

CVJ 522

Information Graphics and Visualization

Section GQ

SPRING SEMESTER, 2015

Tuesday and Thursday

9.30-10.45a.m.

Room 3032

INSTRUCTOR

Alberto Cairo

School of Communication, Office 5051L

e-mail: alberto.cairo@gmail.com

Twitter: [@albertocairo](https://twitter.com/albertocairo)

Office Hours Tuesday and Thursday

11a.m.-12p.m.

Tuesday: 2-4p.m.

OR BY APPOINTMENT

COURSE DESCRIPTION

This course is an introduction to the visual display of information in digital and interactive media, with a special focus on the encoding of data by means of statistical charts, maps, and diagrams.

Description and policies

Overview

This course is an introduction to the principles of visual representation of information. It consists of a deep study of information graphics and digital visualizations, the use of charts, maps, diagrams, and illustrations to tell stories. In this course, you will learn to create effective and beautiful graphical displays of evidence, and to critically evaluate examples from print media, and the Internet.

There will be two kinds of sessions: **regular classes and lab-time**, as detailed in the calendar. Regular classes will be a mix of short conceptual lectures and hands-on exercises that we will use to illustrate the theoretical principles we'll cover. **Attendance is mandatory** both for regular classes and lab-time sessions.

This course has a very heavy workload. You may need between 5 and 10 hours of out-of-class time a week to complete the assignments. Be prepared for that.

If you need me, you can contact me at any time by e-mail, or drop by my office. I am writing this not just as a formality: if I am at School and I am not doing anything that requires my immediate attention, I will help you. If for some reason I cannot answer your questions at that particular time, I will schedule a short meeting with you as soon as possible.

Students enrolled in this course are expected to abide by the University of Miami Honor Code. The purpose of the Honor Code is to protect the academic integrity of the University by encouraging consistent ethical behavior in assigned coursework. Academic dishonesty of any kind, for whatever reason, will not be tolerated. No honest student wants to be guilty of the intellectual crime of plagiarism, even unintentionally. Therefore, we provide you with these guidelines.

Plagiarism is the taking of someone else's words, work, or ideas, and passing them off as a product of your own efforts. Plagiarism may occur when a person fails to place quotation marks around someone else's exact words, directly rephrasing or paraphrasing someone else's words while still following the general form of the original, and/or failing to issue the proper citation to one's source material. In student papers, plagiarism is often due to:

- Turning in someone else's paper as one's own
 - Using another person's data or ideas without acknowledgment
 - Failing to cite a written source (printed or internet) of information that you used to collect data or ideas
 - Copying an author's exact words and putting them in the paper without quotation marks
 - Rephrasing an author's words and failing to cite the source
 - Copying, rephrasing, or quoting an author's exact words and citing a source other than where the material was obtained. (For example, using a secondary source which cites the original material, but citing only the primary material. This misrepresents the nature of the scholarship involved in creating the paper. If you have not read an original publication, do not cite it in your references as if you have!)
 - Using wording that is very similar to that of the original source, but passing it off as one's own.
- The last item is probably the most common problem in student writing. It is still plagiarism if the student uses an author's key phrases or sentences in a way that implies they are his/her own, even if s/he cites the source.

Description and policies

Attendance Policy

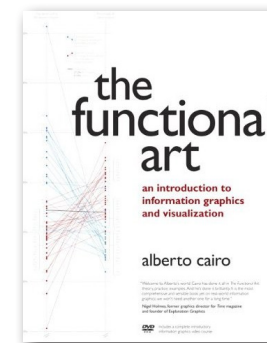
Coming to class is crucial for your success. Being in the lab while we work on projects, for instance, is necessary for me to be able to give you constant feedback on your progress. Therefore, **each unexcused absence will result in a 25 points reduction** in your final grade. Excused absences (doctor's note, for instance) won't affect your grade. In addition, **every three late arrivals (5 minutes or more) will result in another 25 points drop**. Coming late can disrupt other students. No cell phones, IM, messaging or Web surfing will be allowed during regular classes. I am fine with your taking a few minutes off during lab-time sessions every now and then, though.

If you are on the waiting list

If you are on the waiting list for this class, please be aware that attendance is mandatory from the very first day. You won't be allowed into the course otherwise.

