Information Technology Syllabus

Jeremy Ouellette, Instructor • ouellettej@hartfordschools.net • 802-295-8630 x2223

Course Description:

The Information Technology program is designed for students who are interested in exploring a career in the growing tech industry.

Over the course of the year students will gain valuable hands-on experience in computer repair, user support, and networking and have the opportunity to obtain two valuable industry certifications as well as six college credits.

Students will also explore careers across the field and practice the skills necessary to land a job in this growing sector.

Lastly, we will spend some time each week discussing topics of interest like cryptocurrency, big data, artificial intelligence and the impact these technologies have on our modern world.

Classroom Expectations and Goals:

A successful student in the Information Technology program will be able to:

- manage multiple deadlines on simultaneous activities
- focus on tasks for up to 30 minutes at a time, often in front of a computer screen
- maintain a clean, safe, and professional work environment
- communicate professionally with peers, community members, and supervisors
- work well in small groups
- give and accept constructive feedback
- solve challenging problems, often experiencing failure
- learn new skills that may be out of their comfort zone

Concurrent Enrollments Offered:

The program offers two concurrent enrollments through River Valley Community College:

- CSCI-101R: Computer Architecture and Operating Systems (3 credits)
- CSCI-110R: Introduction to Networks (3 credits)

Industry Recognized Credentials:

- COMPTIA A+
- WorkKeys National Career Readiness Certification (NCRC)

Common Standards Assessed in Every Program:

Communication: ESS02.01 Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.

Leadership and Teamwork: ESS07.03 Employ teamwork skills to achieve collective goals and use team members' talents effectively.

Technical Skill: ESS10.01 Employ information management techniques and strategies in the workplace to assist in decision-making.

Problem Solving/Critical Thinking: ESS03.01 Employ critical thinking skills independently and in teams to solve problems and make decisions (e.g., analyze, synthesize and evaluate).

Units of Study:

- Career Exploration and Readiness
- Weekly Discussion Group
- CompTIA A+ Preparation (RVCC CSCI-101R, Fall)
  - * PC hardware
  - * Operating systems
  - * Networking
  - * Troubleshooting
  - * Mobile device support
  - * Virtualization and cloud computing
  - * Security
  - * Operational procedures
- Cisco CCT Routing & Switching Preparation (RVCC CSI-110R, Spring)
  - * Networking fundamentals
  - * Cisco hardware fundamentals
  - * Cisco IOS software operation
  - * Network service-related knowledge
- Digital Assessment Tool

Assignment Policy:

All assignments will be posted on the Canvas learning management system to provide all students with clear due dates and expectations.

Embedded Credit:

Students enrolled in this program receive one Technology credit, .5 English credit, and 1.5 Elective credits.

Articulation Agreements:

- Keene State College (pending)

Grading Categories and Weights:

Communication	25%
Leadership & Teamwork	15%
Problem Solving/Critical Thinking	30%
Technical Skill	30%
Total	100%

Standards Unique to Information Technology:

- Provide technology support to maintain service.
- Manage operating systems and software applications, including maintenance of upgrades, patches, and service packs.
- Apply appropriate troubleshooting techniques in resolving computer hardware, software, and configuration problems.
- Perform installation, configuration, and maintenance of operating systems.
- Demonstrate the use of networking concepts to develop a network.
- Evaluate the effectiveness of an information system.
- Employ system installation and maintenance skills to set up and maintain an information system.
- Employ system administration and control skills to monitor the performance of an information system.
- Employ technical writing and documentation skills in support of an information system.
- Apply quality assurance processes to maximize information system operation.