# VIRGINIA COMMONWEALTH UNIVERSITY ROBERTSON SCHOOL OF MEDIA AND CULTURE

# Syllabus for Computer-Assisted Reporting ● MASC 644 ● Fall 2015

Instructor: Jeff South

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Office hours: 2-4 p.m. on Mondays; 10 a.m.-noon on Wednesdays;

1-3 p.m. on Thursdays; and by appointment

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When and where We will meet from 6 to 8:40 p.m. on Mondays

our class meets in Temple 1118.

On the Web: http://blackboard.vcu.edu – our class website

http://wiki.vcu.edu – our private collaborative space

http://mmj.vcu.edu/ - our public website

#### **COURSE DESCRIPTION**

Semester course; 3 lecture hours. 3 credits. Prerequisites: MASC 611 and 642. Provides a practical guide to online research, data analysis and other computer-assisted reporting and research skills. Students will learn how to find authoritative information, including news sources and data, through the Internet and other online resources. Students will also learn how to use spreadsheets, database managers, mapping programs, social networking analysis, statistical packages and other software to sort, summarize, analyze, visualize and present data. Course will cover how to evaluate the reliability of electronic information, how to find trends and integrate them into news reports, and how the First Amendment and journalism ethics apply to digital information. (Source: *VCU Bulletin*)

In MASC 644, you will learn how to become a better, faster and smarter reporter. You will learn how to use the Internet and other digital technology to find ideas, information and sources for your stories. In particular, you will learn how to obtain and analyze data – about health, crime, education, demographics and other topics. You will learn how to find patterns and trends in the data – to identify what the data mean. You will learn how to pull from the data examples to support the trends you have identified. You will learn how to weave this information into your stories, so that your stories aren't just anecdotal (based on what people have told you) but also analytical (based on reliable data that can't be disputed).

With computer-assisted reporting, you will be able to find stories that have gone unreported; rebut false and misleading statements from news sources; monitor the performance of government and other institutions; and become more marketable journalists.

**PREREQUISITES FOR MASC 644:** MASC 611 (Research Methods in Mass Communications) and 642 (Online Journalism I)

#### COURSE GOALS AND OBJECTIVES

In this course, students will learn to:

- Quickly find authoritative information on the Internet and through social media and other online resources.
- Evaluate data sources and the use of data by interest groups and news organizations.
- Use spreadsheets to sort and do mass computations on data for news stories, and to create charts and other graphics.
- Use database managers to find trends and anecdotes for stories.
- Negotiate for and evaluate the reliability of electronic information.
- Integrate online information and data analysis into news reports.
- Present information online, including posting data, creating searchable databases and designing interactive graphics and maps.

In this course, you will be exposed to the wider context of computer-assisted reporting, including its history, how it fits into the world of journalism, how it has been used in particular stories and projects, and the role that innovative thinking plays in the process. You will get a taste of computer programming as it applies to several news-reporting functions. And you will get an appreciation for the role that visual display of data can play in both analysis and the packaging of stories.

You also will come to understand that, despite advances in technology, the fundamentals of basic reporting still apply. These include a devotion to accuracy, clarity, fairness, solid news value and, ultimately, good storytelling.

#### **COURSE MATERIALS**

In MASC 644, you mostly will learn by doing – by pursuing news stories that require CAR skills. I will provide handouts and online resources to help you learn those skills. In addition, outside of our class meetings, you will take software tutorials from Atomic Learning, an online technology training service free to VCU students.

Our readings in MASC 644 will be mostly online. For example, I will have you read selections from *Precision Journalism: A Reporter's Introduction to Social Science Methods*, by Philip Meyer, a professor emeritus in the School of Journalism and Mass Communication at the University of North Carolina. (An old but still relevant edition of the book is available at http://www.unc.edu/~pmeyer/book/)

CAR is not simply a skill set; it's a culture. I want you to immerse yourselves in this culture. To do that, you must join the nonprofit organization called Investigative Reporters & Editors Inc. As students, you can join IRE for \$10 for the entire semester. I will provide instructions on how we will do this as a class. Your IRE membership will give you access to *The IRE Journal*, the IRE Resource Center (with more than 25,000 investigative stories and 3,500 tipsheets), a library of databases and a community of helpful journalists.

