

July 2001

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Workplace Technology Applications
Program Type: Practical Arts
Occupational Area: Diversified Education
Components: N/A

Program Numbers: Secondary
CIP Number: 8300330
Grade Level: 1011.0101PA
Length: 7-12, 30, 31
Certification: .5 credit
Any Vocational Field or Coverage
Any Field When Cert Reflects Bachelor of Higher
Facility Code: Any Vocational Field or Coverage
CTSO: Any CTSO
Co-op Method: NO
Apprenticeship: NO
Basic Skills:
Math Not Required for Practical Arts
Language Not Required for Practical Arts
Reading Not Required for Practical Arts

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this course is to provide students with general knowledge of technology, how it works, and its uses in the workplace.

The content includes, but is not limited to, instruction in the use of computers and other pieces of technology, workplace related software applications, legal issues affecting the use of computers and technology, and possible future impact of computers and technology in the workplace.

- II. **LABORATORY ACTIVITIES:** Laboratory activities are an essential part of this course. This course has been designed as a hands-on class. It is essential that computers and software be made available for the students to use.

- III. **SPECIAL NOTE:** Any Career and Technical Student Organization is appropriate for providing leadership training and reinforcing specific career and technical skills. Career and technical student organizations, when provided, shall be an integral part of the career and technical instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065(8), FAC.

When a secondary student with a disability is enrolled in a career and technical class with modifications to the curriculum framework, the particular outcomes and student performance standards that the student must master to earn credit must be specified on an individual basis. The job or jobs for which the student is being trained should be reflected in the student's desired outcome statement on the Transition Individual Educational Plan (Transition IEP).

- IV. **INTENDED OUTCOMES:** After successfully completing this course the student will be able to perform the following:

- 01.0 Explain the past, present, and future importance of technology in the workplace.
- 02.0 Define the basic terminology associated with technology in the workplace.
- 03.0 Describe components of emerging technology.
- 04.0 Describe ways technology is used by business to satisfy the needs and wants of customers.
- 05.0 Describe and demonstrate the uses of computers.
- 06.0 Demonstrate selected workplace software application programs.
- 07.0 Describe applications of technology in the workplace.
- 08.0 Discuss employment opportunities in the field of technology.
- 09.0 Demonstrate knowledge of telecommunications.
- 10.0 Identify legal and ethical issues related to technology in the workplace.

**Florida Department of Education
STUDENT PERFORMANCE STANDARDS**

Program Title: Workplace Technology Applications
Secondary Number: 8300330

01.0 EXPLAIN THE PAST, PRESENT, AND FUTURE IMPORTANCE OF TECHNOLOGY IN THE WORKPLACE--The student will be able to:

- 01.01 Summarize development of technology and response of technology to changing needs. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5, LA.C.3.4.6, SS.B.2.4.1, SS.B.2.4.4, SC.D.2.4.1, SC.G.2.4.6, SC.H.3.4.5
- 01.02 List uses of technology in the business community. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5, SC.H.3.4.5
- 01.03 Describe ways technology helps employees do their job. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5, SC.H.3.4.5
- 01.04 Contrast ways employees perform their jobs today using technology with the methods used 20 years ago. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5, SC.H.3.4.5
- 01.05 Describe how technology can be used to enhance the employee's ability to meet the needs of business and industry. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5, SS.B.2.4.4, SC.H.3.4.5
- 01.06 Explain the importance of keyboarding in the use of technology. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 01.07 Explain the concept of programming languages. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 01.08 Describe ergonomic principles important to the configuration of a workstation. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 01.09 Participate in a group presentation discussing if electronic storage transmission of information will lead to the "paperless office." LA.A.1.4.3, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5, SS.B.2.4.4, SS.D.1.4.1
- 01.10 Provide several examples of how technology might be used in the future and its possible impact on the workplace (e.g., voice recognition dictation). LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5, SS.B.2.4.4, SS.D.1.4.1, SS.D.2.4.2, SC.H.3.4.5

