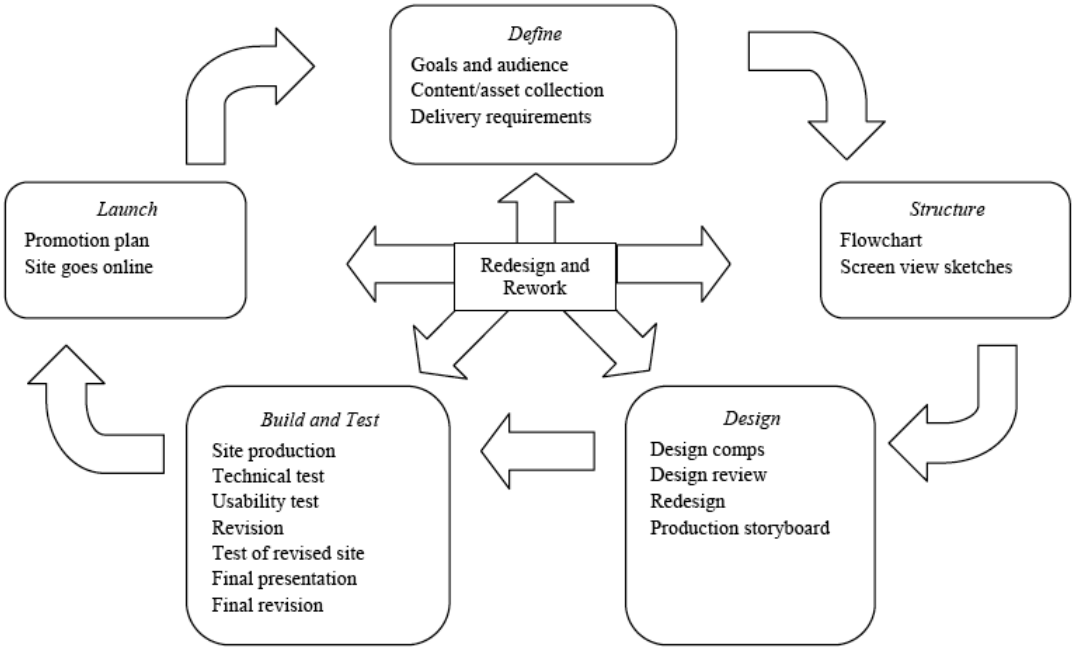
Web Mastering Sessions I and II Scope and Sequence

WEB MASTERING *Foundations of Web Design or Web-mastering* is a two-semester, project-based curriculum that teaches

digital communication skills in the context of the professional web design and development process, using Adobe web tools. *Web Design or Web mastering* develops four key skill areas:

- Project management and collaboration
- Design
- Research and communication
- Professional web-authoring tools

Students develop these key skills in a spiral—each project adds more challenging skills onto the foundation and proficiencies. Web Design addresses each of these areas, using a project-based approach. Each project has phases that follow a design and development process, from project planning to evaluation and launch. To simulate a professional work environment, students gradually migrate their design work from an individual process to a group process. Design and technical work by its very nature is iterative, so the projects contain activities that require students to evaluate and then redesign and rework their communications. Specific attention has been paid to developing concepts and principles for thorough, effective design.



This course focuses on scripting, developing searching strategies, publishing skills, and serving information on a web server. Students enrolled in this course will be computer literate and have the basic electronic productivity tools. A prerequisite for this course is grades 6-8 Technology Applications Knowledge and Skills. Students leaving this class will be skillful in designing, creating and publishing interactive and dynamic web sites (web pages) using various text editors and HTML codes, WYSIWYG applications. Moreover, they will demonstrate advanced knowledge in creating and producing animations and videos/movies to be integrated in their web pages. Ultimately, the goal of this course is to prepare students to become productive members of the information age in which we live today.

Semester I

The first semester of *Webmastering* develops skills that lay the foundation for producing web-ready communications: graphic design principles, storyboards, web development, shared project management skills such as interviewing and project scheduling, peer review, and redesign. Project activities focus on developing effective communications that can be deployed on the web. Students develop a variety of graphical images, an electronic portfolio, and a client website. A great deal of flexibility is implied in the curriculum.

The key skills emphasized in this semester are:
• "Soft" skills such as interviewing and responding to feedback
• Designing a website for clients
• Problem solving that helps support multiple perspectives
• Reflection about the design process and effective communication
• Peer teaching and evaluation in a collaborative environment
• Technical web publishing
In the first semester, students use HTML, XHTML, DHTML, Adobe CS3 or any other text editors and image editing software to develop static and interactive graphics. They
use. This content prepares students for the Adobe Certified Associate, Web Communication using Adobe Dreamweaver CS3 examination.

