Information Technology Career Cluster
Digital Design
Course Number: 11.45100

Course Description:
Using web design as the platform for product design and presentation, students will create and learn digital media applications using elements of text, graphics, animation, sound, video and digital imaging for various format. The digital media and interactive media projects developed and published showcase the student skills and ability. Emphasis will be placed on effective use of tools for interactive multimedia production including storyboarding, visual development, project management, digital citizenship, and web processes. Students will create and design web sites that incorporate digital media elements to enhance content of web site.

Various forms of technologies will be used to expose students to resources, software, and applications of media. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are enhanced in this course to prepare students to be college and career ready. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organization, Future Business Leaders of America (FBLA), are integral components of the employability skills standard for this course.

Digital Design is the second course in the Web and Digital Design pathway in the Information Technology cluster. Students enrolled in this course should have successfully completed Introduction to Digital Technology and Fundamentals.

Course Standard 1

IT-DD-1
Demonstrate employability skills required by business and industry.
The following elements should be integrated throughout the content of this course.

1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.
1.2 Demonstrate creativity with multiple approaches to ask challenging questions resulting in innovative procedures, methods, and products.
1.3 Exhibit critical thinking and problem solving skills to locate, analyze, and apply information in career planning and employment situations.
1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.
1.5 Apply the appropriate skill sets to be productive in a changing, technological, and diverse workplace to be able to work independently, interpret data, and apply teamwork skills.
1.6 Present a professional image through appearance, behavior, and language.
**Course Standard 2**

**IT-DD-2**
Research, explain, and summarize current state of the web, functions of the web, and future trends emerging of the web.

2.1 Compare and contrast web browsers use, function, and purpose for target audience.
2.2 Describe the impact mobile technology has on the web.
2.3 Describe how Web 2.0 technologies, plug-ins, and other web based utilities can enhance the user's experience.
2.4 Describe the impact of web/internet technologies in daily life.

**Course Standard 3**

**IT-DD-3**
Identify logistical, ethical, and legal issues related to digital media and apply concepts to use of text, graphics, animation, sound, video, and digital images in digital products.

3.1 Research the privacy, legal and ethical issues of digital media ensuring to meet the W3C standards and web accessibility requirements for completed digital products including but not limited to copyright, digital rights management, piracy, trademark, open source, plagiarism, fair use, permission, creative commons license, etc.
3.2 Discuss the legal and ethical implications of using social media.
3.3 Demonstrate an understanding of security issues associated with the internet including but not limited to backing up files & cloud storage, e-commerce and collecting customer information, vendor tracking devices, hacking, and data security on a web site.

**Course Standard 4**

**IT-DD-4**
Develop a plan to create, design, and market a web site with digital content to a specific target market.

4.1 Demonstrate an understanding of the phases of web site or digital product development.
4.2 Identify concepts in usability for components of web site or digital product.
4.3 Construct a product development plan for a digital product to meet customer expectations.
4.4 Identify common marketing strategies for web sites for target market, including internet marketing and search engine optimization.
Course Standard 5

IT-DD-5
Explore and write using the various writing styles used on web sites and in digital content to get the intended message across.

5.1 Compare and contrast chunking versus paragraph writing styles noting the benefits of using each style within a website or presentation.
5.2 Demonstrate ability to write using inverted pyramid style of writing.
5.3 Research and debate the type of writing style that reaches different target audiences.

Course Standard 6

IT-DD-6
Identify and develop model digital products that reveal a professional layout and look by applying design principles to produce professional quality digital products.

6.1 Describe and identify graphical elements and the appropriate use of elements on a web site.
6.2 Explore and apply color principles to digital products.
6.3 Critique work samples for professional quality in look and layout based on design principles.
6.4 Explain the difference between graphic elements used in print media and online media.
6.5 Apply the concept of how graphics and text help establish a brand or product identity and explain meaning in presentation of graphic.
6.6 Analyze the look and layout of a website based on the first impression of content and page elements and describe.

Course Standard 7

IT-DD-7
Create and edit images and graphics.

7.1 Demonstrate appropriate image capturing techniques and sources.
7.2 Apply photographic composition techniques (e.g., rule of thirds, point-of-view, and framing) to taking pictures for use in media project.
7.3 Select proper and ethical image-capturing techniques (e.g., royalty-free images, fair-use guidelines).
7.4 Apply appropriate image and graphic editing techniques.
7.5 Use graphic-editing software to create and edit images for publications and presentations.
7.6 Understand and apply image composition techniques (e.g., resolution, anti-aliasing, and lighting).
7.7 Apply appropriate use of photo editing techniques (e.g., cropping, red eye, layers).
7.8 Select appropriate file type and resolution size for digital product use, editing, and storage.
7.9 Compare and contrast raster and vector graphics and editing programs.
7.10 Use a raster edit program to create and edit digital images and graphics.
7.11 Edit digital images to fit digital products.
7.12 Create digital images to align to marketing strategy and target audience.
7.13 Work within a vector editing program to create and edit digital images.

**Course Standard 8**

**IT-DD-8**
**Plan, produce, edit, and publish digital audio.**

- 8.1 Describe the current uses for audio on the web.
- 8.2 Explore online/offline options available for creating and editing audio files.
- 8.3 Identify differences between the common audio file types and their proper uses.
- 8.4 Explain why conforming to copyright laws is important (cutting down to acceptable length).
- 8.5 Explore options available for converting file types for publication on web sites and presentations.
- 8.6 Demonstrate ability to appropriately include audio in digital product.

**Course Standard 9**

**IT-DD-9**
**Plan, edit, produce, and post a multimedia-rich video project.**

- 9.1 Research and reveal how video can be used to enhance the message intended for an audience.
- 9.2 Explain importance and model use of storyboarding a video project.
- 9.3 Develop an equipment list in creating and making videos with novice users for a professional quality product.
- 9.4 Cite available software for creating videos ranging from free software to paid software, and online compared to downloaded software.
- 9.5 Model the use of avatars as digital video creation.
- 9.6 Demonstrate ability to edit videos including adding subtitles, special effects, and transitions.
- 9.7 Insert or embed a video on web site.

**Course Standard 10**

**IT-DD-10**
**Plan, produce, edit, and publish animations.**

- 10.1 Describe the current uses of animation in multimedia and web sites.
- 10.2 Explore tools available to create animations.
- 10.3 Create animations for use in web sites and multimedia productions.
Course Standard 11

IT-DD-11
Explore how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects, entrepreneurship development, and competitive events.

11.1 Explain the goals, mission, and objectives of Future Business Leaders of America.
11.2 Explore the impact and opportunities a student organization (FBLA) can develop to bring business and education together in a positive working relationship through innovative leadership and career development programs.
11.3 Explore the local, state, and national opportunities available to students through participation in related student organization (FBLA) including but not limited to conferences, competitions, community service, philanthropy, and other FBLA activities.
11.4 Explain how participation in career and technology education student organizations can promote lifelong responsibility for community service and professional development.
11.5 Explore the competitive events related to the content of this course and the required competencies, skills, and knowledge for each related event for individual, team, and chapter competitions.