



*Department of Teaching & Learning*  
*Parent/Student Course Information*

*Advanced Web Design*  
*(BE 6631)*  
*One Credit, One Year*  
*Grades 11 - 12*

*Counselors are available to assist parents and students with course selections and career planning. Parents may arrange to meet with the counselor by calling the school's guidance department.*

**COURSE DESCRIPTION**

Careers in web design and development are exploding and the technology is ever-changing as new devices for internet use emerge. HTML, CSS and JavaScript are the critical web coding languages taught in this course. Additionally, students learn user experience focused design, web industry standards and the “business” of the web. Numerous coding editors and web application software by Adobe including Dreamweaver and Photoshop are utilized. Artistic ability is not required but certainly beneficial for the design aspects of the class. In the second year, students will apply web coding skills in a variety of design projects to suit all types of devices: desktop computers, tablets and mobile phones. Using a simulation model of learning, students develop the skills to manage projects with a focus on meeting client needs. Industry-leading software is used throughout both years of the program. Qualified students will be eligible to sit for industry recognized certifications from CIW, Adobe and Microsoft.

**CERTIFICATION**

Students will prepare for nationally recognized certifications from CIW (Certified Internet Webmaster-Advanced HTML5 and CSS3).

**STUDENT ORGANIZATION**

The Future Business Leaders of America (FBLA) is the co-curricular organization for secondary Business and Information Technology students. The organization enhances occupational preparation for students by helping them attain the following goals: leadership skills; knowledge of the American enterprise system; self-confidence; improvement of home, business, and community; scholarship; citizenship; and career goals.

**PREREQUISITE**

Web Design Foundations

**OPTIONS FOR NEXT COURSE**

None

**REQUIRED STUDENT TEXTBOOK**

None

## COMPETENCIES FOR ADVANCED WEB DESIGN

### **Demonstrating Workplace Readiness Skills: Personal Qualities and People Skills**

- 001 Demonstrate positive work ethic.
- 002 Demonstrate integrity.
- 003 Demonstrate teamwork skills.
- 004 Demonstrate self-representation skills.
- 005 Demonstrate diversity awareness.
- 006 Demonstrate conflict-resolution skills.
- 007 Demonstrate creativity and resourcefulness.

### **Demonstrating Workplace Readiness Skills: Professional Knowledge and Skills**

- 008 Demonstrate effective speaking and listening skills.
- 009 Demonstrate effective reading and writing skills.
- 010 Demonstrate critical-thinking and problem-solving skills.
- 011 Demonstrate healthy behaviors and safety skills.
- 012 Demonstrate an understanding of workplace organizations, systems and climates.
- 013 Demonstrate lifelong-learning skills.
- 014 Demonstrate job-acquisition and advancement skills.
- 015 Demonstrate time-, task- and resource-management skills.
- 016 Demonstrate job-specific mathematics skills.
- 017 Demonstrate customer-service skills.

### **Demonstrating Workplace Readiness Skills: Technology Knowledge and Skills**

- 018 Demonstrate proficiency with technologies common to a specific occupation.
- 019 Demonstrate information technology skills.
- 020 Demonstrate an understanding of Internet use and security issues.
- 021 Demonstrate telecommunications skills.

### **Examining All Aspects of an Industry**

- 022 Examine aspects of planning within an industry/organization.
- 023 Examine aspects of management within an industry/organization.
- 024 Examine aspects of financial responsibility within an industry/organization.
- 025 Examine technical and production skills required of workers within an industry/organization.
- 026 Examine principles of technology that underlie an industry/organization.
- 027 Examine labor issues related to an industry/organization.
- 028 Examine community issues related to an industry/organization.
- 029 Examine health, safety and environmental issues related to an industry/organization.

### **Addressing Elements of Student Life**

- 030 Identify the purposes and goals of the student organization.
- 031 Explain the benefits and responsibilities of membership in the student organization as a student and in professional/civic organizations as an adult.
- 032 Demonstrate leadership skills through participation in student organization activities, such as meetings, programs and projects.
- 033 Identify Internet safety issues and procedures for complying with acceptable use standards.

### **Enhancing Project-Management Skills**

- 034 Identify components of project management.
- 035 Explain the impact of project management in information technology.
- 036 Apply the project-management cycle to a class project.

### **Designing and Creating Advanced Desktop-Published Projects**

- 037 Select appropriate software for a desktop-published project.
- 038 Apply principles of design, layout, and typography to an advanced desktop-published project.
- 039 Convert graphic elements and text to compatible formats for integration into publications.
- 040 Create a variety of specialized documents.
- 041 Analyze options and costs for printing a desktop-published project.

### **Designing and Creating Advanced Interactive Multimedia Projects**

- 042 Incorporate audio and visual elements into an interactive multimedia project.
- 043 Convert a publication to an interactive multimedia project.
- 044 Research the different types of interactive multimedia software available.

### **Examining Internet Technologies**

- 045 Relate networking essentials to Web site construction.
- 046 Describe the basic network types.
- 047 Identify key Internet protocols.
- 048 Explain Internet Protocol (IP) addresses and the domain naming system (DNS).
- 049 Evaluate Web site hosting options.

### **Designing and Creating Advanced Web Sites**

- 050 Create an advanced website by applying accepted design principles.
- 051 Critique an advanced Web site according to accepted Web site design principles.
- 052 Examine new and emerging trends in Web site design.
- 053 Create an advanced Web site, using Web site design software and/or programming language.
- 054 Use client-side and server-side scripting to create database-driven Web sites and applications.
- 055 Incorporate Search Engine Optimization (SEO) techniques in Web sites.
- 056 Proofread and edit an advanced Web site.
- 057 Test an advanced Web site.
- 058 Describe the process for publishing a Web site.
- 059 Demonstrate publishing, updating, and maintaining an advanced Web site.
- 060 Assess the effects of new and emerging technologies on Web use.
- 061 Identify the basic components of an e-commerce Web site.
- 062 Explore the use of communication tools.

### **Complying with Laws and Professional Ethics**

- 063 Comply with copyright laws when creating advanced desktop-published, multimedia, and Web site design projects.
- 064 Demonstrate avoidance of unethical/inappropriate use of elements in advanced projects.
- 065 Comply with licensing agreements pertaining to software usage.
- 066 Demonstrate procedures to guard against computer crimes.
- 067 Describe design of Web sites for accessibility and accommodation of persons with special needs.

### **Relating Classroom Applications to Business and Industry**

- 068 Describe new and emerging trends in desktop publishing, interactive multimedia, and Web technologies.
- 069 Explain the importance of desktop publishing, interactive multimedia, and Web technologies to business and industry.
- 070 Create a desktop publishing, interactive multimedia, and/or Web site design team project for a business/industry client.
- 071 Deliver a presentation according to the principles of effective communication.
- 072 Critique a presentation in accordance with the components of effective presentations.

### **Preparing for Industry Certification**

- 073 Describe the process and requirements for obtaining industry certifications related to the Advanced Design, Multimedia, and Web Technologies course.
- 074 Identify testing skills/strategies for a certification examination.
- 075 Demonstrate ability to successfully complete relevant practice certification examinations.
- 076 Successfully complete an industry certification examination representative of skills learned in this course (e.g., MOS, IC3, NOCTI).

### **Developing Employability Skills**

- 077 Identify job opportunities in the digital media industry.
- 078 Update a professional portfolio.
- 079 Deliver an oral presentation of a professional portfolio.
- 080 Investigate new and emerging technological trends in the workplace.

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Produced by the Department of Media and Communications for the  
Department of Teaching and Learning.  
For further information please call (757) 263-1070.

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(Revised August 2018)