
Course Outline

# JOU4100 - DIGITAL JOURNALISM II

Fall 2018
Tuesday 8:30-11:20

## INSTRUCTOR INFORMATION


| | |
|---|---|
| Instructor: | Jean-Sébastien Marier |
| Office Hours: | Tuesday and Thursday, 11:30-12:30 (or by appointment) |
| Office: | Desmarais 11111 |
| Email: | marierjs@gmail.com** |
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* Please write "JOU4100" in the subject line of your message.

## OFFICIAL DESCRIPTION

Production of advanced digital contents, introduction to coding, use of geolocation software and computer graphics, design and data visualization.

## COURSE CONTENT

Whereas JOU3100 primarily aimed to help you develop core competencies in news writing and multimedia production, JOU4100 invites you to discover the universe of web development and data journalism. In the coming weeks, you will learn the nuts and bolts of HTML & CSS coding. You will also learn to find, extract, clean, analyze and visualize data.

**SPECIFIC COURSE OBJECTIVES**

**Practical:** This course aims to help you perfect the knowledge and core competences acquired in JOU3100. By the end of the term, you should be able to produce advanced and thorough multimedia news stories which meet industry standards. More specifically, you will learn to:

1. Modify existing web pages by manipulating their source code;
2. Create a mini website using HTML & CSS;
3. Find data in databases and through access to information requests;
4. Extract data by writing XPath scripts;
5. Clean and analyze data in order to identify news stories;
6. Use formulas to automate part of your data analysis in spreadsheet software such as Google Sheets;
7. Create pivot tables;
8. Turn your data into graphics and maps;
9. Produce a 1500-word long article, which will include multimedia elements and stem from a thorough exercise of data analysis and visualization.

**Theoretical:** As young academics, you ought to be able to take a critical stance towards digital journalism. At the end of this course, you should be able to:

1. Defend your editorial decisions from both an ethical and a technical standpoint;
2. Explain your personal newsgathering process and the steps which led to the production of each of your assignments;
3. Develop strategies to cope with some of the issues associated with digital journalism, such as source protection and data perenniality.

**TEACHING METHODS**

Most of our meetings will be divided in two parts. During the first half, I will lecture and we will discuss the mandatory readings together. After the 10:00 break, we will normally do hands-on exercises and case studies. At times, I will try to organize special activities, such as guest lectures by professional journalists, watching videos on issues pertaining to data journalism and visits to the University of Ottawa's Learning Crossroads (CRX).

**REQUIRED EQUIPMENT**

You must bring your laptop to each of our meetings, since we will be doing practical exercises in class. Make sure to download and install the following software before our September 25th meeting:

- GitHub Desktop
- Brackets
- Chrome
- OpenRefine 2.8

Also make sure to complete the following steps:

- Create a GitHub account.
- Follow my GitHub account (@jsmarier).
- Create a Codecademy account.
- Make sure to know the username and password of your @uottawa email account.

For your final project, you will also need access to audio and video production equipment. You can borrow voice recorders, microphones, photo cameras, camcorders and tripods from the Multimedia Distribution Service, which is located in the basement of Morisset Hall.

**REQUIRED TEXTS**

We will read *The data journalism handbook: How journalists can use data to improve the news* cover-to-cover. It will be our bible throughout the semester. You can download the online version or buy a hard copy at the campus bookstore.

We will also use *Digging deeper: A Canadian reporter's research guide*, *The Canadian Press stylebook: A guide for writers and editors* and *The Canadian Press caps and spelling*.

I have placed copies of all four books in the course reserve at the Morisset Library. Here are the bibliographical references:

**Cribb, R. M., Jobb, D., Vallance-Jones, F., & McKie, D. (2015). *Digging deeper: A Canadian reporter's research guide*. Don Mills, Ontario: Oxford University Press.**

**Gray, J., Bounegru, L., & Chambers, L. (2012). *The data journalism handbook: How journalists can use data to improve the news*. Sebastopol, California: OReilly & Associates.**

**McCarten, J. (2017). *The Canadian Press stylebook: A guide for writers and editors*. Toronto, Ontario: The Canadian Press.**

**McCarten, J. (2015). *The Canadian Press caps and spelling*. Toronto, Ontario: The Canadian Press.**

Throughout the semester, I will invite you to read other materials. They will be available on the Virtual Campus or in the course reserve at the Morisset Library.

**LANGUAGE OF INSTRUCTION**

This course will be taught in English. Please note that the Regulation on Bilingualism at University of Ottawa does not apply to the journalism program. As such, you must complete your assignments in English.

If you need help writing your assignments, please do not hesitate to visit the Academic Writing Help Centre (AWHC). I also encourage you to use the Antidote software (installed on the computers in the Morisset Library) to spell check your articles.