IRE oversees a sister organization called the National Institute for Computer-Assisted Reporting. You must subscribe to the NICAR listsery at

http://www.ire.org/resource-center/listservs/subscribe-nicar-l/

That will allow you to monitor and participate in online discussions about computer-assisted reporting.

You will need a portable hard drive (at least 100 gigabytes) to store digital files of your work and course materials. It can be the same device you use for other courses in the Multimedia Journalism Master's Program. For MASC 644, develop a logical filing system on your hard drive – with nested folders and consistent file-name conventions. Save all your work; keep a backup; and always work with the latest version of a data file or story. The ability to manage information is a key to success in this course.

For consistency, all in-class work in MASC 644 will be done on the PCs in Temple 1118. That said, CAR can be done on Macs as well as – and if you are a Mac user, I can advise you on how you can use your Mac computer for out-of-class activities.

# **KEEPING UP WITH THE NEWS**

As journalists, it is crucial for you to keep up with what is happening in the Richmond area, in Virginia, in the United States and around the world. Every day, you should read the *Richmond Times-Dispatch* and *The New York Times* or *The Washington Post* – if not on paper, then online. You also should monitor alternative media, listen to NPR and watch news on television. Look and listen for stories that used – or could have benefited from – CAR techniques. You also will find such stories at:

Extra! Extra! Your Guide to the Latest Investigative Work (a blog hosted by Investigative Reporters and Editors Inc.): http://www.ire.org/blog/extra-extra/

# **CLASS WEBSITES**

We will use the Blackboard course management system [http://blackboard.vcu.edu] for some key aspects of MASC 644. They include:

- ♦ Announcements. Here, I will post assignments, reminders or ideas. I'll email this information to you, too, but Bb's Announcements page will have a permanent copy.
- ♦ Discussions. We may use this area to engage in online discussions during weeks when we do not meet in person.
- Email via Blackboard. This function lets you send email to me and to your classmates.

In addition, the top announcement on our Blackboard home page will link to a private wiki that I have created for MASC 644. (The wiki can be accessed directly at https://wiki.vcu.edu.) Our wiki will be the starting point for every class meeting. Before each class, I will post an agenda that will guide us for that meeting. And we'll use our wiki for posting and collaborating on resource materials. I've enabled you to edit the wiki pages, so all of us can contribute when it's appropriate. For example, we can use this space for suggesting research tips, websites or databases.

In addition, the Multimedia Journalism Master's Program has a public website at http://mmj.vcu.edu/. We will use the public website to showcase your stories and other work.

#### IMPORTANT RULES ABOUT EMAIL

VCU gives each student an email account, and that is the address Blackboard uses (and I will use) for this class. We will communicate frequently in this class by email. Therefore, you should check your email at least once a day for messages about MASC 644. It is your responsibility to ensure that you are receiving emails from me.

When you send me email, begin the subject line with "MASC 644:". That way, I will know to give it top priority.

#### POLICIES AND PROCEDURES FOR GRADUATE STUDENTS

# General academic regulations for all graduate students

It is the responsibility of all graduate students to be familiar with the Graduate Bulletin of record (the bulletin in effect at the time of official admission), as well as the academic regulations in individual school and department publications and on program websites.

In all cases, the official policies and procedures of the University Graduate Council take precedence over individual program policies and guidelines. You can find these University Graduate Council's policies, procedures and requirements at:

http://www.pubapps.vcu.edu/bulletins/graduate/

#### SATISFACTORY ACADEMIC PROGRESS

Graduate students at VCU must continue to make satisfactory progress toward their degrees. Unsatisfactory grades and unprofessional conduct are areas that may warrant review for possible termination from their programs.

