Domain 1: User Interface Design Projects

1.1 Describe how Web user interfaces have evolved as more devices access the Internet.

1.2 Explain current trends in user interface design, such as mobile devices and responsive design techniques.

1.3 Explain the responsibilities and tasks of Web design team members.

1.4 Describe the basic tasks of Web design project management, including project management phases, project documentation and communication.

1.5 Describe the advantages of Web design project collaboration.

1.6 List the benefits of creating a personal Web design project portfolio.

1.7 Start planning a fictitious Web-based business, including drafting a goals statement (types of customers, feel of work, mission statement) and creating a design team.

Domain 2: User Interface Design Process

2.1 List steps in a basic Web design project's development process, including bottom-up approach, Agile approach, vision, strategy, specifications, mindmapping, site map, wireframe.

2.2 Describe the Agile Web development approach, including streamlining project workflow, eliminating bottlenecks, focusing on value, facilitating changes in requirements.

2.3 Define a project vision for a Web site or mobile app interface.

2.4 Explain the user interface design process, from vision to strategy.

2.5 Define the specifications for designing a Web site.

2.6 Discuss considerations for site publishing, including FTP uploads, mobile apps, publishing tools.

2.7 Describe various choices and challenges of site hosting, including security, costs.

2.8 Describe the security maintenance required for Web sites.

2.9 List guidelines for ethical Web design, including comparing unethical vs. illegal.

2.10 Apply the mindmapping process to user interface design projects.

2.11 Determine metaphors for a user interface design.

2.12 Define the purpose of creating word lists and mood boards in relation to the Web design process. Create a word list for your Web site using the two-step process and mood board using the eight-step process.

2.13 Create a site map for a fictitious business.

Domain 3: User Centered Web Design

3.1 Explain the optimal relationship between Web users and site design, including customers vs. contributors, attracting and retaining users, needs-driven design, and scenario-based design.

3.2 Identify Participatory Design and its involvement with all stakeholders.

3.3 Explain Scenario-based design and when it is used.

3.4 Describe the importance of Cognitive Psychology in relation to Web Design.

3.5 Identify the terms "personas" and "usability" to understand your audience.

3.6 Explain use case and use case scenarios.

3.7 Describe the purpose and importance of site usability testing.

3.8 Given a scenario, determine how to improve site accessibility.

3.9 Explain how to improve site accessibility for mobile devices.

Domain 4: User Interface Design Principles

4.1 Apply user interface design principles to Web site design.

4.2 Describe CARP (contrast, alignment, repetition, proximity) and how it is important to UI design principles.

4.3 Describe ERBU (emphasis, rhythm, balance, unity) and how it is important to UI design principles.

4.4 Explain branding considerations in user interface design.

4.5 Given a scenario, describe and resolve legal issues in Web design.

Domain 5: Color, Typography, Layout, and Wireframing

5.1 Describe the importance of color usage in user interface design.

5.2 Consider font choices and challenges in user interface design.

5.3 Identify elements of effective Web page layout (e.g., content, navigation, space), and discuss variables that may apply to specific situations or site types. Given a scenario, determine an effective Web page layout.

5.4 Create a Web page wireframe for a fictitious business.

5.5 Explain page layout techniques when creating user interfaces for mobile devices.

Domain 6: Designing a Basic Web Page User Interface

6.1 Create a simple Web user interface using best practices.

6.2 Identify the basics of HTML, CSS and responsive design.

6.3 Apply a default page template to a Web site.

6.4 Apply a set of custom page templates to a Web site.

6.5 Use spelling and grammar tools to review site text.

Domain 7: Web Site Navigation Concepts

7.1 Explain why navigation is critical to interface design, including user-centered design concepts, and "mystery meat" navigation.

7.2 Identify best practices for Web site structure, URLs and file names. Create a site navigation system.

7.3 Describe familiar conventions used in site navigation, including breadcrumb trails, logos, menus, visited links, home page, naming conventions.

7.4 Compare primary and secondary navigation elements in a Web site.

7.5 Identify the benefits of guided site navigation.

7.6 Given a scenario, create a navigation hierarchy for a Web site.

7.7 Given a scenario, create a navigation action plan for a Web site.

Domain 8: Designing an Interactive Web Page User Interface

8.1 Identify why prototyping is so important.

8.2 Explain common patterns of user activity on interfaces, including breadcrumbs, progressive disclosure, and pattern libraries.

8.3 Optimize the "look and feel" for a site.

8.4 Identify the importance of forms for user input within a user interface using best practices.

8.5 Explain how a form in a Web page should be processed to a database.

8.6 Identify an appropriate framework for a Web site.

8.7 Describe how UI library elements are used to create a Web site.

8.8 Identify a content management system to create a Web site.

8.9 Identify templates and themes.

8.10 Compare various site publishing tools, including FTP, HTTP and vendor-specific tools.

8.11 Choose a Web host and domain name for your site.

Domain 9: User Interface Design and SEO Strategies

9.1 Test a user interface, including HTML5 validation, quality assurance, security, focus groups. Validate the site code.

9.2 Explain the tasks required to properly maintain a Web site.

9.3 Define search engine optimization (SEO), including the relationship between SEO and Internet marketing.

9.4 Explain the relationship between written Web site content and SEO.

9.5 Given a scenario, explain SEO strategies for mobile apps and data.

9.6 Describe how metadata is used in SEO, including the <meta> tag, document identification, search engines, delayed file change.