# **Cover Sheet: Request 11350**

# MMC XXXX

Info	
Process	Course New Ugrad/Pro
Status	Pending
Submitter	Spiker,Theodore D tspiker@jou.ufl.edu
Created	12/12/2016 4:21:37 PM
Updated	1/12/2017 8:08:34 PM
Description	New 1-credit course: Data Literacy for Communicators
of request	

# Actions

	ACTIONS									
Step	Status	Group	User	Comment	Updated					
Department	Approved	JOU - Journalism 012304000	Spiker, Theodore D		12/12/2016					
No document										
College	Approved	JOU - College of Journalism and Communications	Weigold, Michael Fredrick		12/16/2016					
No document										
University Curriculum Committee	Comment	PV - University Curriculum Committee (UCC)	Cacciatore, Amber S	Added to the January agenda.	12/19/2016					
No document	changes									
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			12/19/2016					
No document	changes									
Statewide Course Numbering System										
No document	changes									
Office of the Registrar										
No document	changes									
Student Academic Support System										
No document	changes									
Catalog										
No document College Notified No document										
140 document	chariges									

# Course | New for request 11350

## Info

**Request:** MMC XXXX

**Description of request:** New 1-credit course: Data Literacy for Communicators

Submitter: Griffith, Casey Todd cgriffith@aa.ufl.edu

**Created:** 1/13/2017 1:23:23 PM

Form version: 2

# Responses

Recommended PrefixMMC
Course Level 2
Number XXX
Category of Instruction Introductory
Lab Code None
Course TitleData Literacy for Communicators
Transcript TitleData Literacy for Com
Degree TypeBaccalaureate

**Delivery Method(s)**On-Campus **Co-Listing**No

Effective Term Earliest Available Effective YearEarliest Available Rotating Topic?No Repeatable Credit?No

#### Amount of Credit1

#### S/U Only?No

Contact Type Regularly Scheduled

**Weekly Contact Hours** 1

**Course Description** This course in numeracy enables you to become data-literate – to use, evaluate and communicate numbers in situations commonly faced in advertising, journalism, public relations and telecommunications.

Prerequisites None Co-requisites None

**Rationale and Placement in Curriculum** SLO data shows that journalism students are not prepared to understand data in the context of media and communications scenarios. This course will help students learn practical application for numbers in media and communications industries.

# **Course Objectives** Objectives

By the end of the course, you should be able to:

- Communicate numbers and basic statistics to an audience.
- Appraise the validity of statements employing numbers.
- Critique and summarize public opinion surveys.
- Distinguish between random events and meaningful patterns.
- Evaluate assertions about causation, evidence, theory and risk.
- Interpret tables, charts and data visualizations.
- Simplify and contextualize large or complicated numbers.
- Identify cognitive biases that shape interpretation of numbers.
- Detect and avoid common forms of number abuse.
- Use a spreadsheet to calculate, sort, filter and pivot numbers.

**Course Textbook(s) and/or Other Assigned Reading** Damned Lies and Statistics," updated edition, by Joel Best. University of California Press, 2012. ISBN: 978-0520274709 (links to Amazon and Barnes & Noble)

### **Weekly Schedule of Topics**

- 1 January 4 Introduction Gaining numerical confidence
- 2 January 11 Evaluating Data Evidence, proof, theory, hypothesis, limitations: how to decide what information is credible in your reporting and information consumption
- 3 January 18 Average Correctly using mean, median and mode in databased coverage
- 4 January 25 Percent Portion, change, points, percentile, quartile. Tracking government/business performance
- 5 February 1 Simplify Spatial comparisons, per capita, rates, ratios in coverage
- 6 February 8 Polling Sampling error, survey techniques, election polling
- 7 February 15 Probability & Risk Relative risk, regression to the mean, gambler's fallacy
- 8 February 22 Midterm
- 9 March 1 Number Biases Relativity, price, anchoring, availability
  - March 8 (spring break)
- 10 March 15 Communicating DataCommunicating numbers in word and speech in communications fields and media
- 11 March 22 Correlation Causation, measurement scales, variable types
- 12 March 29 VisualsInterpreting tables and charts, discerning error
- 13 April 5 Spreadsheet 1 Manipulating data for storytelling: Cell formats, formulas, functions, sort
- 14 April 12 Spreadsheet 2 Manipulating data for storytelling 2: Filter, pivot table, importing, exporting, sharing
- 15 April 19 Discernment Normalization, comparisons, data skepticism