Specifically, students may not present courses receiving less than a C for fulfilling degree requirements. At the end of each semester, graduate faculty advisers and program directors will review the academic progress of all graduate students in their programs. The academic standing of any graduate students who receive multiple grades of C or grades of D or F will be reviewed for possible termination from their programs.

#### **CLASS ATTENDANCE POLICY**

This course simulates professional standards. You are expected to regularly participate in all class discussions and exercises. Class will start promptly. Please be on time.

Attendance is essential and therefore required. If you know in advance that you must miss a class, notify me in advance by phone or email. You must meet with me after an absence so you can tell me why you were absent and I can tell you what you missed.

If you miss two class meetings, I will lower your final grade in the course by one letter. If you miss three or more classes, you automatically will receive an F in MASC 644.

It is your responsibility to make up all work covered during a class that you miss. Moreover, you must submit assigned work on time even if you are absent; you may do so by email. An absence does not excuse you from meeting a deadline.

#### ASSIGNMENTS AND TESTS

"Data Drop" briefs – Almost every week, I will have you analyze a data set and write a report (250-300 words), which we'll call a "Data Drop" brief. We'll start this activity in class; you'll finish it afterward and file your brief online. We will discuss the briefs in class or online. (And I'll ask one member of the class to summarize our information, so we can post an overall report, with the data, on our public website.) Your briefs will not require interviewing people. Instead, they will be like a blog item; you can cite and link to news stories and other online information relevant to the data.

**Spreadsheet-driven story** (due Oct. 2) – You will research and write a news story based on spreadsheet analysis. The spreadsheet can be one we have explored in class or one you have found on your own. After analyzing the data, you must find people to interview – "official" sources as well as "real people." (Unlike a "Data Drop" brief, your news story must be entirely original reporting; it can't take information from a previously published article.) The story must be at least 600 words and have at least three sources.

# Midterm exam (Oct. 23)

**CAR project** (proposals by Oct. 30; drafts on Nov. 20; final versions on Dec. 4; respond to edits Dec. 13) – Your project will be like the spreadsheet-driven story but far more complex, using a bigger data set (and/or multiple data sets) and software beyond Excel. Your project should be investigative and compelling – something you can enter in a journalism contest. It must include, at minimum, a mainbar; a sidebar; a "nerd box"; and graphics, tables or charts. You will work in pairs on your project; grades will be based on what you do individually as well as together.

Final exam (Dec. 11)

#### GRADING STANDARDS

On your stories and other writing assignments, I will apply the following standards for specific letter grades:

A = Substantially error-free and ready for publication. (Moreover, to receive an A, you must make a significant effort to get the final version of your story published by a news organization. I will help you with this.)

B = Solid effort; only minor editing errors.

C = Average work; needs some reorganization and rewrite

D = Multiple errors; needs major rewrite

F = Gross factual errors; unsuitable for publication

0 = Missed deadline; ignored assignment

#### CALCULATION OF FINAL COURSE GRADES

This chart show how much each gradebook item will be worth. This grading scheme will be modified if we change the number or types of assignments during the semester. Changes will be announced in class and on Blackboard.

Gradebook item	Weight
"Data Drop" briefs	10
Spreadsheet-driven story (due Sept. 28)	15
Midterm exam (Oct. 19)	15
CAR project (Nov. 16-Dec. 7)	25
Final exam (Dec. 7)	35
Total	100

Here is how I will calculate your final grade:

Weighted total	Final grade
90% or more	A
80-89%	В
70-79%	С
60-69%	D
Below 60%	F

#### INCOMPLETES

No incompletes will be given in this course, except for dire emergencies. All assignments must be completed by the end of the semester to pass.

#### **ETHICS**

Fabricating material or using another's work without attribution is an extremely serious offense, and your name will be turned in to appropriate university officials. In this course, as in the journalism profession, plagiarism is not tolerated. This means you must not use direct quotes or verbatim material from a newspaper or other publication without giving credit.