**ASSIGNMENTS, PARTICIPATION & PROFESSIONALISM**

You must submit your assignments on Virtual Campus **before 23:59 on the due date**. I will give you detailed guidelines ahead of time.

| **Description** | **Deadline** | **Value** |
|---|---|---|
| Assignment 1: Creating a Mini Website | October 18 | 15% |
| Assignment 2: Access to Information Request | October 30 | 15% |
| Assignment 3: Story Pitch for the final project | November 13 | 15% |
| Assignment 4: Data Extraction & Analysis | November 27 | 15% |
| Final Project:  Long-Form Multimedia Story | December 20 | 30% |
| Participation & Professionalism | Throughout the term | 10% |

**Assignment 1: Creating a Mini Website**

Using your new HTML5 & CSS3 coding skills, you must create a three-page mini website, including a homepage, your biography and a page of your choosing. All three web pages must be linked to the same CSS file. Your website must also follow some accessibility guidelines. Your site must be published on GitHub Pages.

**Assignment 2: Access to Information Request**

Find a newsworthy issue you would like to explore further thanks to access to information law. For this assignment, you must not only hand in your access to information request, but you must also clearly detail your journalistic process by citing some of the mandatory readings.

**Assignment 3: Story Pitch for the Final Project**

You need to pitch me an idea for your long-form multimedia story. Your pitch must include a) a summary of your topic and angle, b) an explanation as to how you intend to collect, analyze and visualize data in your final project, and c) the names and contact information for three potential sources (interviewees).

**Assignment 4: Data Extraction & Analysis**

For this assignment, you must extract data from a website or database. You must then clean and analyze the data, and find a potential story idea. Your assignment must clearly detail your journalistic process.

**Final Project: Long-Form Multimedia Story**

The final project consists of a 1500-word article, which must include at one data visualization item (interactive map, graphic, etc.) and two other multimedia elements (photo-essay, audio item, video, etc.). You must choose a topic in the Ottawa-Gatineau area. Also, your story must stem from a thorough exercise of data analysis and visualization.

**Participation & Professionalism**

I believe that your participation mark should not be a simple attendance mark, especially since this is a fourth-year course. As such, you must earn each of your 10 participation points by actively contributing to your own learning and the learning of your peers. Amongst other things, I expect you to do the mandatory readings and to take part to our in-class group discussions.

**A QUICK REMINDER OF WHAT CONSTITUTES A NEWS STORY**

Do not forget that a good news story goes beyond writing the “minutes” of an event or meeting. A university-type essay on a social problem/issue is not, in itself, a news story either. Instead, your assignments must be fact-based storytelling endeavours tackling an issue of interest to your target audience. You must captivate your readers, listeners or viewers by telling them a story. Remember our senses: hearing, sight, smell, taste and touch. Make us “experience” your story. Also, don’t forget to answer the following questions: Who? What? Where? When? Why? and How? And since we will be dealing with data journalism this term, we will add a seventh question: How much/many?

## FORMATTING & STYLE OF ASSIGNMENTS

Your assignments must follow the instructions published on Virtual Campus. They must also be formatted according to the guidelines highlighted in *The Canadian Press stylebook: A guide for writers and editors* and *The Canadian Press caps and spelling*.

## OFFICIAL GRADING SYSTEM

Grades are assigned using the official University of Ottawa grade scale:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **A+** | 90-100% | **B+** | 75-79% | **C** | 60-64% | **E** | 40-49% |
| **A** | 85-89% | **B** | 70-74% | **D+** | 55-59% | **F** | 0-39% |
| **A-** | 80-84% | **C+** | 65-69% | **D** | 50-54% | | |

**ABS** Absent
**EIN** Failure/Incomplete
**NNR** Grade not available or not submitted because of an ongoing investigation over alleged academic fraud

See also Academic regulation I-10 - Grading system.

## LATE PENALTY

As future journalists, you must learn the utmost importance of deadlines. As such, assignments must be handed in by the deadline specified in this syllabus. If you do not hand in your assignment by the due date, I will deduct 10% from your grade for said assignment per day, unless you can produce the proper justification, as outlined in Article 9.5 of Academic regulation I-9 - Evaluation of student learning.

## ATTENDANCE & PUNCTUALITY

Whether there's a power outage, a flood or a winter blizzard, journalists ought to show up for work on time to keep the public informed. As such, I am expecting you to be in class on time. If you miss more than two lectures, you will need to produce a medical note or any other form of proper paperwork. Otherwise, you will get a 0 as your participation and professionalism mark.

**ACADEMIC FRAUD**

Although academics and journalists don't always see eye to eye, we do have one thing in common: we do not tolerate plagiarism. This includes using sentences, quotes and ideas that are not yours without properly attributing them. In short: don't pass someone else's work off as your own.

In the specific case of your final project, it would be fraudulent to invent quotes or stats, to pretend that you witnessed a situation when you did not, to use images and sound captured by another person without giving proper credit.

It is also prohibited to plagiarise yourself. Don't hand in an assignment that was already submitted in another course, for an internship application, for your job, etc. When in doubt, ask me first.

If you need more information about plagiarism, please read the "Academic Fraud" section of the University of Ottawa's website.