  April 27 3-5p Final Exam

#### **Links and Policies**

Academic Integrity

UF students pledge to abide by an honor code that prohibits academic dishonesty such as fabrication, plagiarism and cheating. You have an affirmative obligation to understand what constitutes academic dishonesty. You also must report to appropriate personnel any condition that facilitates academic misconduct. If you have any questions or concerns, please contact me.

When I discover cheating, my default policy is to fail all involved for the entire course and report the details to the Dean of Students Office.

#### Course Evaluations

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations. You will be notified by email when the evaluations are open, typically in the last two or three weeks of the semester. Summary results are available to you and the public.

Please note that evaluations serve two purposes: They (1) help my boss evaluate my performance and (2) enable me to improve my teaching and this course for future students. So what you have to say really does matter.

#### Students with Disabilities

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565) by providing appropriate documentation. Once registered, students will receive an accommodation letter, which must be presented to me when requesting accommodation. Such requests should be made as soon as possible – preferably at the start of the semester – so that I can adjust to the accommodation and therefore assist you in your learning.

#### Health and Wellness

Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on campus by encouraging everyone to look out for one another and to reach out for help if a person is in need.

If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by calling 352-392-1575.

The U Matter, We Care team can help connect students to many other helping resources including, but not limited to, victim advocates, housing staff, and the Counseling and Wellness Center. Asking for help is a sign of strength.

In case of emergency, call 911.

#### Academic Resources

- E-learning technical support: 352-392-4357 (select option 2) or e-mail to Learningsupport@ufl.edu or reach the website.
- For career advice and planning, or even help selecting a major or minor, contact the Career Resource Center in the Reitz Union, 392-1601.
- For help in finding resources, ask a UF librarian through Library Support.
- General study skills and tutoring available from the Teaching Center, Broward Hall, 392-2010 or 392-6420.
- Have a complaint? See the UF Complaints Policy for links and directions.

#### **Grading Scheme** Grade Allocation

Weekly quizzes or assignments (low 2 drop)

45% Midterm

25%

Final (cumulative)

30%

# Attendance

Attendance is expected. Course requirements for attendance, make-up exams, assignments and other work are consistent with UF policy. The course drops the two low

quiz scores. These two drops can be for any reason. Medical documentation must be provided that follows UF policies to make up that weekly work.

For an exam, a make-up can be accommodated if and only if (a) the absence is covered by UF policy, (b) you contact me (call preferred: 392-5137) at least 30 minutes before class begins, and (c) you promptly provide written documentation for the absence in case of an emergency.

#### Final Exam

The final exam time was scheduled by the University of Florida. If you have more than two exams that day, UF policy determines which one has to be rescheduled. Please let me know early in the semester if that situation applies to you. Otherwise, the final exam cannot be rescheduled to accommodate personal schedules or family vacations.

# **Grading Scale**

	Percent	Percent		Percent		Percent			
	B+	89-8	37%	C+	79-7	7%	D+	69-6	7%
Α	100-93%	В	86-8	33%	С	76-7	73%	D	66-63%
A-	92-90%	B-	82-8	30%	C-	72-7	70%	D-	62-60%

Scores are rounded to the nearest whole point: 89.4 rounds down to 89 (B+) while 89.5 rounds up to 90 (A-). The UF grading policy details how GPA is computed.