The VCU Honor System will be enforced in this class. Unless I specify otherwise, all work done for this course is "pledged" work, as defined by the Honor System. Each assignment implicitly carries this pledge:

# "On my honor, I have neither given nor received aid on this assignment."

For a complete copy of the VCU Honor System, see www.students.vcu.edu/policies.html.

In this course, we also will follow the Society of Professional Journalists' Code of Ethics [http://www.spj.org/pdf/ethicscode.pdf]. Among other provisions, I expect you to "test the accuracy of information from all sources and exercise care to avoid inadvertent error"; "identify sources whenever feasible"; "avoid stereotyping"; "give voice to the voiceless"; "avoid conflicts of interest, real or perceived"; "remain free of associations and activities that may compromise integrity or damage credibility"; and "admit mistakes and correct them promptly."

#### CONDUCT IN THE CLASSROOM AND THE FIELD

According to VCU policy, you are entitled to receive instruction free from interference by other students. If you believe that another student's behavior is disruptive, tell me and I will deal with the situation.

During class, you may use the computers only as I allow; you may not read email, browse the Web, play games, write letters or do other activities unless authorized.

You must not install any programs on the school's computers without my permission. It is a violation of VCU policy for you to install file-sharing, chat, instant-messenger or other programs on the school's computers. You must not install screensavers or desktop images, either. Action will be taken against violators. Tell me immediately whether unauthorized programs have been installed on the computer you are using.

No food or drink is allowed in the classroom. Turn off your cellphones before class begins. You may not sleep, wear headphones or use electronic devices (such as computer games) in class. You must not conduct side conversations or create other disruptions. It is disruptive to arrive late and/or pack up early. Be on time for class and plan on meeting for the entire class period.

VCU rules prohibit anyone "to have in his possession any firearm, other weapon, or explosive, regardless of whether a license to possess the same has been issued, without the written authorization of the President of the university."

Be polite; respect your classmates, your instructor and others with whom you will interact during this course. If you engage in any behavior that I deem disruptive, you will get a verbal warning for the first incident and a written warning for the second. A third incident will result in your being administratively withdrawn from this class.

In reporting stories for MASC 644, you will interact with news sources and other people. You must act in a professional manner at all times: in interviewing people, talking to them on the phone and communicating with them by email. This means being respectful, polite and non-argumentative – in short, acting as a professional and ethical journalist. It also means dressing appropriately for interviews and other meetings. Your behavior and appearance reflect not only on you but also on VCU and the Robertson School of Media and Culture. If you act unprofessionally, I will lower your grade accordingly.

#### **CULTURAL DIVERSITY**

It is vital that students in this course broaden their mass communications experiences, with guidance from the instructor, by including in their course work people and subjects such as ethnic, racial and religious minorities, people with disabilities, gay men and lesbians, and other groups. The intent is to ensure that students are exposed to diverse ideas and perspectives. In this class, it is the responsibility of the instructor and students to foster an environment that supports free expression.

Under VCU policy, you may not harass or intimidate any person or "interfere with the lawful freedom of other persons, including invited speakers, to express their views."

#### REPORTING OF INCIDENTS OF SEXUAL MISCONDUCT

All faculty members are mandated reporters of any incidents of sexual misconduct/violence (e.g., sexual assault, sexual exploitation and partner or relationship violence). This means that faculty cannot keep information about sexual misconduct/violence confidential if you share that information with them and they must report this information immediately to the university's Title IX Coordinator.

Confidential reporting sources include staff in Sexual Assault and Domestic Violence at the Wellness Resource Center, University Counseling Services and University Student Health Services.

#### STUDENTS WITH DISABILITIES

The Americans with Disabilities Act of 1990 requires Virginia Commonwealth University to provide academic adjustments or accommodations for students with documented disabilities. If you have a disability that requires an academic adjustment or accommodation, you must contact Joyce Knight, the coordinator of services for students with disabilities on VCU's Academic Campus. Ms. Knight's office is in Room 102 of the Student Commons, 907 Floyd Ave. Her email address is jbknight@vcu.edu, and her phone number is 828-2253.