02.0 DEFINE THE BASIC TERMINOLOGY ASSOCIATED WITH TECHNOLOGY IN THE WORKPLACE--The student will be able to:

- 02.01 Define and describe the term "hardware." LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 02.02 Define and describe the term "program." LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 02.03 Define and describe the term "programming language." LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 02.04 Define and describe the term "operating system." LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 02.05 Define and describe the terms "systems software" and "applications software." LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 02.06 Define and describe the concept of "computer literacy." LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 02.07 Define and describe the terms "mainframe computer", "minicomputers", and "microcomputers." LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 02.08 Define and describe the term "microprocessor." LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 02.09 Define and describe the term "graphical user interface (GUI)." LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 02.10 Explain the difference between data and information. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 02.11 Define and describe the term "modem." LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 02.12 Define and describe the terms "Internet", "World Wide Web" (WWW), "FTP", "Intranet", and "Extranet." LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 02.13 Define and describe Universal Resource Locators (URLS) and associated extensions. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 02.14 Define and identify a variety of Internet search engines. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5

03.0 DESCRIBE COMPONENTS OF EMERGING TECHNOLOGY--The student will be able to:

- 03.01 List 10 examples of emerging technologies. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5, SC.H.3.4.5
- 03.02 Identify and define multi-media technology. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 03.03 Identify techniques for designing effective multi-media presentations. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5, VA.A.1.4.2
- 03.04 Identify and describe the various information systems (e.g., OIS, MIS, DSS, IIS) available in today's business environment. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 03.05 Identify the basic functions of each of the above information systems. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 03.06 Discuss management of above listed information systems. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5

04.0 DESCRIBE WAYS TECHNOLOGY IS USED BY BUSINESS TO SATISFY THE NEEDS AND WANTS OF CUSTOMERS--The student will be able to:

- 04.01 Identify information provided to a consumer on a sample computerized receipt and invoice. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5, MA.A.1.4.3, MA.A.1.4.4, MA.A.2.4.2, MA.A.3.4.1, MA.A.3.4.3, MA.A.4.4.1, MA.A.5.4.1, MA.B.2.4.2, MA.B.3.4.1, MA.B.4.4.2, MA.D.1.4.2
- 04.02 Describe advantages of computers in the workplace. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5, SC.H.3.4.5
- 04.03 Describe disadvantages of computers in the workplace. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5, SC.H.3.4.5
- 04.04 Describe how a word processor helps businesses benefit the customers. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 04.05 Describe how a database helps businesses benefit the customers. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5, MA.A.1.4.3, MA.A.1.4.4, MA.A.2.4.2, MA.A.3.4.1, MA.A.3.4.3, MA.A.4.4.1, MA.A.5.4.1, MA.B.1.4.3, MA.B.2.4.2, MA.B.3.4.1, MA.B.4.4.2, MA.D.1.4.1, MA.D.1.4.2, MA.D.2.4.1, MA.D.2.4.2, MA.E.1.4.1, MA.E.1.4.3
- 04.06 Describe how a spreadsheet helps businesses benefit the customers. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1,

- LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5, MA.A.1.4.3,
MA.A.1.4.4, MA.A.2.4.2, MA.A.3.4.1, MA.A.3.4.3, MA.A.4.4.1,
MA.A.5.4.1, MA.B.1.4.3, MA.B.2.4.2, MA.B.3.4.1, MA.B.4.4.2,
MA.D.1.4.1, MA.D.1.4.2, MA.D.2.4.1, MA.D.2.4.2, MA.E.1.4.1,
MA.E.1.4.3
- 04.07 Describe how sophisticated programs such as graphics and desktop publishing help businesses benefit their customers. LA.A.1.4.3,
LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2,
LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3,
LA.C.3.4.4, LA.C.3.4.5
- 04.08 Describe how businesses use the World Wide Web and Web Pages to reduce costs, improve communication, and market products or images. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3,
LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1,
LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5, SS.D.1.4.2,
SS.D.2.4.2, SC.F.1.4.7, SC.H.3.4.5
- 04.09 Discuss how teleconferencing can save time and money. LA.A.1.4.3,
LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2,
LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3,
LA.C.3.4.4, LA.C.3.4.5, SS.D.1.4.1, SS.D.2.4.2, SC.H.3.4.5
- 04.10 Compare and contrast the use of pagers and cellular telephones. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1,
LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2,
LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5, SS.D.1.4.1, SS.D.2.4.2
- 05.0 DESCRIBE AND DEMONSTRATE THE USES OF COMPUTERS--The student will be able to:
- 05.01 Define and describe the three components of computer hardware: input device, central processing unit, and output device.
LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1,
LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2,
LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 05.02 Demonstrate "booting" and "power off" procedures for a computer.
- 05.03 Explain use of machine specific commands and keyboard functions.
LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1,
LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2,
LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 05.04 Demonstrate use of a mouse.
- 05.05 Demonstrate use of a printer.
- 05.06 Demonstrate various methods for storing information.
- 05.07 Describe use of electronic mail. LA.A.1.4.3, LA.B.1.4.1,
LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3,
LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4,
LA.C.3.4.5
- 05.08 Describe use of a scanner. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2,
LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4,
LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 05.09 Describe use of a digital camera. LA.A.1.4.3, LA.B.1.4.1,
LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3,
LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4,
LA.C.3.4.5
- 05.10 Describe use of a video camera and/or images. LA.A.1.4.3,
LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2,
LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3,
LA.C.3.4.4, LA.C.3.4.5
- 05.11 Define and describe processing and multi-tasking. LA.A.1.4.3,
LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2,
LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3,
LA.C.3.4.4, LA.C.3.4.5

- 05.12 Describe at least two methods of compressing files. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 05.13 Describe the use of hypertext links using at least "mail to" and "url." LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 05.14 Describe a method of setting up a self-extracting file transfer. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 05.15 Describe the use of two different types of electronic video. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 05.16 Explain two methods of constructing a document in a hybrid platform. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 05.17 Describe a method of converting a web graphic for GIF to jpg. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 05.18 Demonstrate the relationship of programming language, input, memory (storage), arithmetic and logic, control, and output (distribution).
- 05.19 Describe importance of care and handling of a computer and peripherals and systems maintenance. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 05.20 Describe typical computer component and peripheral problems. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5

06.0 DEMONSTRATE SELECTED WORKPLACE SOFTWARE APPLICATIONS--The student will be able to:

- 06.01 List the brand names of computers used by several businesses in the community. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 06.02 List the names of application software being used by several businesses in the community. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 06.03 Compare and contrast types of technology and software being used in the business community with what is available at your school.
- 06.04 Describe how one software package is being used (applied) in a sample workplace. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 06.05 Prepare a business letter and envelope using an integrated software application package. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4
- 06.06 Demonstrate a method to produce mailing labels using computer software. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3,

- LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1,
LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 06.07 Develop a sample database to integrate with a business letter.
 LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1,
 LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, MA.A.1.4.3, MA.A.1.4.4,
 MA.A.2.4.2, MA.A.3.4.1, MA.A.3.4.3, MA.A.4.4.1, MA.A.5.4.1,
 MA.B.1.4.3, MA.B.2.4.2, MA.B.3.4.1, MA.B.4.4.2, MA.D.1.4.1,
 MA.D.1.4.2, MA.D.2.4.1, MA.D.2.4.2, MA.E.1.4.1, MA.E.1.4.3
- 06.08 Develop a sample spreadsheet to integrate with a business letter.
 LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1,
 LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, MA.A.1.4.3, MA.A.1.4.4,
 MA.A.2.4.2, MA.A.3.4.1, MA.A.3.4.3, MA.A.4.4.1, MA.A.5.4.1,
 MA.B.1.4.3, MA.B.2.4.2, MA.B.3.4.1, MA.B.4.4.2, MA.D.1.4.1,
 MA.D.1.4.2, MA.D.2.4.1, MA.D.2.4.2, MA.E.1.4.1, MA.E.1.4.3
- 06.09 Develop a sample computer-generated graph to represent collected data.
 LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1,
 LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, MA.A.1.4.3, MA.A.1.4.4,
 MA.A.2.4.2, MA.A.3.4.1, MA.A.3.4.3, MA.A.4.4.1, MA.A.5.4.1,
 MA.B.1.4.3, MA.B.2.4.2, MA.B.3.4.1, MA.B.4.4.2, MA.D.1.4.1,
 MA.D.1.4.2, MA.D.2.4.1, MA.D.2.4.2, MA.E.1.4.1, MA.E.1.4.3,
 VA.A.1.4.1, VA.A.1.4.2
- 06.10 Develop a sample presentation using PowerPoint or comparable software application.
 LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2,
 LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4,
 VA.A.1.4.1, VA.A.1.4.2, VA.A.1.4.4
- 06.11 Demonstrate the use of a computer system in processing information and resources.
- 06.12 Evaluate appropriateness of various peripherals for specific applications.
 LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3,
 LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1,
 LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 07.0 DESCRIBE APPLICATIONS OF TECHNOLOGY IN THE WORKPLACE--The student will be able to:
- 07.01 Describe the uses of computer-aided design (CAD), computer-aided manufacturing (CAM), and computer numeric control (CNC).
 LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1,
 LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2,
 LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 07.02 Describe the uses of computer cash registers.
 LA.A.1.4.3,
 LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2,
 LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3,
 LA.C.3.4.4, LA.C.3.4.5
- 07.03 Explain the use of computers in manufacturing.
 LA.A.1.4.3,
 LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2,
 LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3,
 LA.C.3.4.4, LA.C.3.4.5
- 07.04 Explain the use of computers in government.
 LA.A.1.4.3,
 LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2,
 LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3,
 LA.C.3.4.4, LA.C.3.4.5, SS.B.1.4.4, SS.D.2.4.3, SS.D.2.4.5
- 07.05 Explain the use of computers in communications.
 LA.A.1.4.3,
 LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2,
 LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3,
 LA.C.3.4.4, LA.C.3.4.5
- 07.06 Explain the use of computers in transportation.
 LA.A.1.4.3,
 LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2,
 LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3,
 LA.C.3.4.4, LA.C.3.4.5

