COM 205-01 MULTIMEDIA APPLICATIONS

St. Joseph's University
Department of Mathematics/Computer Science
Fall 2024: Thursday, 6:15 – 9:15

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Required Textbook:
- T.M. Savage, K.E. Vogel, <u>An Introduction to Digital Media</u>, Jones & Bartlett Publishers, Sudbury, MA, 2009

Catalogue Description:
In this course students will be introduced to multimedia principles and technologies. Topics will include effectively representing, processing, and retrieving multimedia data such as text, graphics, sound, music, images, and video. Students will use the Internet, design and edit an Internet home page, and create a multimedia presentation. Various multimedia tools and techniques will be explored.

Prerequisite: COM 141 or equivalent.
3 hours a week, 1 semester, 3 credits.

Modality:
The course will be conducted on campus, meeting every Thursday from 6:15 – 9:15.

Core Outcome:
In addition to developing basic technological skills (e.g., using email, word processing and presentation tools, researching, etc.), students will be able to demonstrate critical and technological thinking to locate, organize, create, evaluate, analyze, synthesize, and ethically utilize information from a multiplicity of sources and media.

Course Objectives:
This course is designed to enable students to:
- Understand and manipulate the basic elements of multimedia (text, graphics, images, video, and sound).
- Comprehend how the hardware translates commands and responses into computer activity.
- Improve their organizational skills, through the use of storyboards, logic flowcharts, and scripts.
- Become familiar with basic animation techniques and software.
- Develop interactive materials for use on the Internet.
- Use authoring software to organize, design, and implement a multimedia project.

St. Joseph's Mission and Goals:

1. to offer curricula that foster the knowledge and intellectual skills associated with the liberally educated person;

2. to encourage students to develop personal value systems and responsible self-direction;

3. to foster committed participation in the local and global communities

4. to help students develop as whole persons by providing individual attention, interactive learning, and

opportunities for active participation in academic and extracurricular programs;

5. to prepare students for their careers by offering the necessary professional and pre-professional education;

6. to provide for the needs of a diversified student population with varied educational and professional experiences;

7. to foster an environment of openness to the exploration and understanding of diverse ideas, traditions and cultures;

8. to support educational programs and services that will contribute to the vitality of the communities served by the Brooklyn and Suffolk campuses.

Departmental Student Learning Outcomes (SLO):
- Communicate effectively with people at different levels of technical knowledge
- Act professionally, ethically, and with social responsibility
- Design and develop computer programs

SLO's Assessed through - Signature Assignment:
As part of the student's semester project, students will complete a 5-page website. Students will incorporate the principals and techniques learned throughout the semester to organize content, create assets and demonstrate their proficiency with the programs used in class. Grade will be based on design and functionality of the project.

Assignments:
Since the emphasis of this course is on producing effective multimedia, assignments of varying degrees of complexity will be given to help you develop the skills necessary to organize and implement a real multimedia project. Some assignments will require an hour for completion, while others will take much longer and will require additional time to complete outside of class time.

For full credit exercises/projects are expected to be handed in on due date even if you are absent from class that day. Any late exercises/projects will receive 20 points off per week. Homework/projects due dates will be strictly enforced.

While you are encouraged to work together in groups to give and receive feedback, all design/work submitted for a grade must be your own.   All exercises/projects must be your own work and if found to be otherwise a failing grade will be given. If there are two incidences of cheating the student will receive a grade of F for the course. You must also properly document and acknowledge the contributions of others (images, sounds, text, etc...).

Attendance:
Students are expected to attend all class sessions and exams. If a student is unable to attend class, please contact me via email. You are expected to get and submit all assignments even if you miss class.

Grading:
Quizzes and tests will be given throughout the semester to test your skills and comprehension of basic concepts. The major portion of your grade will consist of the semester project. Please note that makeup tests and quizzes will not be given, except in rare circumstances.

- Professionalism/Participation: 5% (Defined as behavior that enhances the learning environment, including but not limited to attending class on time, following class rules, and interacting respectfully with other students and the instructor.)
- Homework/Exercises: 10%

- Tests/Quizzes: 30%
- Final Exam: 20% (No exemptions from the final)
- Semester Project: 35%

Final Exam Date: Thursday, December 12th, 2023

Supplies:

Supplies that you will need for the semester are listed below:

- Notebook
- GitHub Account
- Removable storage (Jump Drive) - Optional

Course Website:

In addition to canvas, the class website, com205.safiredesign.com, will be used to inform you of upcoming tests/quizzes, project milestones and any inclement weather notifications. You can also find all important course materials, course calendar, various handouts, and the PowerPoint slides that we use in class.

