COURSE OUTLINE

Course Number **DMA 144**	**Course Title** **Internet Tools and Techniques**	**Credits** **3**
Hours: **Lecture/Lab/Other** 1 / 4 / 0	**Co- or Pre-requisite** None	**Implementation** Spring 2022

Catalog description:

Introduction to the tools and techniques used to create social media posts, commercial websites, and internet applications. Topics include the history of the Internet, accessibility and ownership on the Internet, information architecture and content strategies, and the tools used in social media, creating web pages. Students will research, analyze, diagram, and create Internet applications and websites.

General Education Category: **Goal 4: Technology or Info** **Literacy**	**Course coordinator:** **Mauro Zamora ext. 3340 zamoram@mccc.edu**

Required texts & Other materials:

Sketch book with gridded lines (any-size)
Flash drive with 32-64 GB of space
Readings provided by instructor

Open online resources
Mozilla MDN Web Docs - https://developer.mozilla.org/en-US/
W3School – World Wide Web School website - https://www.w3schools.com

Free Online image and icon databases
Pexels – free stock photography website – https://www.pexels.com
Unsplash – free stock photography website – https://unsplash.com
Icon Icon – free icon libraries – https://icon-icons.com
Additional open online resources

Course Student Learning Outcomes (SLO):

Upon successful completion of this course the student will be able to:

1. Identify and describe the software and hardware components that form the foundation for the Internet [Supports ILG # 1, 4, 11; PLO # 6]

2. Collect information to analyze different types of information systems through web analytics, user surveys and usability testing using spreadsheet software [Supports ILG # 1, 10, 11; PLO # 6]

3. Write briefs describing the processes that a specific information system uses to present information using word processing software [Supports ILG # 1, 10; PLO # 6]

4. Construct diagrams defining the organizational structures of the Internet using prototyping software [Supports ILG # 4, 10; PLO # 3, 4, 7]

5. Build interactive systems to present information accessible through the Internet using HTML and CSS [Supports ILG # 4, 10, 11; PLO # 1, 2, 3, 4, 7]

6. Describe the importance of historical events in shaping the history of the Internet [Supports ILG # 1; PLO # 6]

7. Debate the ethical implications of how information is structured and accessed using the Internet [Supports ILG # 1, 9; PLO # 6]

Course-specific Institutional Learning Goals (ILG):

Institutional Learning Goal 1. Written and Oral Communication in English. Students will communicate effectively in both speech and writing.

Institutional Learning Goal 4. Technology. Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals.

Institutional Learning Goal 9. Ethical Reasoning and Action. Students will understand ethical frameworks, issues, and situations.

Institutional Learning Goal 10. Information Literacy: Students will recognize when information is needed and have the knowledge and skills to locate, evaluate, and effectively use information for college level work.

Institutional Learning Goal 11. Critical Thinking: Students will use critical thinking skills understand, analyze, or apply information or solve problems.

Program Learning Outcomes for Digital Media Arts (PLO)

1. Understand the pre-production process, for applied design in the areas of animation, multi-media, web design, and digital asset distribution on the internet.

2. Understand and apply storytelling principles applicable in the areas of animation, multi-media, web design, and digital asset distribution on the internet.

3. Produce and manage digital assets for various production scenarios including animation, multi-media, web design.

4. Produce and manage two-dimensional and three-dimensional digital assets containing change over time and throughout pagination using professional software.

5. Use professional 3-D modeling, animation, prototyping, and text editor software applications.

6. Develop and present ideas in both written and oral formats.

7. Use professional software applications to design websites with accessible design and content.

8. Use design principles to develop websites that communicate effectively.

9. Create a professional portfolio to serve in the pursuit of further education or employment.

Units of study in detail – Unit Student Learning Outcomes:

Unit I **History of the Internet** [Supports Course SLO # 6, 7]
Learning Objectives
The student will be able to:
- Describe the history and technological events that produced the World Wide Web.
- Identify key figures in the creation of the World Wide Web and discuss their contributions to their field.
- Describe the history and technology of mobile applications.

- Debate the ethical issues involved in accessibility on the web.
- Debate the ethical issues involved in intellectual property, copyright, and digital patents.
- Predict the future of the Internet using current trends and events.

Unit II   **Technology of the Internet** [Supports Course SLO # 1]
Learning Objectives
The student will be able to:
- Identify and describe the hardware and software used in commercial websites, including dynamically generated webpages and e-commerce applications.
- Identify and describe the hardware and software used for social media applications.
- Identify and describe the hardware and software used in Web 2.0 applications, Web 3.0 applications, and the semantic web.
- Identify and describe the hardware and software used in podcasting and rich media   applications.

Unit III   **Researching Internet Information Systems** [Supports Course SLO # 2, 3]
Learning Objectives
The student will be able to:
- Collect and analyze information about specific blogs including information about users, types of traffic, types of performance and conversion rates using web analytics and spreadsheet software.
- Write a brief describing the types of users and the types of information presented by a specific blog using word processing software.
- Collect and analyze trends in user browser adoption using spreadsheet software.
- Plan and execute a usability study of a website that observes the ability of user groups to achieve their goals.
- Describe the level of success of user groups with navigation and content using word processing software.
- Describe the types of users, navigation, and terminology presented by a specific website using word processing software.
- Conduct searches of websites with similar goals and compare and contrast the different content strategies.

Unit IV   **Organizing and Diagramming Internet Information Systems** [Supports Course SLO # 4]
Learning Objectives
The student will be able to:
- Diagram the organizational structure of a commercial website using presentation software.
- Analyze and reorganize the structure of a commercial website using presentation software.
- Diagram the organizational structure of a rich interactive website using presentation software.
- Analyze and reorganize the structure of a rich interactive website using presentation software.

Unit V   **Building Internet Information Systems** [Supports Course SLO # 5]
Learning Objectives
The student will be able to:
- Develop a content strategy and write content for a commercial website.
- Develop rich assets for posting on social media platforms.
- Develop imagery to be used on the internet in social media, blogging or a website context.
- Design and layout components for a commercial website using prototyping software.
- Construct a commercial website for a business using HTML, CSS.

Evaluation of student learning:

Achievement of the course objectives will be evaluated using the following tools:

- Weekly discussion forum including questions about the history and ethics of the Internet.
- Software and hardware technology quizzes.
- Documents from research projects including spreadsheets, briefs, and diagrams.
- Uploaded internet projects created using social media platforms, HTML, CSS, and image and video editing software.

Grading

Discussion Forum	15%
Quizzes	15%
Research, Briefs and Diagrams	30%
Internet Project	40%
Total	100%