Semester I is composed of 2 Terms with each term covering 9 weeks. Copyright laws and Fair Use Guidelines will be discussed at the onset of this semester. Additionally, image manipulation and compositing are taught to be used in the web pages they will design and create using HTML codes. Students will understand and analyze the difference(s) between HTML and XHTML to prepare for the WWW future standards. DHTML and Java scripting will be covered so students will be enabled to produce dynamic and interactive web pages. Before the end of semester I, Flash Interface and working environment will be introduced and Flash basic features will be covered.

	Project Management	**Design**	**Research and Communication**	**Technical**
Unit 1: Graphic design using Adobe Fireworks CS3 *Focus:* Principles of good design Individual and peer review process Optimization and graphic manipulation in Fireworks *Time:* 12–18 hours (3–4 weeks)	Planning a scan Creating a storyboard Following standard copyright practices for text Reviewing and redesigning images Planning graphics based on needs and audience	Optimizing JPEGs and GIFs Editing images Using composition, contrast, and balance Applying the rule of thirds Creating emphasis Applying proximity and patterns Using line Using shape Using unity and color Using typography Design and create original page banner	Understanding graphics types Understanding copyright issues Collecting and analyzing audience needs and purpose to inform design Communicating with peers to review and redesign images Present and communicate design principles	*General* Scanning photographs, objects, and drawings Using a digital camera *Fireworks* Understanding panel elements and structure Creating text Setting export window options Creating effects Using drawing tools
Unit 2: Electronic portfolios using Adobe Dreamweaver *Focus:* Electronic portfolio design Website storyboards Quality assurance and redesign techniques Usability and accessibility *Time:* 12–18 hours (3–4 weeks)	Managing files and using file-naming conventions Designing for usability and accessibility Managing a quality assurance test Factoring visitor response into redesign Synthesizing content based on reflection	Investigating and incorporating color and layout consistently Applying principles of user interface design Considering screen size Designing consistent website pages Rebuilding web pages based on visitor feedback	Evaluating and analyzing content validity Evaluating and analyzing website navigation Designing a quality assurance test Advocating and practicing legal use of images Technical skills	*Dreamweaver* Using options on panels Creating a root folder and site Creating pages Using tables to lay out content Using Design view Inserting images and text Using relative and absolute links Using alternative text (Alt text) Importing interactive images from Fireworks Publishing a website *Fireworks* Building buttons Exporting buttons as HTML

I. Content Semester 1 (Terms 1 and 2)

Access and navigate the web
Learn web scripting
Development strategies
Design strategies
Web publishing skills
Hypertext Markup Language (HTML, XHTML, DHTML)
Java Scripting
Web Page editors
Web Server Management
Publishing Skills

II. Skills to beTaught

1. creating, manipulating /editing images using image editing software (such as: Creative Suite 4, Photoshop, Fireworks, Illustrator, InDesign etc…)

2. Creating, designing web pages using HTML, XHTML, DHTML codes

3. Developing and acquiring knowledge and techniques in navigating and searching the World Wide Web for useful information

4. Understanding Java Scripting to enhance web pages

5.Designing and creating interactive images and movies or animations using any animation software such as Flash, Fireworks, Photoshop, CS 4 etc…

III. Setting project requirements

1 Identify the purpose, audience, and audience needs for a website.
2 Identify web page content that is relevant to the website purpose and appropriate for the target audience.
3 Demonstrate knowledge of standard copyright rules (related terms, obtaining permission, and citing copyrighted material).
4 Demonstrate knowledge of website accessibility standards that address the needs of people with visual and motor impairments.
5 Follow design specifications.
6 Understand project management tasks and responsibilities.
7 Follow a flowchart and storyboards to create web pages and a site map (site index) that maintain the planned website hierarchy
8 Add text to a web page.
Insert images and apply alternative text on a web page.
9 Link web content, using hyperlinks, e-mail links, and named anchors.
10 Insert rich media, such as video, sound, and animation in Flash format.
11 Insert navigation bars, rollover images, and buttons created in Adobe Fireworks on a web page.
12 Build image maps.
13 Import tabular data to a web page.
14 Import a Microsoft Word or Microsoft Excel document to a web page.
15 Create forms.
16 Set and modify document properties.
17 Organize content by using tables.
18 Organize web page layout with absolutely-positioned div tags and CSS styles.
19 Modify text and text properties.
20 Modify images and image properties.
21 Modify Flash movies on a web page.

