshooting computers and peripherals, and using system tools and diagnostic software. They develop skills in computer networking and resource sharing. In addition, students explore the relationships between internal and external computer components. Emphasis is placed on customer service skills and career exploration. Upon successful completion of the course, students may qualify to take the A+ certification exam. The cooperative education (Business Cooperative Internship--679920) method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year. **Industry certification may be available as part of this course. Students successfully completing this course may be eligible to earn a Career and Technical Education diploma seal. Students successfully completing this course in conjunction with another one credit course within the same program area will satisfy the sequential elective requirement for the standard or modified standard diploma. Successful completion of this course in conjunction with a corresponding industry certification may qualify for a student selected verified credit.**

### **A+ LEVEL 2 (862326) Year-long**

**Grades: 10, 11, 12      Credit: one**

**Prerequisite: A+ Level 1**

#### *Marshall Academy*

Building on the foundation of A+ Level 1, this advanced course provides students with training in procedures for optimizing and troubleshooting concepts for computer systems and subsystems. Students explore wireless technologies (e.g., Bluetooth, Wi-Fi) and create and configure a network. Emphasis is placed on technical proficiency, skill-building, and workplace readiness. The course prepares students for postsecondary education and training, and a successful career in information technology. Upon successful completion of the course, students may qualify to take the A+ certification exam. The cooperative education (Business Cooperative Internship--679920) method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

**Industry certification may be available as part of this course. Students successfully completing this course may be eligible to earn a Career and Technical Education diploma seal. Students successfully completing this course in conjunction with another one credit course within the same program area will satisfy the sequential elective requirement for the standard or modified standard diploma. Successful completion of this course in conjunction with a corresponding industry certification may qualify for a student selected verified credit.**

### **A+ LEVEL 1 (862233) Fall Only**

**Grades: 10, 11, 12      Credit: one**

**Prerequisite: Computer related course or equivalent skill**

#### *Marshall Academy*

**Corequisite: A+ Level 2 Spring Course**

### **A+ LEVEL 2 (862334) Spring Only**

**Grades: 10, 11, 12      Credit: one**

**Prerequisite: A+ Level 1**

#### *Marshall Academy*

**Corequisite: A+ Level 1 Fall Course**

### **CISCO 1 PART A (854233) Fall Only**

**Grades: 10, 11, 12      Credit: 1/2**

**Prerequisite: Computer related course or equivalent skill**

**Corequisite: Cisco 1 Part B**

#### *Marshall Academy*

This is part A of a full year course. Part A is taken in the fall semester. Students also register and take Cisco 1 part B in the spring semester. This course teaches students the skills needed to obtain entry-level home network installer jobs. It also helps students develop some of the skills needed to become network technicians, computer technicians, cable installers, and help-desk technicians. It provides a hands-on introduction to networking and the Internet, using tools and hardware commonly found in home and small business environments. Labs include PC installation, Internet connectivity, wireless connectivity, file and print sharing, and the installation of game consoles, scanners, and cameras. The cooperative education (Business Cooperative Internship--679920) method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year. **Industry certification may be available as part of this course. Students successfully completing this course may be eligible to earn a Career and Technical Education diploma seal. Students successfully completing this course in conjunction with another one credit course within the same program area will satisfy the sequential elective requirement for the standard or modified standard diploma. Successful completion of this course in conjunction with a corresponding industry certification may qualify for a student selected verified credit.**

**CISCO 1 PART B (854334) *Spring Only***

**Grades: 10, 11, 12                      Credit: 1/2**

**Prerequisite: Cisco 1 Part A**

**Corequisite: Cisco 1 Part A**

***Marshall Academy***

This is part B of a full year course. Part B is taken in the spring semester. Students also register and take Cisco 1 part A in the fall semester. This course prepares students for jobs as network technicians and helps them develop additional skills required for computer technicians and help desk technicians. It provides a basic overview of routing and remote access, addressing, and security. It also familiarizes students with servers that provide e-mail services, Web space, and authenticated access. Students learn about the soft skills required for help desk and customer service positions, and the final chapter helps them prepare for the CCENT certification exam. Network monitoring and basic troubleshooting skills are taught in context. The cooperative education (Business Cooperative Internship--679920) method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

