

Semester Topic information visualization [infoviz]

Instructor Nico Carver

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Office Hours by appointment (right before or after class will usually work)

Course Description

Production of large-scale interactive media projects incorporating text, image, video and sound. Topics include theoretical and advanced technical components within a workshop format. Aesthetics, innovation, and cultural awareness are emphasized in creating interactive projects.

Textbook Processing: A Programming Handbook for Visual Designers and Artists, 2nd Ed., by Casey Reas and Ben Fry, available in the UD Bookstore and Online.

Prerequisites ART307 or ART385 or ART326. Experience working in HTML and CSS.

Tools

We will be working with Processing, text editors, ftp clients, HTML/CSS/Javascript, Adobe products and other various software and languages.

On Canvas (udel.instructure.com)

Syllabus

Assignments

Readings

Discussions

Grades

Course Work

Course work will progress incrementally from smaller projects to a final portfolio piece. Class time will be used for project work, short presentations, discussion and critiques. Everything produced in this class will be made by you and/or your group. We will be copy and pasting code occasionally, but only as a starting point or a web framework (for instance, Bootstrap). This course requires that you spend around 10 hours per week working on projects outside of class.

Course Objectives

In this course, students will:

- Learn how to tell a story with data
- Build interactive visualizations for the web
- Research and present on current topics in digital art
- Reverse engineer their favorite websites to learn how to steal from the best
- Continue proficiency in independent learning—using both Online and print resources

- Practice working both solo and in teams on complex projects that require planning and management to keep on track

Course Requirements

Attendance is mandatory. Three unexcused absences will result in your final grade decreasing by one letter grade (that is, you are allowed two unexcused absences without penalty). (An absence will be considered excused based on the university's policy). For example, if your final grade is a 'C', three unexcused absences will cause it to fall to a 'D'. Subsequent absences will cause it to fall further, one third of a grade for each absence. Arriving to class late and/or leaving early three times will count as one unexcused absence. To avoid unexcused absences, please consult with me before you miss class. Projects will each be graded on a scale of 100.

University grading breakdown:

A	93-100%	A-	90-92%	B+	88-89%	B	83-87%
B-	80-82%	C+	78-79%	C	73-77%	C-	70-72%
D	63-67%	D-	60-62%	F	59% and below.		D+

All projects will be turned in Online on our class web server. When you are ready for me to see your work, you will add the link on the assignment page on Canvas. Any assignment not completed by the due date on Canvas will be considered late. Project grades will decrease by one full grade for each class the project is late. Work will not be accepted if missed due to an unexcused absence. Final grades will be based upon the following rubric:

Course Schedule (subject to change)

Date	Description	Reading (complete before class)	Assignment Due
2/09	Introductions / Course setup and overview / web server		
2/11	Different kinds of code / HTML and CSS refresher / Intro to "debugging"	poke around here and complete any lesson you feel you should brush up on: http://www.codecademy.com/en/tracks/web	
2/16	Fixed vs. responsive webpage / data vs. information / what makes an effective visualization?	read and follow links in article: http://alistapart.com/article/responsive-web-design	Change the CSS on your class website / add an about page and a nav
2/18	Thinking like a computer / First Processing sketch	read: Processing, 2nd Ed., Chapter 1	
2/23	Color on the computer - understanding RGB, Hex, and HSB / playing with Processing	skim: https://processing.org/tutorials/color/ and Processing, 2nd Ed., Chapter 4	Your first Processing sketch uploaded to your website (link to it on Canvas!)
2/25	Processing tutorial (adding basic mouse interaction) / group formation	read/ take notes/ write down questions about: Processing, 2nd Ed., Chapter 2	

Date	Description	Reading (complete before class)	Assignment Due
3/02	Processing tutorial (variables, basic looping and conditionals)	skim/ do exercises: Processing, 2nd Ed. Chapters 5 + 6	Your second Processing sketch uploaded to your website (link to it on Canvas!)
3/04	Workshop on finding data/ code examples/ and help online / introduce the final assignment	none	
3/09	Processing Tutorial (svg, images, fonts, et al.) / Working in your group on your presentation	none (but you should be doing your web research assignment in your groups outside of class time)	
3/11	Web research presentations	none	First Group Presentations (5% of grade)
3/16	Processing Tutorial (functions, objects)	skim/ do exercises: Processing, 2nd Ed. Chapters 24 + 25	
3/18	Processing Tutorial (arrays and data input)	skim/ do exercises: Processing, 2nd Ed. Chapters 28 + 32	
3/23	Group work time with tutorials as needed	to be announced (check Canvas) I will update the syllabus.	Group brief report with dataset choice and work plan (due before class starts!) (5% of grade)
3/25	Group work time with tutorials as needed / Nico will meet with groups to go over work plan		
4/06	Group work time with tutorials as needed		
4/08	Group work time with tutorials as needed		
4/13	Virtual class on studio. sketchpad.cc -details on Canvas		
4/15	Virtual class on studio. sketchpad.cc -details on Canvas		
4/20	In-class presentations and critique (day 1)		Second Group Presentations/ critique (10% of grade)
4/22	In-class presentations and critique (day 2)		
4/27	Group/individual work time with tutorials as needed		
4/29	Group/individual work time with tutorials as needed		
5/04	Usability testing (day 1)		
5/06	Usability testing (day 2)		

Date	Description	Reading (complete before class)	Assignment due
5/11	Final presentations and critique (day 1)	none	
5/13	Final presentations and critique (day 2)	none	
5/18	Wrap-up, class critiques and surveys, inspiration and looking forward	http://norvig.com/21-days.html	Final personal visualizations due on your website (50% of grade)