**ABOUT ME**

I have been working for CBC/Radio-Canada since the spring of 2011. I am currently a multiplatform producer. I also worked as a researcher for *Ruby TFO* and *Le rêve de Champlain*, which are both TV series which aired on TFO. In past years, I directed several independent short docs, notably on child trafficking in Benin and street theatre in Colombia. I hold a Bachelor of Arts in International Studies from York University's Glendon College, together with a Master of Journalism degree from Carleton University and a Graduate Diploma in Public Ethics from Saint-Paul University. I live in Ottawa with my wife Samantha and our three house plants.

**CLASS CALENDAR**

**Understanding the Nuts and Bolts of Web Coding and Data Journalism**

**1. Tuesday, September 11 - First Class**

Welcome, presentation of the course outline, your learning goals, quick review of the subjects addressed in JOU3100, required texts and equipment, Q & A session.

**2. Tuesday, September 18 - What is Data Journalism?**

Is data journalism a form of investigative reporting? What's the difference between data journalism and computer-assisted reporting (CAR)? What are the main tools used by data journalists? We will tackle those questions and more.

To read before class:

- *Digging deeper*
  - Chap. 1 "An Introduction to investigative journalism"
  - Chap. 2 "The nuts and bolts of investigations"
- *The data journalism handbook*
  - Chap. 1 "Introduction"
  - Chap. 2 "In the newsroom"

**3. Tuesday, September 25 - Learn to Code in HTML & CSS: Part A**

The HyperText Markup Language (HTML) and Cascading Style Sheets (CSS) are the core building blocks of a website. In the next two weeks, we will learn how to understand these two languages and we will build a mini website.

To do before class:

- Make sure to configure your laptop according to the guidelines highlighted in the "Required Equipment" section of this course outline.
- Start the Learn HTML and Learn CSS courses on Codecademy.

**4. Tuesday, October 2 - Learn to Code in HTML & CSS: Part B**

We will pick up where we left off last week. We will also talk about accessibility standards set forth by the World Wide Web Consortium (W3C) and address intellectual property issues we face when exploring the source code of software, apps and websites.

To do before class:

- Try to complete the Learn HTML and Learn CSS courses on Codecademy.

**Finding, Collecting & Extracting Data**

**5. Tuesday, October 9 - Open Data, Access to Information & Other Sources**

While data journalism has been around for quite some time, the Internet and the digitization of data have brought about new opportunities for data journalists. Today, we will learn how to find data. We will explore online government databases, public tenders and access to information requests.

To read before class:

- *The data journalism handbook*: Chap. 4 "Getting data"
- *Digging deeper*: Chap. 10 "Getting behind closed doors: Using the information laws"

**6. Tuesday, October 16 - Web Scraping with XPath: Part A**

Last week, we learned how to access government data the "official way." In the coming weeks, we will learn how to scrape data. We will use our new knowledge of HTML and CSS to extract data by writing XPath queries.

To read before class:

- All six sections of the *XPath Tutorial* by W3Schools

Complementary resources:

- I encourage you to explore Python.org over reading week.
- If you are up for a challenge, Codecademy offers a free 10-hour course on Python.

## ---------- Reading Week October 21-27 ----------

**7. Tuesday, October 30 - Web Scraping with XPath: Part B**

We will pick up where we left off before reading week. We will talk about APIs and your pitch for the final project.

To read before class:

- Read the "Perfect pitch, or how I learned to love rejection" in *The bigger picture : elements of feature writing*, pp. 29-42 (Virtual Campus)

**Cleaning & Analyzing Data**

**8. Tuesday, November 6 - Cleaning & Understanding Data**

Once we have found an interesting dataset, we need to clean it and format it. We then need to analyze it in order to identify a newsworthy story. This week, we will learn to use tools such as OpenRefine and Google Sheets.

To read before class:

- *The data journalism handbook*: Chap. 5 "Understanding data"

**9. Tuesday, November 13 - Exploring the Data to Find a Story**

We will pick up where we left off last week. I will teach you how to "code" functions in order to automatically calculate averages, sums, etc. I will also show you how to use pivot tables.

To read before class:

- *Google Sheets function list* on Docs Editors Help.
- *Digging deeper*: Chap. 9 "Following the money: Seeing the business angle in any story"
- The Canadian Press stylebook
    - Statistics
    - Polls

## Visualizing & Presenting Data

### 10. Tuesday, November 20 - Creating Interactive Graphics & Charts

Today, we will look at ways to make our data "speak". We will learn how to turn our data into interactive graphs and charts. You will learn to use tools such as DataWrapper, Infogram and Tableau.

To read before class:

- *The data journalism handbook*: Chap. 6 "Delivering data"

To do before class:

- Complete the following training lessons on Google News Lab:
  - Google Historical Imagery
  - Permissions: Source Google Data

### 11. Tuesday, November 27 - Using Geolocation Data to Create Maps

Datasets are not only comprised of numbers. They also often include geolocation data. I will teach you how to create interactive maps with CARTO, Google MyMaps and Google Fusion Tables.

To do before class:

- Complete the following training lessons on Google News Lab:
  - Google My Maps: Show where stories happen
  - Google Crisis Map: Diagramming a disaster and its response

## Conclusion & What Comes Next

### 12. Tuesday, December 4 - Last Class

Wrap-up of the semester, what comes next?, questions about the final project, what have we learned?, etc.