**Industry certification may be available as part of this course. Students successfully completing this course may be eligible to earn a Career and Technical Education diploma seal. Students successfully completing this course in conjunction with another one credit course within the same program area will satisfy the sequential elective requirement for the standard or modified standard diploma. Successful completion of this course in conjunction with a corresponding industry certification may qualify for a student selected verified credit.**

**IT SEMINAR (662126)**

**Grades: 10, 11, 12                      Credit: one**

**Prerequisite: IT Academy Course**

**Corequisite: IT Academy Course**

***Marshall Academy***

Academy Information Technology (IT) students may enroll in this class upon completion of an IT class or concurrently with an IT class. Students will study IT workplace skills to include communication, office procedures, managing of information, financial functions, information and data processing, organization, and supervision. Students have the opportunity to complete workplace readiness assessments and IT related industry certifications in their field. In addition, students will participate in IT internships. Students must provide their own transportation to the internship site. **Industry certification may be available as part of this course. Students successfully completing this course may be eligible to earn a Career and Technical Education diploma seal. Students successfully completing this course in conjunction with another one credit course within the same program area will satisfy the sequential elective requirement for the standard or modified standard diploma. Successful completion of this course in conjunction with a corresponding industry certification may qualify for a student selected verified credit.**

### **NETWORK ADMINISTRATION 1 (665033) Fall Only**

**Grades: 10, 11, 12                      Credit: one**

**Prerequisite: Computer related course, Algebra 1, or equivalent skill**

*Marshall Academy*

**Corequisite: Network Administration 2**

Network Administration is a comprehensive, hands-on computer course in which students are taught basic networking skills using Windows XP Professional and Microsoft Server 2003. Topics covered throughout the year include network concepts, installation, configuration, management, and troubleshooting. Computer Network Software Operations is designed to teach many aspects of computer support and network administration. Students learn networking concepts, from usage to components, and set up peer-to-peer network systems and client server networks. Students install and configure network cards and connect them to networks. Students learn how to install the operating systems, set up and manage accounts, load software, and set up and implement security plans. Upon successful completion of Network Administration, students may elect to obtain industry-recognized professional certification by taking the Microsoft Certified Professional (MCP) exams leading to Microsoft Certified Systems Administrator (MCSA), Microsoft Certified Desktop Support Technician (MCDST) and Microsoft Certified Systems Engineer (MCSE). The cooperative education (Business Cooperative Internship--679920) method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

**Industry certification may be available as part of this course. Students successfully completing this course may be eligible to earn a Career and Technical Education diploma seal. Students successfully completing this course in conjunction with another one credit course within the same program area will satisfy the sequential elective requirement for the standard or modified standard diploma. Successful completion of this course in conjunction with a corresponding industry certification may qualify for a student selected verified credit.**

### **NETWORK ADMINISTRATION 2 (665134) Spring Only**

**Grades: 11, 12                      Credit: one**

**Prerequisite: Network Administration 1 or equivalent skill**

*Marshall Academy*

**Corequisite: Network Administration 1**

Network Administration 2 is designed to continue teaching aspects of network administration—focusing on management and support of network users and systems. Time is spent discussing responsibilities of computer professionals, training end users, evaluating new technology, developing system policies, troubleshooting workstations, managing network services and protocols, and effectively using e-business communications. Students learn communications protocols, troubleshooting techniques for systems and client server networks, web site management and other advanced networking topics. The cooperative education (Business Cooperative Internship--679920) method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

**Industry certification may be available as part of this course. Students successfully completing this course may be eligible to earn a Career and Technical Education diploma seal. Students successfully completing this course will satisfy the sequential elective requirement for the standard or modified standard diploma. Successful completion of this course in conjunction with a corresponding industry certification may qualify for a student selected verified credit.**