Religious Holy Day policy

It is the student's obligation to provide faculty members with notice of the dates they will be absent for religious holy days, preferably before the beginning of classes but no later than the end of the first three class days. Absences due to observance of religious holy days not pre-arranged within the first three class days may be considered unexcused and there is no obligation to allow any make up work, including examinations. Missing a class due to travel plans associated with a particular religious holy day does not constitute an excused absence. The University's complete Religious Holy Day Policy can be found in the 2012-2013 Bulletin.



Our class drive

<https://www.dropbox.com/sh/ph7g0q75rw8us4p/AACZ3PLCpZhSJGGffvyASHABa?dl=0>

Required readings/videos

The Functional Art Alberto Cairo

I will reimburse you for the royalties that I get (\$2 per book)

Creating Maps, Charts and Infographics with Adobe Illustrator (video).

You will have access to this product for free

Software

We will use Adobe Illustrator (any version) and Tableau in this class.

USB flash drive or external Hard Drive

You must back up your files on a regular basis.

No deadline can be missed due to loss of data.

Assignments and grading

Grading

This is a project-oriented course. Therefore, grading will be based on several exercises, and also on a quiz about Chapters 1-9 from the textbook and about the class lectures.

Components

	Value
First weeks exercises*	100
Quiz	150
Project 1: Charts and Maps	200
Project 2: Visual explanation	250
Project 3: Final project	300
Total	1,000

*You will get the full 100 points if you complete all small assignments in the first weeks of class, including critiques, software exercises, etc.

If more than 1 of the exercises isn't completed properly, the 100 points will be lost.

Scale

Points	Grade
950-1,000	A
920-949	A-
890-919	B+
840-889	B
800-839	B-
770-799	C+
730-769	C
700-729	C-
680-699	D+
630-679	D
600-629	D-
599 and below	F

A note on projects

I will give you detailed guidelines for each project right before we begin working on it. Here you have a summary of what we'll do:

Project 1: You will have to create a simple static display based on data I will provide, combining several statistical charts and maybe some data maps in a composition.

Project 2: You will have to design a visual explanation about a topic I will propose.

Project 3: You will have to create a complex, multi-component infographic.

I reserve the right to adjust the final grade according to class participation, attendance, overall quality of work, etc.

Assignments and grading

Grading criteria

There are several expectations that you should meet in order to get a high grade. These are the generic grading criteria I will be using for the projects:

1. Every project must be completed on time.
2. Spatial organization, structure of the elements, informative value of the display.
3. Thoughtful use of color and type.
4. Aesthetic design choices in general.
5. Creativity.

I will include the specific grading criteria in the guidelines for each project.

Meetings with Univisión/Fusion

During the semester, I will organize four visits to the newsroom of Univisión / Fusion. The goal is to meet with the teams that produce interactive graphics and visualizations, and talk about current and future projects.

To attend these meetings, you will need to add your name to this spreadsheet:

https://docs.google.com/document/d/1dshQW3e2DiSakBgmWGP_aN1UDRLSNmUGuCHkNZ-RRs8/edit?usp=sharing

Please notice that space is limited, so be very serious about being at Univisión / Fusion on time (it's in Doral.) If you cannot attend for some reason, let me know immediately, so I can let other students in.

Course calendar

Our schedule may change slightly depending on class needs, although I will do my best to stick to the plan below. I will announce any change to the calendar in advance.

January	Tuesday 13	Intro: How the class will work <i>Lecture: An introduction to Information Graphics and Visualization</i>
	Thursday 15	<i>Lecture: Principles of Visualization I</i> BEFORE NEXT WEEK: Lessons 1, 2, and 3, and review of infographics provided in class
	Tuesday 20	Discussion
	Thursday 22	<i>Lecture: Principles of Visualization II</i> BEFORE NEXT WEEK: Illustrator video lesson 4 (graphs and maps), and exercise
	Tuesday 27	Discussion
	Thursday 29	<i>Lecture: Principles of Visualization III</i> BEFORE NEXT WEEK: Illustrator video lessons 5, 6, and 7, and exercises
February	Tuesday 3	Discussion
	Thursday 5	<i>Lecture: Principles of Visualization IV</i> BEFORE NEXT WEEK: Lynda.com's Up and Running with Tableau examples
	Tuesday 10	Discussion NOTE: WEDNESDAY 11, Attend Tableau training in the Morning or Afternoon
	Thursday 12	<i>Lecture: Principles of Visualization V</i> BEFORE NEXT WEEK: Illustrator video lessons 8 and 9
	Tuesday 17	GUIDELINES: Project 1 QUIZ
	Thursday 19	(Project1)
	Tuesday 24	Project 1
	Thursday 26	Project 1
March	Tuesday 3	Project 1
	Thursday 5	Project 1 <i>Project 1 due on Friday 6 before the end of the day</i> GUIDELINES: Project 2

