PRINCIPLES OF DIGITAL VISUALIZATION

COURSE NUMBER: DIG2121	**INSTRUCTOR:** MICHAEL CLARK
SEMESTER/YEAR: SPRING2019	**COURSE WEBSITE:** ELEARNING.UFL.EDU
CREDIT HOURS: 3.0	**CONTACT EMAIL:** MICHAEL@DIGITALWORLDS.UFL.EDU
CLASS LOCATION: NRG 0205	**CONTACT PHONE:** (352) 294-2000
CLASS MEETING TIME(S): M & T 4; W & TR 4 – 5	**Office location/Hours:** MCCARTY 101 M 2 – 3 pm; DW 116 T 12 – 3 pm

COURSE DESCRIPTION
This course will help prepare students for application to the BA in Digital Arts & Sciences degree and/or to develop a heightened sense of visual fluency.

PURPOSE OF COURSE
This course will develop appreciation and basic fluency in the application of visual and design literacy into emergent forms of digital media. Historical and theoretical perspectives inform hands-on learning across topics including Character Sketch and Pre-Animation development, pre-visualization, storyboarding and production in static and time-based media, and the critical analysis of contemporary gaming and iconic visual storytelling.

COURSE GOALS AND/OR OBJECTIVES: *By the end of this course, students will be able to:*
1. Identify and apply visualization concepts in a variety of design environments
2. Demonstrate an understanding of the requirements of animation, digital production, and game graphics
3. Analyze, discuss, and demonstrate effective communication of concepts and data via visual presentations

COURSE SCHEDULE:
This schedule is only a guide and is subject to change. Individual assignments will be explained in detail as the course progresses. The final exam time scheduled for this course will be announced in advance of each semester by the University of Florida Registrar's Office at http://www.registrar.ufl.edu/soc/

DATE	TOPIC	Assignments Given & Due
<u>WEEK 01</u>	-Introductions, review of upcoming coursework The Science of Color and Color Vision -Define Lighting, Color, shapes, and angle placement in composition. -Early forms of visualization in history	Assign: Drawing using shapes/cross hatch (Participation points) Compose and Capture

WEEK 02	Define visual terminology: Visualization of Objects and Data; The Tangible and Intangible -Color theory. -Composition -Atmospheric perspective. -Using the Frame; Aspect Ratio, Image Components and the Story - Balance, rule of thirds, etc. - What makes a good composition Drawing and Understanding Drawings	Photoshop Demo Photoshop Drawing demo: Demo shapes. Assign: Drawing exercise- fill 1 page
WEEK 03	Perception of Space and Environment -how color and space tell a story Static and Moving Patterns, Computer Tool Sets	Assign Character Sketch 4 poses
WEEK 04	Digital Production and Storytelling Quiz 1 – Composition Terms -Storyboards -Animatic	Assignment 2 Given Assign: Draw an object and create the sensation of a moving light source. Use ambient, directional, and spotlight techniques. Fill one page.
WEEK 05	Media; Iconic imagery and the rise of Cinematic Conventions	Assignment 2 Due- Assignment 3 Given Assign: Create a storyboard. 1 page
WEEK 06	Photoshop / Premiere integration -Pre-visualization to final results. -Data organization seen in pipelines Considerations in Time-based	
WEEK 07	Data Visualization -Define info graphics, timelines, and graphs. - Explanatory vs. exploratory.	Assignment - develop comparative motion graphic for data visualization.
WEEK 08	Compositing; Techniques and Applications, Creating an Animatic	Assignment - Object Removal

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WEEK 09	CAD Introduction , Photoshop 3d, Texture maps Introduction to Final Project	Introduction to Final Project
WEEK 10	Discussion of Gaming Worlds 2D 21/2 D 3D	Assignment – Storytelling in Games
WEEK 11	AR/VR immersion, 360 Video	Assignment _ photo stitching
WEEK 12	Unity Introduction	Assignment – Visualizing Game Directions
WEEK 13	Working and Production Session Final Projects and Classwork	
WEEK 14	Individual Student Research Presentations: Analysis of Iconic Time-Based Media	Final Project Due
WEEK 15	Final Exam	Final Exam

REQUIRED TEXTBOOKS AND SOFTWARE:

While there isn't a required textbook, the Instructor will be suggesting reading and research and sharing a variety of instructional resources. The students will work with a personal "workbook" of visualization sketches and information to refer to at the end of the course. Students should have personal access to the Adobe Creative Suite or CC and Google Drive. Other technologies will be introduced during the course session.

COURSE FEES:

Course fees are assessed for certain courses to offset the cost of materials or supply items consumed in the course of instruction. A list of approved courses and fees is published in the Schedule of Courses each semester. (UF-3.0374 Regulations of the University of Florida).

Material and supply and equipment use fee information is available from the academic departments or from the schedule of courses (Florida Statutes 1009.24). The total course fee for this class is $0.00

The total course fee for each course is listed on the UF Schedule of Courses. (https://registrar.ufl.edu/soc/).

