Work-Based Learning - WD

Level: 4
Career Cluster: Digital Technology
Program: Information Technology
Pathway(s): Web Design

Course Catalog Description

This course provides students with advanced, career-connected experiences in web design and development through authentic projects and work-based learning activities. Students apply technical, creative, and professional skills to prepare for postsecondary education, internships, and entry-level careers in digital technology fields.

Summary

This course provides students with authentic, career-connected experiences that extend both their technical expertise and professional readiness in web design and development. Building on prior coursework, students engage in advanced learning through real or simulated workplace projects that require them to apply industry-relevant practices in user experience design, interface development, front-end coding, testing, debugging, project workflow, and client communication. Students strengthen their ability to plan, build, revise, and present web-based solutions while managing deadlines, responding to feedback, and demonstrating professional expectations commonly found in digital technology careers. The course emphasizes collaboration, problem-solving, adaptability, and independent work habits as students participate in experiences that mirror real-world web development environments. Students may contribute to client-based projects, school or community web initiatives, portfolio development, and work-based learning activities that help connect classroom knowledge to practical application. By the end of the course, students will be better prepared for postsecondary education, internships, industry-aligned credentials, and entry-level opportunities in web design, front-end development, user experience, and related digital technology fields.

Notes

Compared with the earlier general course, this updated document is now specifically tailored to the Web Design pathway and provides a more detailed, course-specific structure for teaching and assessment. The previous course emphasized broad work-based learning requirements such as training plans, safety agreements, documentation of hours, supervisor evaluations, and general career reflection, while the new version organizes learning into clearly defined units focused on web design and development skills, including professional workflow, user experience design, implementation, testing, client-based projects, industry readiness, and portfolio development. This revision also expands the course description, clarifies student learning outcomes, strengthens the connection to authentic web development tasks, and adds more specific examples of real-world experiences, end-of-course outcomes, and assessment components that better align the course to advanced pathway expectations in web design.

Student Learning Outcomes

1. Career Launch & Industry Preparation

Objective: *Prepare students for career pathways and success in work-based learning environments.*

- Analyze careers in web design, front-end development, and UX/UI
- Identify personal strengths and interests in web development areas
- Develop resume, online portfolio, and professional profile
- Create a Work-Based Learning Plan with defined goals
- Demonstrate understanding of professional expectations in IT environments

Real-World Experience Ideas

- Conduct an informational interview with a web designer or developer.
- Create a mock professional portfolio and resume for an entry-level role.
- Attend a virtual industry webinar and summarize key takeaways.
- Compare job postings to identify common entry-level web skills.

2. Professional Practice & Web Development Workflow

Objective: *Strengthen professional practice, collaboration, and workflow management in web development.*

- Apply structured development processes (design → development → testing → deployment)
- Demonstrate collaboration and communication in development teams
- Follow project timelines, requirements, and technical specifications
- Use version control or file management systems appropriately

Real-World Experience Ideas

- Simulate a team sprint with assigned roles, deadlines, and check-ins.
- Use a shared project tracker to manage tasks for a class web project.
- Participate in a stand-up meeting to report progress and blockers.
- Write a brief project update email for a teacher or client.

3. User Experience (UX) and Interface Design

Objective: *Apply user-centered design principles to create effective, accessible digital experiences.*

- Analyze user needs and define project requirements
- Design wireframes, mockups, and layouts
- Apply accessibility and usability best practices
- Evaluate design effectiveness based on audience needs

Real-World Experience Ideas

- Interview potential users and create a simple persona for a website project.
- Test a prototype with peers and revise the design based on feedback.
- Review a live website and suggest UX improvements for a target audience.
- Create an accessibility checklist and apply it to a design draft.

4. Web Development & Implementation

Objective: *Develop technical skills to build, organize, and implement functional web solutions.*

- Build websites or applications using front-end technologies
- Apply styling, layout, and interactivity features
- Manage assets, files, and project structure
- Integrate data or interactive components where applicable

Real-World Experience Ideas

- Build a small website for a school club, event, or classroom need.
- Publish a working prototype and document the implementation process.
- Adapt a project to meet a client request or branding guideline.
- Document file organization and naming conventions for handoff.

5. Testing, Debugging, and Optimization

Objective: *Improve quality, performance, and usability through testing, debugging, and revision.*

- Test and debug websites or applications
- Analyze performance, usability, and functionality
- Implement revisions based on feedback and testing
- Ensure responsiveness across devices and platforms

Real-World Experience Ideas

- Run cross-device tests and record issues in a bug log.
- Present revisions made after usability or client feedback.
- Use a testing checklist to verify links, forms, and navigation.
- Compare page load speeds before and after making improvements.

6. Client-Based Web Projects

Objective: *Apply core skills in authentic client-based projects that mirror workplace expectations.*

- Develop web solutions for real clients
- Interpret client requirements and translate them into design solutions
- Present and justify design and technical decisions
- Deliver completed web products

Real-World Experience Ideas

- Complete a client intake meeting and draft a project scope.
- Deliver a finished website mockup or prototype to a real or simulated client.
- Present design revisions during a simulated client check-in meeting.
- Write a short client summary explaining completed work and next steps.

7. Advanced Work-Based Learning (Toward Industry Readiness)

Objective: *Build independence, professionalism, and readiness for postsecondary study or employment.*

- Demonstrate independence in development tasks
- Meet professional standards for quality and deadlines
- Apply problem-solving to real-world development challenges
- Evaluate readiness for postsecondary or employment

Real-World Experience Ideas

- Shadow a mentor or internship supervisor during a development task.
- Complete an independent task under professional-style deadlines and quality expectations.
- Track time spent on tasks using a simple professional timesheet.
- Reflect on feedback from a mentor and set one improvement goal.

8. Portfolio Development & Project

Objective: *Showcase learning through a polished portfolio and a culminating web development project.*

- Develop a professional web design portfolio (live sites, links, GitHub)
- Document projects with explanations of design and technical decisions
- Complete a comprehensive web development project
- Present and defend project outcomes
- Reflect on learning and career goals

Real-World Experience Ideas

- Present a capstone website portfolio to a review panel or community partner.
- Write a reflection connecting completed projects to postsecondary or career goals.
- Create a portfolio rubric and self-assess the final presentation.
- Update portfolio pieces based on reviewer or community partner feedback.

Additional Information

End-of-Course Outcomes

- Design and develop responsive, user-centered websites or web applications
- Apply front-end development skills (HTML, CSS, JavaScript or equivalent tools)
- Plan, build, test, and deploy web solutions using structured workflows
- Apply UX/UI principles to improve usability and accessibility
- Collaborate effectively in team-based development environments
- Demonstrate professional workplace behaviors including communication and time management
- Develop and present a professional web design portfolio
- Evaluate postsecondary and career pathways in web design and development

WBL Experience Options (Learning THROUGH → AT Work)

- Client-based website or web app development
- Internship with IT, marketing, or business teams
- Industry mentorship or collaborative web project
- School-based enterprise (school website, event promotion, digital content)
- Freelance or supervised entrepreneurship (web design services)
- Open-source or community website contributions

Assessment Structure

- Work-Based Learning Plan
- Client Website Deliverables
- Reflection Logs
- Code Documentation / Repository
- Portfolio (live websites + project explanations)
- Mentor / Employer Feedback
- Project & Presentation