Course calendar

	Tuesday 10	SPRING BREAK
	Thursday 12	SPRING BREAK
	Tuesday 17	(Project 2)
	Thursday 19	(Project 2)
	Tuesday 24	(Project 2)
	Thursday 26	Project 2
	Tuesday 31	Project 2
April	Thursday 2	Project 2 <i>Project 2 due on Friday 3 before the end of the day</i>
	Tuesday 7	Project 3
	Thursday 9	Project 3
	Tuesday 14	Project 3
	Thursday 16	Project 3
	Tuesday 21	Project 3
	Thursday 23	Project 3 <i>Project 3 due on Friday 24 before the end of the day</i>
	Thursday 28	Final critique session (THERE'S NOT AN EXAM FOR THIS CLASS)

Tear off and return with information required below:

STUDENT ACKNOWLEDGMENT:

I HAVE RECEIVED AND READ THE SYLLABUS FOR CVJ 522 SECTION GQ. I HAVE COMPLETED THE PREREQUISITE COURSES LISTED IN THE SYLLABUS OR HAVE HAD THE PROFESSOR SIGN BELOW TO CERTIFY A WAIVER OF THE PREREQUISITES.

CVJ 522 Section GQ, Spring 2015: The University requires acknowledgement of receipt and reading of the syllabus. Also, please include current contact information. If this information changes, let me know. It is your responsibility to be aware of any schedule changes.

SIGNED:_____

PRINTED NAME:_____

DATE:_____

CURRENT EMAIL:_____

CURRENT TELEPHONE OR OTHER CONTACT INFORMATION: _____

Professor Signature Certifying Waiver of Prerequisites, If any: _____

This course emphasizes applied skills and the production and publication of news stories – both in terms of text and multimedia. What we produce in this class, as submitted by you or as later edited and modified, may be published and displayed by the University. Therefore, we require your consent to such uses of the material you produce individually or as part of a team effort as well as your consent to use your name and likeness. Unless you are working on a special project that requires an assignment of ownership rights and you agree to that assignment, you own your own work, as far as the University is concerned. You may use your own work for your portfolio and your own purposes. If you have any questions about the consent form below, please let me know. Thank you.

I AGREE AND UNDERSTAND THAT IMAGES (E.G., PHOTOGRAPHS AND VIDEOTAPE) OF MY LIKENESS, RECORDINGS OF MY VOICE AND STORIES I HAVE WRITTEN OR HELPED PRODUCE MAY APPEAR IN WEBSITES, VARIOUS PUBLICATIONS, OTHER MEDIA AND IN RELATED MATERIALS PRODUCED OR PUBLISHED BY THE UNIVERSITY OF MIAMI, SCHOOL OF COMMUNICATION AND/OR ANY OF ITS EMPLOYEES, AGENTS, LICENSEES OR CONTRACTORS (COLLECTIVELY, “UM”). MY SIGNATURE BELOW GRANTS THE FOLLOWING RIGHTS TO UM: THE RIGHT TO USE AND RE-USE, LICENSE, PUBLISH AND REPUBLISH, MODIFY, EXHIBIT, TRANSMIT, OBTAIN, AND MAKE DERIVATIVE USES OF ANY STORIES, ARTICLES, PHOTOGRAPHS, BROADCASTS, FILMS, VIDEOTAPES, IMAGES OR RECORDINGS (“WORKS”) OF ME OR MADE OR CREATED BY ME, IN WHOLE OR IN PART, OR IN WHICH I MAY HAVE PARTICIPATED AS A STUDENT IN CVJ 522 IN 2015. I AGREE THAT THESE WORKS MAY BE USED FOR EDITORIAL, PROMOTIONAL, TRADE, ADVERTISING, EDUCATIONAL AND ANY OTHER LAWFUL PURPOSE IN ANY MEDIUM NOW EXISTING OR SUBSEQUENTLY DEVELOPED. MY AGREEMENT IS A GRANT OF WORLDWIDE RIGHTS IN PERPETUITY.

STUDENT ACKNOWLEDGEMENT AND CONSENT:

DATE: