Arkansas CTE

Technology Design and Applications: Grades 9, 10, 11, 12

Adopted 2013

Project Management

1.1 Identify the critical factors of project management.

1. Define the common components of project management: integration, scope, time, cost, quality, resources, communication, risk, and procurement. 1.1.1
2. Define the common processes of project management: initiating, planning, executing, monitoring, and closing. 1.1.2

1.2 Investigate current and emerging productivity, collaboration and delivery methods

1. Evaluate online resources and software used in business/industry. 1.2.1
2. Examine industry certifications/qualifications. 1.2.2

1.3 Describe appropriate and responsible behavior in the classroom and the workplace.

1. Examine ethical situations encountered in the workplace. 1.3.1
2. Explain intellectual property and copyright as they apply to computing. 1.3.2

Tools for project-based learning using productivity software

2.1 Explain the purposes and uses of tables

1. Examine various table formats. 2.1.1
2. Discuss the software options for creating a table. 2.1.2
3. Discuss and design a complex table. 2.1.3

2.2 Explain the purposes and uses of forms

1. Examine existing forms used in business/industry. 2.2.1
2. Discuss the software options for creating a form. 2.2.2
3. Discuss the design and formatting of forms. 2.2.3

2.3 Explain the purpose of a table of contents and an index

Skip to main content

1. Examine the layout of existing tables of contents and indexes. 2.3.1
2. Discuss the software options for creating a table of contents or an index. 2.3.2

3. Discuss the design and formatting of tables of contents and indexes. 2.3.3

2.4 Examine acceptable formats for research projects

1. Identify different formatting guidelines for research papers and presentations. 2.4.1
2. Format sources for a research project. 2.4.2

2.5 Examine advanced spreadsheet features

1. Examine the formatting features of a professional spreadsheet. 2.5.1
2. Examine the appropriate use of charts. 2.5.2
3. Implement mathematical functions and special formatting elements using IF, PMT, LOOKUP, and conditional formatting. 2.5.3
4. Explain the benefits of using macros. 2.5.4
5. Examine how filters are used to extract data. 2.5.5

2.6 Examine the resources for creating presentations

1. Discuss the software options for creating presentations. 2.6.1
2. Investigate types of media to include in a presentation: video, music, hyperlinks, narration and sound effects. 2.6.2
3. Examine components of a professional presentation. 2.6.3
4. Identify methods for delivering professional presentations. 2.6.4

2.7 Examine the resources for creating professional websites

1. Identify the options for developing and publishing a professional website. 2.7.1
2. Examine the features of a website. 2.7.2
3. Discuss design considerations and planning steps in developing an effective website. 2.7.3
4. Construct a multi-page website. 2.7.4

Project-based Learning

3.1 Apply the basic concepts of productivity software

1. Examine career choices and required employment documents. 3.1.1
2. Examine materials related to business activities. 3.1.2
3. Develop a research project. 3.1.3