- 07.07 Explain the use of computers in education. LA.D.2.4.4,
LA.D.2.4.5, LA.D.2.4.6, MA.E.1.4.1, MA.E.1.4.3, MA.E.3.4.1,
SC.E.2.4.6, SC.E.2.4.7, SS.B.1.4.1
- 07.08 Explain the use of computers in science and engineering.
LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1,
LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2,
LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5, SC.D.2.4.1, SC.G.2.4.5,
SC.G.2.4.6, SC.H.2.4.1, SC.H.2.4.2, SC.H.3.4.1, SC.H.3.4.2,
SC.H.3.4.3, SC.H.3.4.3, SC.H.3.4.4, SC.H.3.4.5
- 07.09 Explain the use of computers in medicine. LA.A.1.4.3, LA.B.1.4.1,
LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3,
LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4,
LA.C.3.4.5
- 07.10 Explain the use of computers in banking and investing.
LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1,
LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2,
LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 07.11 Explain the use of computers in customer service. LA.A.1.4.3,
LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2,
LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3,
LA.C.3.4.4, LA.C.3.4.5
- 07.12 Explain the use of computers in the arts and music. LA.A.1.4.3,
LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2,
LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3,
LA.C.3.4.4, LA.C.3.4.5, MU.B.2.4.1, MU.B.2.4.2, MU.E.1.4.1,
MU.E.1.4.2, VA.A.1.4.1, VA.A.1.4.4
- 07.13 Describe transdisciplinary computer literacy and computer-based
technological applications. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2,
LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4,
LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5,
SC.D.2.4.1, SC.G.2.4.5, SC.G.2.4.6, SC.H.2.4.1, SC.H.2.4.2,
SC.H.3.4.1, SC.H.3.4.2, SC.H.3.4.3, SC.H.3.4.4, SC.H.3.4.5,
SC.H.3.4.6
- 07.14 Identify kinds and levels of work and job opportunities related to
transdisciplinary computer technology. LA.A.1.4.3, LA.B.1.4.1,
LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3,
LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4,
LA.C.3.4.5
- 07.15 Describe the uses of databases in the workplace. LA.A.1.4.3,
LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2,
LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3,
LA.C.3.4.4, LA.C.3.4.5
- 07.16 Explain a method to back-up and maintain files and a computer
system. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3,
LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1,
LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 07.17 Describe current and emerging telecommunications systems.
LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1,
LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2,
LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 07.18 Summarize present and potential diverse applications of technology
including robotics. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2,
LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4,
LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5,
SC.H.2.4.1, SC.H.2.4.2, SC.H.3.4.1, SC.H.3.4.2, SC.H.3.4.3,
SC.H.3.4.4, SC.H.3.4.5, SC.H.3.4.6
- 08.0 DISCUSS EMPLOYMENT OPPORTUNITIES IN THE FIELD OF TECHNOLOGY--The student
will be able to:

- 08.01 List 10 different types of employment opportunities available in the technology field (e.g., systems analyst, operator, repair specialist, salesperson, web page designer). LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 08.02 Prepare and deliver an oral report on one of the jobs available including necessary education and training, pay, positions available, advancement opportunities. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 08.03 Interview individuals currently employed in the technology field. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4
- 08.04 Create an electronic resume that could be used to apply for a technology-related position. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4
- 09.0 Demonstrate Knowledge of Telecommunications--The student will be able to:
- 09.01 Identify the basic functions of telecommunications. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 09.02 Define and describe local area networks (LANs). LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 09.03 Define and describe wide area networks (WANs). LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 09.04 Define and describe electronic mail (e-mail) capabilities and functions. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 09.05 Define and describe facsimile (FAX). LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 09.06 Define and describe voice messaging. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 09.07 Define and describe networking cabling requirements. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 09.08 Discuss the emergence of the Internet and electronic bulletin boards as means of transmitting information. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5
- 09.09 Describe the process for arranging a teleconference. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5

10.0 **IDENTIFY LEGAL AND ETHICAL ISSUES RELATED TO TECHNOLOGY IN THE WORKPLACE**--The student will be able to:

- 10.01 Discuss the impact of technology and related trends on society and the environment. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5, LA.D.2.4.5, SS.B.1.4.4, SS.B.2.4.1, SC.H.2.4.1, SC.H.2.4.2, SC.H.3.4.1, SC.H.3.4.2, SC.H.3.4.3, SC.H.3.4.4, SC.H.3.4.5, SC.H.3.4.6
- 10.02 Identify ethical issues resulting from technological advances (e.g., hacking, computer viruses, copyright infringement). LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5, SC.H.1.4.7
- 10.03 Discuss copyright laws and their impact on technology. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, LA.C.3.4.1, LA.C.3.4.2, LA.C.3.4.3, LA.C.3.4.4, LA.C.3.4.5, LA.D.2.4.6
- 10.04 Research ways to promote confidentiality for messages transmitted via technology. LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4
- 10.05 Participate in a group presentation discussing legal and ethical issues pertaining to the use of technology in the workplace (e.g., personal privacy, security). LA.A.1.4.3, LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3, LA.B.2.4.1, LA.B.2.4.2, LA.B.2.4.3, LA.B.2.4.4, SC.H.1.4.7, SC.H.3.4.5, SC.H.3.4.6