2019/2020 Student Competency Record
Information Technology Fundamentals
6670 - 36 weeks

_____	2019-2020
Student	**School Year**
Bassett High	T. Blankenship
School	**Teacher Signature**

Traditional letter or numerical grades do not provide adequate documentation of student achievement in competency-based education; therefore, the Virginia Standards for CBE require a recording system to provide information about competencies achieved to employer, student-employee, and teacher. The Student Competency Record provides a means for keeping track of student progress. Ratings are assigned by the teacher for classroom competency achievement and by the teacher-coordinator in conjunction with the training sponsor when competence is evaluated on the job.

Tasks/competencies designated "Required" are considered essential statewide and are required of all students. In some courses, all tasks/competencies have been identified as required. Tasks/competencies marked "Optional" are considered optional; they and/or additional tasks/competencies may be taught at the discretion of the school division. Tasks/competencies marked with an asterisk (*) are considered sensitive, and teachers should obtain approval by the school division before teaching them.Student competency records should be kept as long as the student is enrolled in the school and for five years after the student graduates/leaves the school.

Note: Students with an Individualized Education Program (IEP) or an Individualized Student Alternative Education Plan (ISAEP) will be rated, using the following scale, only on the competencies identified in their IEP or ISAEP.

Students will be expected to achieve a **satisfactory rating** (one of the three highest marks) on the Student Competency Record (SCR) rating scale on at least 80% of the required (essential) competencies in a CTE course.

...RATING SCALE...
1 - Can teach others
2 - Can perform without supervision
3 - Can perform with limited supervision
4 - Can perform with supervision
5 - Cannot perform

6670 36 weeks	Information Technology Fundamentals TASKS/COMPETENCIES		Date	Rating
	Demonstrating Personal Qualities and Abilities			
Required	1	Demonstrate creativity and innovation.		
Required	2	Demonstrate critical thinking and problem solving.		
Required	3	Demonstrate initiative and self-direction.		
Required	4	Demonstrate integrity.		
Required	5	Demonstrate work ethic.		
	Demonstrating Interpersonal Skills			
Required	6	Demonstrate conflict-resolution skills.		
Required	7	Demonstrate listening and speaking skills.		
Required	8	Demonstrate respect for diversity.		
Required	9	Demonstrate customer service skills.		
Required	10	Collaborate with team members.		
	Demonstrating Professional Competencies			
Required	11	Demonstrate big-picture thinking.		
Required	12	Demonstrate career- and life-management skills.		
Required	13	Demonstrate continuous learning and adaptability.		
Required	14	Manage time and resources.		
Required	15	Demonstrate information-literacy skills.		
Required	16	Demonstrate an understanding of information security.		
Required	17	Maintain working knowledge of current information-technology (IT) systems.		
Required	18	Demonstrate proficiency with technologies, tools, and machines common to a specific occupation.		
Required	19	Apply mathematical skills to job-specific tasks.		
Required	20	Demonstrate professionalism.		
Required	21	Demonstrate reading and writing skills.		
Required	22	Demonstrate workplace safety.		
	Examining All Aspects of an Industry			
Required	23	Examine aspects of planning within an industry/organization.		
Required	24	Examine aspects of management within an industry/organization.		
Required	25	Examine aspects of financial responsibility within an industry/organization.		

Required	26	Examine technical and production skills required of workers within an industry/organization.		
Required	27	Examine principles of technology that underlie an industry/organization.		
Required	28	Examine labor issues related to an industry/organization.		
Required	29	Examine community issues related to an industry/organization.		
Required	30	Examine health, safety, and environmental issues related to an industry/organization.		
	Addressing Elements of Student Life			
Required	31	Identify the purposes and goals of the student organization.		
Required	32	Explain the benefits and responsibilities of membership in the student organization as a student and in professional/civic organizations as an adult.		
Required	33	Demonstrate leadership skills through participation in student organization activities, such as meetings, programs, and projects.		
Required	34	Identify Internet safety issues and procedures for complying with acceptable use standards.		
	Exploring Work-Based Learning			
Required	35	Identify the types of work-based learning (WBL) opportunities.		
Required	36	Reflect on lessons learned during the WBL experience.		
Required	37	Explore career opportunities related to the WBL experience.		
Optional	38	Participate in a WBL experience, when appropriate.		
	Mastering Digital Technology Basics			
Required	39	Investigate the history and emerging advances of digital technology.		
Required	40	Describe the effect of digital technology on business and society.		
Required	41	Describe software associated with information systems.		
Required	42	Explore binary concepts and their operations in the digital technology world.		
Required	43	Describe the evolution of the Internet and how it works.		
Required	44	Investigate emerging technologies as they relate to the future of the Internet.		
Required	45	Investigate trends in digital technology.		
Required	46	Examine social, ethical, and legal issues associated with digital technology.		