After meeting with Ms. Knight, you then should meet with me to discuss your needs and how we can address them. For more information, see the university's Web page on Services for Students with Disabilities:

#### www.students.vcu.edu/dss/

#### STUDENT TECHNICAL STANDARDS

The School of Mass Communications has created descriptions of technical standards required for various professions within communications, including but not limited to print journalism, broadcast journalism, online journalism, advertising, public relations and photography. These technical standards – in the areas of motor skills, sensory-observation abilities, communication skills, cognitive skills and behavioral capabilities – reflect the performance abilities and characteristics that are necessary to successfully complete the requirements of the academic programs at the school. These standards are not requirements for admission into the programs. The School of Mass Communications complies with the requirements and spirit of Section 504 of the Rehabilitation Act and Americans with Disabilities Act of 1990. Therefore, the school will endeavor to make reasonable accommodations for students with disabilities who are otherwise qualified. The complete technical standards may be found at:

http://robertson.vcu.edu/about/students/technical-standards/

#### WHAT TO KNOW AND DO TO BE PREPARED FOR EMERGENCIES AT VCU

- 1. Sign up to receive VCU text messaging alerts (www.vcu.edu/alert/notify). Keep your information up-to-date.
- 2. Know the safe evacuation route from each of your classrooms. Emergency evacuation routes are posted in on-campus classrooms.
- 3. Listen for and follow instructions from VCU or other designated authorities.
- 4. Know where to go for additional emergency information (www.vcu.edu/alert).
- 5. Know the emergency phone number for the VCU Police (828-1234). Report suspicious activities and objects.

#### OTHER POLICIES AND SYLLABUS INFORMATION

Visit http://provost.vcu.edu/faculty-resources/academic-affairs/syllabus-statements/ for other VCU policies, including the "Statement on Military Short-Term Training or Deployment" and "Excused Absences for Students Representing the University."

# SCHEDULE OF CLASSES, READINGS, ASSIGNMENTS AND TESTS

This schedule is subject to change. Changes will be announced in class and by email and posted on Blackboard.

### To prepare for our first class meeting:

# Readings:

Essays from When Nerds and Words Collide

Articles from "21st Century Muckrakers: Staying Local, Digging Deep"

Wikipedia entries on "Computer-assisted reporting" and "Data-driven journalism"

# Assignment:

Find one example of a CAR story (or a data-driven story).

**Week 1: Wednesday, Aug. 19** – Review syllabus. Overview of computer-assisted reporting. Discuss readings. The history of CAR. Examples of stories that used CAR. A quick tour of CAR tools.

Data du jour: Medicare Provider Charge Data

Skills focus (if time allows): Online research – Google tips

### Homework

Online readings (see our wiki)

Precision Journalism: Preface and Chapter 1

Internet search tipsheet

# Other assignments

Post a "Data Drop" brief about the Medicare Provider Charge Data.

Join IRE.

Subscribe to NICAR-L, the listserv of the National Institute for Computer-Assisted Reporting.

**Week 2: Monday, Aug. 24** – Discuss readings. Online research. The Internet. Google hacks. Finding sources. Social media. The "deep Web." Lookups vs. downloads. Boolean logic in searching patents.

Skills focus: Online research, social media and the "deep Web"

Data du jour: Patents; health insurance coverage

# <u>Homework</u>

Online readings

Precision Journalism: Chapter 2

Selected issues of the IRE Journal

Other assignments

Online search exercise / scavenger hunt

"Data Drop" brief

Atomic Learning modules: Excel 2010 – Intro:

- A. Basics
- B. Working with Cells
- C. Formulas and Functions
- D. Formatting Cells
- E. Working with Columns and Rows

Wednesday, Aug. 26: End of add/drop and late registration

Week 3: Monday, Aug. 31 – Discuss readings. Review online research skills.