COM205 AI Policy:

The use of generative AI tools (ex: ChatGPT, Bing Creative Mode, Adobe Firefly) is permitted in this course **ONLY** for the following activities:

- Creating website imagery for your Semester Project
- Creating website copy for your Semester Project
- Where the use of generative AI is required to complete a given assignment

The use of generative AI tools is **NOT permitted** in this course for the following activities:

- Writing HTML/CSS code for any homework/exercise assignments
- Writing HTML/CSS code for your Semester Project
- Writing the Project Proposal for your Semester Project
- Creating the Mockup designs for your Semester Project

Beware the limits of generative AI technology. You, the student, are responsible for all the information you submit in this course. All AI material should be checked for accuracy. AI is a tool, but one that you need to acknowledge using. Please include a paragraph at the end of any assignment that uses AI explaining what you used it for and what prompts you used to get the results Failure to do so is in violation of university policy on academic dishonesty.

Plagiarism and other forms of Academic Dishonesty:

The University expects students to observe academic integrity in all aspects of their academic life, including the conduct of examinations, assignments, and research. All members of the University community share the responsibility for

creating a climate of academic integrity, based on the fairness to others and respect for oneself. Violations of academic integrity are treated very seriously.

Plagiarism (the act of copying, stealing or representing the words of another as one's own without giving credit to the source), cheating on examinations, and all forms of academic dishonesty are forbidden. Students found guilty of such behavior are subject to appropriate disciplinary action, which may include a reduction in grade, a failure in the course, or expulsion. Instructors at St. Joseph's University routinely use plagiarism detection devices such as Turnitin.com, Safe Assign, and Google to uncover acts of plagiarism.

Students with Disabilities:
St. Joseph's University, in accordance with the Americans with Disabilities Act, provides assistance and resources for students with disabilities. If you have a documented disability: physical, psychological, medical or learning, which may impact your academic learning, contact the Office for Academic Tutoring, Development, and Accessibility Services by emailing Katie Blumenthal (kblumenthal@sjcny.edu) or stopping into N304, O'Connor Hall. This office will assist you in getting all necessary accommodations at the college and in the classroom. All information will be kept confidential and private. Students should also work with their instructor to make arrangements if they require accommodations for test taking, carrying out assignments, or other academic needs.

Security:
Every effort is made to make St. Joseph's University a safe and secure learning environment. There are security guards in each building and you may contact them in the event of an emergency. They can also arrange for you to get an escort to your car, especially after evening courses or events.

An Introduction to Digital Media:

1. **The Multimedia Revolution**
   a. Definition of Modern Multimedia
   b. Origins of Multimedia
   c. Multimedia Visionaries

2. **Digital Data**
   a. Elements of digital media
   b. Digital Codes and Files
   c. Compression
   d. Advantages of Digital Media

3. **Computer Hardware**
   a. Computer Systems
   b. Computer Platforms
   c. Hardware Components
   d. Computer Networks

4. **Computer Software**
   a. Software categories
   b. Operating System Functions
   c. Types of Programming Languages
   d. Software for Multimedia Development

5. **Text**
   a. Text tradition & common terms
   b. Codes for computer text
   c. Font Technologies
   d. Multimedia Text

6. **Graphics**
   a. Key Elements of traditional graphics
   b. Features & uses of computer graphics
   c. Guidelines for using graphics in multimedia

7. **Sound**
   a. Nature of sound
   b. Traditional Sound Reproduction
   c. Digital Sound

8. **Video**
   a. Analog Video
   b. Digital Video
   c. Digital Video sources
   d. Guidelines for using video in multimedia

9. **Animation**
   a. Animation basics
   b. Traditional Animation Techniques
   c. 2-D Animation Techniques
   d. 3-D Animation

10. **Authoring**
    a. Integrating multimedia elements
    b. Authoring metaphors
    c. Authoring process

11. **Multimedia Development**
    a. Stages and Planning
    b. Multimedia team members
    c. Team member responsibilities

12. **Professional Issues**
    a. Multimedia as a profession
    b. Copyrights
    c. Digital Rights Management

Supplemental Materials:

1. **Understanding Color (w/Graphics)**
   a. Color terms and definitions
   b. The Color Wheel
   c. Color Schemes
   d. Color Selection Process

2. **Tools for the World Wide Web (w/Dreamweaver)**
   a. Web Servers and Browsers
   b. Site Builders
   c. Plug-ins
   d. Beyond HTML (XHTML/CSS, XML, VRML, CGI)

3. **Designing for the World Wide Web (w/Dreamweaver)**
   a. Text for the web and HTML
   b. Images for the web
   c. Sound for the web
   d. Animation for the web