Required	47	Debate an ethical issue related to using computer and Internet technology.		
	Using Digital Applications			
Required	48	Create documents related to real-world business situations.		
Optional	49	Create a relational database for a real-world business situation.		
Required	50	Create spreadsheets for a real-world business situation.		
Required	51	Create presentations related to a real-world business situation.		
	Investigating Computer Fundamentals			
Required	52	Identify the parts of a computer system and the relationships among its components.		
Required	53	Describe characteristics and functions of CPUs.		
Required	54	Explain the functions and characteristics of system expansion devices.		
Optional	55	Demonstrate the use of connectivity devices and peripheral equipment.		
Optional	56	Perform basic operations in an operating system environment.		
Required	57	Manage various file types.		
Required	58	Describe the computer start-up sequence.		
Required	59	Compare operating systems.		
Required	60	Investigate needs affecting system purchases and upgrade decisions.		
Optional	61	Investigate the building stages of a computer.		
	Maintaining, Upgrading, and Troubleshooting Computers			
Required	62	Describe the importance of system maintenance and preventive measures.		
Required	63	Install hardware in a computer system.		
Optional	64	Install software programs.		
Required	65	Explain the purpose of anti-X software.		
Required	66	Identify problems associated with computer hardware, operating systems, and application software.		
Required	67	Describe risk-mitigation techniques.		
Required	68	Identify security risks inherent to computer hardware and software.		
Required	69	Describe security best practices for businesses.		
Required	70	Describe the importance of data backup media and strategies.		
Required	71	Back up files.		

Required	72	Evaluate remote connection troubleshooting.		
	Exploring Network Fundamentals			
Required	73	Investigate networks and their evolution.		
Required	74	Explain networking concepts and different network structures.		
Required	75	Compare peer-to-peer and client-server networks.		
Optional	76	Describe the differences between analog and digital technologies.		
	Exploring Internet Fundamentals			
Required	77	Identify the necessary elements that are required to connect to the Internet.		
Required	78	Describe the concept of IP addresses and the Domain Name System (DNS).		
Required	79	Explain the delivery methods of ISPs.		
Required	80	Compare the types and features of various web browsers.		
Required	81	Explain file transfer mechanisms.		
Required	82	Exhibit principles of digital citizenship.		
Required	83	Identify criteria for conducting searches on the Internet.		
Required	84	Assess the effect and value of available firewalls and intrusion detection systems (IDS).		
	Exploring Programming			
Required	85	Explain the purpose and functions of computer programming.		
Optional	86	Identify the types of programming languages.		
Optional	87	Explain the steps in a program life cycle.		
Required	88	Design a simple program for a specific application.		
Required	89	Create a simple computer program.		
Required	90	Execute a simple program.		
Required	91	Document a simple program.		
	Exploring Web Page Design			
Required	92	Investigate design elements of professionally developed websites.		
Optional	93	Analyze the navigation of a website for ease of use.		
Required	94	Create a website.		
Required	95	Investigate publishing a website.		
	Exploring Graphics and Interactive Media			
Required	96	Identify hardware required for multimedia and entertainment presentations.		

Required	97	Identify software programs associated with graphics and interactive media.		
Required	98	Explore the components of multimedia design and their applications.		
Optional	99	Explore digital technology as it relates to game design and development.		
Required	100	Create an interactive multimedia presentation.		
	Preparing for Industry Certification			
Optional	101	Describe the process and requirements for obtaining industry certifications related to the IT Fundamentals course.		
Required	102	Identify testing skills/strategies for a certification examination.		
Optional	103	Demonstrate ability to successfully complete selected practice examinations.		
Optional	104	Complete an industry certification examination representative of skills learned in this course.		
	Developing Career Exploration and Employability Skills			
Required	105	Complete self-assessments to help determine career development goals.		
Required	106	Investigate careers, educational requirements, and certifications in the IT career pathways.		
Required	107	Demonstrate project-management skills.		
Required	108	Create manual and online employment-related correspondence.		
Required	109	Create an electronic and/or hard-copy portfolio.		