Skills focus: Spreadsheets – downloading files; sorting, simple calculations, filtering

Data du jour: International demographics

## Homework

Online readings: TBA

Other assignments

"Data Drop" brief

NewsU.org course: Math for Journalists

Atomic Learning modules: TBA

Week 4: VCU is closed on Monday, Sept. 7, for Labor Day. We will hold online activities this week. Ideas for spreadsheet-driven story. Each student must select a topic and data set for the article due Sept. 28.

Skills focus: Spreadsheets – more practice downloading data files; creating more complex formulas; putting data online (Google Spreadsheets).

Data du jour: Crime statistics; graduation rates

# **Homework**

Online readings: TBA

Other assignments

"Data Drop" brief

Atomic Learning modules: Excel 2010 – Pivot Tables Training

Excel exercise

# Week 5: Monday, Sept. 14 – Data integrity; working with "dirty data."

Skills focus: Spreadsheets – converting PDF tables; data cleanup; pivot tables

Data du jour: Student loan defaults; health data

# Homework

Online readings: TBA

Other assignments

"Data Drop" brief

Work on stories due Sept. 28.

Sept. 19-27: VCU classes will be canceled as Richmond hosts the UCI Road World Championships.

# Week 6: VCU is closed because of the bike race. We will hold online activities this week. Your spreadsheet-driven story will be due on Monday, Sept. 28. I will be feedback online.

# Homework

Online readings: TBA

Other assignments: TBA

Week 7: Monday, Oct. 5 – Discuss your spreadsheet-driven stories.

Skills focus: Creating and embedding simple online graphics

Databases – exploring Access together; simple queries

Data du jour: Dam safety; VCU grades data

## Homework

Online readings: TBA

Other assignments

"Data Drop" brief

Access exercise

**Week 8: Monday, Oct. 12** – How to find and negotiate for data. Practice writing FOIA requests. Calculating correlation and other statistics with Excel and other software programs.

Skills focus: Databases – more practice; grouping Data du jour: Political donations; election returns

# Homework

"Data Drop" brief

Study for the midterm exam.

**Week 9: Monday, Oct. 19** – Review. During the second half of class, you will take a midterm exam covering all material to date (readings, online research, spreadsheets and database managers).

# **Homework**

Online readings: TBA

Other assignments: TBA

**Week 10: Monday, Oct. 26** – Go over midterm exams. Working in pairs, students will select a topic for their final projects, which must involve both Access and Excel.

Skills focus: Databases – importing data; joining data Data du jour: Mortgage loan data; boating accidents

### Homework

Online readings: TBA

Other assignments

"Data Drop" brief

On Blackboard, you will share and discuss your project ideas.

Friday, Oct. 30 – Last date to withdraw with a mark of W

**Week 11: Monday, Nov. 2** – Critique your project ideas; develop budgets and strategies. Discuss the use of CAR in election coverage.

Skills focus: More on data cleaning; crosstabs

Data du jour: Election results and campaign spending

## Homework

Online readings: TBA

Other assignments

Work on your CAR projects

Tuesday, Nov. 3 – Election Day. We may do post-election analysis later in the week.

# Week 12: Monday, Nov. 9

Skills focus: ArcGIS; publishing data with Google Maps and Google Fusion Tables.

Data du jour: American Community Survey data from the U.S. Census Bureau

# **Homework**

Online readings

Social networking analysis tipsheets

Other assignments

"Data Drop" brief

Work on your CAR projects

# Week 13: Monday, Nov. 16 – CAR project drafts are due. In-class critiques.

Skills focus: social networking analysis

Data du jour: transportation data

# Homework

Online readings: TBA

Other assignments

"Data Drop" brief

Week 14: Monday, Nov. 23 – In class, we will continue practicing Access skills and Excel skills. I will give you time to work on your projects as well.

**Week 15: Monday, Nov. 30** – Final versions of your CAR projects are due. You must post your project on our class website and make a presentation to the class. Review for final exam.

Final exam: 6-8:50 p.m. on Monday, Dec. 7