PRINCIPLES OF DATA VISUALIZATION

COURSE NUMBER: DIG 2121	CREDIT HOURS: 3	
SEMESTER/YEAR: SUMMER 2018	CLASS LOCATION: ORC	
	CLASS MEETING TIME(S): M,T,W,R,F PERIOD 5	
	2:00 PM - 3:15 PM	
INSTRUCTOR: CHELSEA CANTRELL	OFFICE LOCATION/HOURS:	
	CONTACT EMAIL: CANVAS	
CONTACT PHONE: (352) 294-2000	COURSE COMMUNICATION: UF E-LEARNING	

COURSE DESCRIPTION

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 previsualization and storyboarding in static and time-based media, and the critical analysis of contemporary and iconic visual storytelling.

PREREQUISITE KNOWLEDGE AND SKILLS

N/A

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 historic and current practice visualizing concepts and data
- 3. Analyze, discuss, and demonstrate effective communication of concepts and data via visual presentations

course schedule:

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/

Week	Topic	Assignments/Quizzes
1	The Science of Color and Color Vision (intro) -Introductions, review of upcoming coursework -Define Lighting, Color, shapes, and angle placement in compositionEarly forms of visualization in history -Using the Frame; Aspect Ratio, Image Components and story - What makes a good composition	Photoshop/GIMP Demo: explore interface. Assign: Drawing using shapes/cross hatch Quiz 1: 10 questions based on lectures
2	Visualization of Objects and Data; Intro to story -Color theory -Composition	Assignment 1 Due Assign2: Create an object and create a light source. Use ambient, directional, and

		an all data date en
	-Atmospheric perspective.	spotlight techniques. Fill one
	-Composition Terms (time based media, rule of thirds, etc)	page.
	-Storyboards	
	-Animatic	Quiz 2: 10 questions based
		on lectures
3	Perception of Space and Environment/ Production	Photoshop/Illustrator cross over and demo
	-how color and space tell a story	
	-Pre-visualization to final results.	Assign 2 Due
	-Data organization seen in pipelines	Assign3: Create a storyboard.
	-Introduce final assignment structure: Start planning process	1 page
		Quiz 3: 10 questions based
		on lectures
4	The Science of Color and Color Vision	Assignment 3 Due
	-Data Visualization	Assign 4: Create a poster with
	-Define infographics, timelines, and graphs.	Explanatory or exploratory
	- Explanatory vs. exploratory.	data. Use color and mood to
	Explanatory 131 exploratory.	define your poster.
	Gestures, body language, and posing. How body language tells	a commo y con process
		Quiz 4: 10 questions based
	its own story. Push poses. Examples in pre-visualization, graphic	on lectures
	novels, advertisements.	on lectures
5	Visual data: How visual arts alter perceptions of quality	Assignment 4 Due.
		Final: Group Short Story.
	-Examples through charts	Create a short story that can
	-Font and typeface	be translated into time based
	and consumerism	media.
	Eye tracking demo.	
	Lyo tracking demo.	All quizzes due at end of week 5
6	Know your audience.	Final Due
	Use of Pre-visualization; Techniques and Applications	

REQUIRED TEXTBOOKS AND SOFTWARE:

- 1. Small Notebook or Sketchbook (no larger than 8.5 x11)
- 2. GIMP GNU image manipulation program (free online download)

RECOMMENDED MATERIALS:

- 1. Smiciklas, Mark. (2012) *The Power of Infographics: Using Pictures to Communicate and Connect with Your Audiences*. Que Publishing.
- 2. Adobe CC

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 <u>approved courses and fees</u> 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 \$21.00

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

EVALUATION OF GRADES

Assignment	Total Points	Percentage of Grade
Participation		10%
Assignments		50%
Quizzes		25%
Final		10%
Attendance		5%

GRADING SCALE:

Letter Grade	% Equivalency	GPA Equivalency
Α	94 – 100%	4.0
A-	90 – 93%	3.67
B+	87 – 89%	3.33
В	84 – 86%	3.00
B-	80 – 83%	2.67
C+	77 – 79%	2.33
С	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-		0.00
U, WF		

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.

25% of your overall grade is participation and attendance. Participation in this class includes engaging in group activities, class discussion, and critique.

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

MAKE-UP POLICY

Each quiz can be taken up to 3 times each, with your highest score being your final score. Students may retake quizzes up until week 5. Course assignments may be submitted late, but each late submission will drop one letter grade per day late. (For example, if your assignment is awarded a 90% and submitted 2 days late, your final grade will be 70%.)

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 University of Florida and Digital Worlds requires that students have access to and on-going use of a laptop/mobile computer for DIG courses in order to be able to function in the current learning environment. Students are required to access electronic forms of information, submit assignments and communicate with other students and faculty electronically. DW requires each student's mobile computer to meet certain minimum specs for heavy graphics use, the requirements documented below must be met.

DW Computer Requirements

http://digitalworlds.ufl.edu/programs/ba-in-digital-arts-sciences/new-student-buyers-guide/

COURSE COMMUNICATIONS

Students can communicate directly with the Instructor regarding the course material through UF e-Learning. http://elearning.ufl.edu/

COURSE TECHNOLOGY SUPPORT:

The <u>Technology Support Center</u> 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 <u>Submit a Help Ticket</u> or email <u>support@digitalworlds.ufl.edu</u>.

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 <u>Disability Resource</u> <u>Center</u> (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 <u>online evaluations</u>. 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 <u>evaluation results</u>.

CAMPUS RESOURCES

HEALTH AND WELLNESS

U Matter, We Care

If you or a friend is in distress, please contact <u>umatter@ufl.edu</u> or 352 392- 1575 so that a team member can reach out to the student.

Counseling and Wellness Center

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.