22 Create web page templates.
23 Use basic HTML tags to set up an HTML document, format text, add links, create tables, and build ordered and unordered lists.
24 Add head content to make a web page visible to search engines.
25 Use CSS to implement a reusable design.

Semester II Web (Terms 3 and 4)

Second semester projects

The second semester of *Web Mastering* builds on student design and development skills by focusing on rich media development as well as website design and development. Students continue to work individually or on teams and produce rich media communications such as digital narratives and rich media elements of client websites. They focus on effective rich media design, multimedia storyboarding, design specifications, and iterative development with clients. They produce design documents and visual components that clients review. They develop rich media designs that solve specific communication challenges. They build technical skills to address client needs.
The key skills emphasized in this semester are:

• "Soft" skills such as interviewing and responding to feedback
• Communication with clients, using design documents or specifications
• Design and redesign according to client specifications
• Technical multimedia skills such as film effects and transitions
• Design solutions, including effective navigation systems and digital narratives
In the second semester, students learn Adobe Flash CS3 and Dreamweaver to apply design solutions requiring rich media and interactivity. This content prepares students for the Adobe Certified Associate, Rich Media Communication using Adobe Flash CS3 examination.

In Semester II, Flash 8 advanced features will be covered as a continuation of the Flash unit introduced at the end of Semester I. Additionally, Internetworking fundamentals will be covered will be introduced and discussed thoroughly to give students a general idea of how the **Internet** and the **World Wide Web** work, including but not limited to various vocabulary words such as**: LAN, WAN, Network, networking, IP, IP addresses, TCP, TCPIP, Internet, World Wide Web, ISOC, ICCAN, NIC, OSI Model (Open System Interface)**

1. **Internet working Fundamentals**
2. **designing and creating interactive and dynamic web pages (Resume')**
3. **Create interactive web pages using Adobe Flash (Advanced features of Flash)**
4. **Design business oriented web site using Dreamweaver** (basic and advanced features of this program will be utilized and applied)
5. **Explore Blogging**

I. Introduce Internetworking Fundamentals
Continue Flash lessons and projects (advanced features)

II. Understanding the Adobe Dreamweaver Interface

Specific Mini Lessons to cover are:

1 Identify elements of the Dreamweaver interface.
2 Use the Insert bar.
3 Use the Property inspector.
4 Use the Assets panel.
5 Use the Files panel.

Adding content

1. Define a Dreamweaver site.
2. Create, title, name, and save a web page.
3. Follow a flowchart and storyboards to create web pages and a site map (site index) that maintain the planned website hierarchy
4. Add text to a web page.
5. Insert images and apply alternative text on a web page.
6. Link web content, using hyperlinks, e-mail links, and named anchors.
7. Insert rich media, such as video, sound, and animation in Flash format.
8. Insert navigation bars, rollover images, and buttons created in Adobe Fireworks on a web page.
9. Build image maps.
10. Import tabular data to a web page.
11. Import a Microsoft Word or Microsoft Excel document to a web page.
12. Create forms.

Organizing and modifying content

1. Set and modify document properties.
2. Organize content by using tables.
3. Organize web page layout with absolutely-positioned div tags and CSS styles.
4. Modify text and text properties.
5. Modify images and image properties.
6. Modify Flash movies on a web page.
7. Create web page templates.
8. Use basic HTML tags to set up an HTML document, format text, add links, create tables, and build ordered and unordered lists.
9. Add head content to make a web page visible to search engines.
10. Use CSS to implement a reusable design.

Evaluating and maintaining a site

1. Conduct basic technical tests.
2. Identify techniques for basic usability tests.
3. Present web pages to others (such as team members and clients) for feedback and evaluation.
4. Identify methods for collecting site feedback.
5. Manage assets, links, and files for a site.
6. Publish and update site files to a remote server.
7. Planning site design and page layout.
8. Demonstrate knowledge of best practices for designing a website, such as maintaining consistency, design, using standard fonts and web-safe colors.
9. Produce website designs that work equally well on various operating systems and browser versions/configurations.
10. Demonstrate knowledge of page layout design concepts and principles.
11. Identify basic principles of website usability, readability, and accessibility.
12. Demonstrate knowledge of flowcharts and storyboards to create web pages and a site map (site index) that maintain the planned website hierarchy.
13. Communicate with others (such as peers and clients) about design and content plans.