EVALUATION OF GRADES

Assignment or Course Component	Points	Percentage of Grade
Three Quizzes	100	15%
Various Class Assignments	100	25%

Research and Culminating Project	100	25%
In Course Participation – Students are expected to actively participate in class discussions, both in class as well as in class online forums outside class meetings.	100	10%
Attendance	100	5%

GRADING SCALE:

Letter Grade	% Equivalency	GPA Equivalency
A	94 – 100%	4.0
A-	90 – 93%	3.67
B+	87 – 89%	3.33
B	84 – 86%	3.00
B-	80 – 83%	2.67
C+	77 – 79%	2.33
C	74 – 76%	2.00
C-	70 – 73%	1.67
D+	67 – 69%	1.33
D	64 – 66%	1.00
D-	60 – 63%	.67
E, I, NG, S-U, WF	0 – 59%	0.00

More information on grades and grading policies is here:
https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

COURSE POLICIES:

PARTICIPATION / ATTENDANCE
We value participation more than mere attendance. Each Instructor is responsible for communicating the specific details of what percentage of your grade (if any) will be assigned to participation, and how class participation will be measured and graded. Real Time [RT] interaction with your peers and the Instructor will empower you to greater achievement. Attendance to receive the proper instruction and example is paramount to your success in this class   if your absence cannot be avoided please contact the Instructor prior to the class session that needs to be missed. More than one (1) unexcused absence will result in a deduction of 5% of the participation grade for each missed session.

MAKE-UP POLICY
Late assignments or Missed Exams will be marked down unless a prior arrangement is made. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

COURSE TECHNOLOGY
The students will be required to have access to, and use a personal computer with the access to the Internet. Word editing software will be required for written assignments. Students should have personal access to the Adobe Creative Suite or CC and a working knowledge of Photoshop and Adobe Premiere are expected. Other technologies will be introduced during the course session.

COURSE COMMUNICATIONS
Students can communicate directly with the Instructor regarding the course material through the course management system (CANVAS). Electronic communication must demonstrate a formal tone and style and , unless absolutely urgent, will be responded to M-F 10am – 6pm

ASSIGNMENTS
There are a number of class projects. It is important to complete the class projects in the time assigned, as completed projects will become the basis for continued projects. Most projects will need to be completed in the week interim between course meetings.

GRADING
Your assignment grades will be based on these factors:
- Your understanding of the assignment and your ability to follow instruction
- The completion of the project during the time required
- That all factors that are in the assignment are addressed completely and correctly
- Your quality, level of research, preparedness and ability to discuss your project using the correct terminology when called upon.

COURSE TECHNOLOGY SUPPORT:

The Technology Support Center provides computer support for Digital Worlds students who access Visimeet, lecture recordings, student equipment, facilities and other technology-based resources.
http://digitalworlds.ufl.edu/support

For computer assistance related to Visimeet, lecture recordings, student equipment, and facilities request please Submit a Help Ticket or email support@digitalworlds.ufl.edu.

For support related to account services, technical consulting, mobile device services, software services, administrative support, application support center, and learning support services, please contact the UF Computer Help Desk available 24 hours a day, 7 days a week at 352-392-4357 or helpdesk@ufl.edu.

UF POLICIES:

UNIVERSITY HONESTY POLICY

UF students are bound by The Honor Pledge that states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

CLASS DEMEANOR

Students are expected to arrive to class on time and behave in a manner that is respectful to the instructor and to fellow students. Please avoid the use of cell phones and restrict eating to outside of the classroom. Opinions held by other students should be respected in discussion, and conversations that do not contribute to the discussion should be held at minimum, if at all.

STUDENTS REQUIRING ACCOMMODATIONS

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

NETIQUETTE COMMUNICATION COURTESY

All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats, more information can be found at: http://teach.ufl.edu/wp-content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf

ONLINE COURSE EVALUATIONS

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at evaluation results.

CAMPUS RESOURCES

HEALTH AND WELLNESS

U Matter, We Care
If you or a friend is in distress, please contact umatter@ufl.edu or 352 392- 1575 so that a team member can reach out to the student.

Counseling and Wellness Center

Principles_of_Digital_Visualization_V1_MC

http://www.counseling.ufl.edu/cwc/Default.aspx, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS)
Student Health Care Center, 392-1161.

University Police Department, 392-1111 (or 9-1-1 for emergencies). http://www.police.ufl.edu/

ACADEMIC RESOURCES

E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling. http://www.crc.ufl.edu/

Library Support, http://cms.uflib.ufl.edu/ask. Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. http://teachingcenter.ufl.edu/

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. http://writing.ufl.edu/writing-studio/

Student Complaints Campus:
https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf

On-Line Students Complaints:
 http://www.distance.ufl.edu/student-complaint-process

Disclaimer: This syllabus represents the instructor's current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.