Instructor(s) Norm Lewis

# **MMCxxxx Data Literacy for Communicators**

Spring 2017 / Section 1G51 / Periods 4-5 Thursdays, Weimer 1094 / 1 credit



# Associate Professor Norman P. Lewis, Ph.D.

Office: Weimer 3052

Office hours: 12:45 to 2:45 p.m. (periods 6-7) Wednesday and Thursday

Phone: 352-392-5137 (I respond within 24 hours Monday through Friday) E-mail: nplewis@ufl.edu (I respond within 24 hours Monday through Friday)

About me: See my <u>website</u> or follow me (@bikeprof) on <u>Twitter</u>

"Office hours" are times I dedicate to being in the office (unless called away) and are first-come, first-served. Or, make an appointment. Or, drop in if the door is open.

#### **ABOUT THE COURSE**

# **Course Purpose**

To enable future media professionals to correctly interpret and communicate numbers.

## **Course Description**

This course in numeracy enables you to become data-literate – to use, evaluate and communicate numbers in situations commonly faced in advertising, journalism, public relations and telecommunications. It is a foundational course designed to be taken your freshman year. No pre-requisite.

#### **Course Structure**

This is a "flipped" course: Your homework is to watch instructional videos online and come to class to do practice problems. Each week's online module averages about 40 minutes of videos plus a practice quiz. The class meets for two periods to ensure sufficient time for practice problems and to answer questions before taking a graded quiz.

# **Objectives**

By the end of the course, you should be able to:

- Communicate numbers and basic statistics to an audience.
- Appraise the validity of statements employing numbers.
- Critique and summarize public opinion surveys.
- Distinguish between random events and meaningful patterns.
- Evaluate assertions about causation, evidence, theory and risk.
- Interpret tables, charts and data visualizations.
- Simplify and contextualize large or complicated numbers.
- Identify cognitive biases that shape interpretation of numbers.
- Detect and avoid common forms of number abuse.
- Use a spreadsheet to calculate, sort, filter and pivot numbers.

# **Required Textbook**

"Damned Lies and Statistics," updated edition, by Joel Best. University of California Press, 2012. ISBN: 978-0520274709 (links to <u>Amazon</u> and <u>Barnes & Noble</u>)

# **Simple Calculator Allowed**

You may use a calculator in class for quizzes and tests. It must be a dedicated calculator (no phones allowed) that cannot be programmed (so that graphing calculator from calculus is forbidden). Bottom line: If the calculator display shows only one row of numbers, it can be used for quizzes and tests.

#### **ASSIGNMENTS AND GRADING**

### **Tentative Schedule**

Class	Date	Theme	Key Topics		
1	January 4	Introduction	Gaining numerical confidence		
2	January 11	Evaluating Data	Evidence, proof, theory, hypothesis, limitations: how		
			to decide what information is credible in your		
			reporting and information consumption		
3	January 18	Average	Correctly using mean, median and mode in data-based		
			coverage		
4	January 25	Percent	Portion, change, points, percentile, quartile. Tracking		
			government/business performance.		
5	February 1	Simplify	Spatial comparisons, per capita, rates, ratios in		
			coverage.		
6	February 8	Polling	Sampling error, survey techniques, election polling		
7	February 15	Probability & Risk	Relative risk, regression to the mean, gambler's fallacy		
8	February 22	Midterm			
9	March 1	Number Biases	Relativity, price, anchoring, availability		
	March 8	(spring break)			
10	March 15	Communicating Data	Communicating numbers in word and speech in		
			communications fields and media		
11	March 22	Correlation	Causation, measurement scales, variable types		
12	March 29	Visuals	Interpreting tables and charts, discerning error		
13	April 5	Spreadsheet 1	Manipulating data for storytelling: Cell formats,		
			formulas, functions, sort		
14	April 12	Spreadsheet 2	Manipulating data for storytelling 2: Filter, pivot table,		
			importing, exporting, sharing		
15	April 19	Discernment	Normalization, comparisons, data skepticism		
	April 27 3-5p	Final Exam			

According to the schedule on the registrar's website, UF has scheduled the final exam for 3:00 to 5:00 p.m. Thursday, April 27. Please plan your schedule accordingly.

#### **Grade Allocation**

Weekly quizzes or assignments (low 2 drop) ...... 45%

Midterm	 25%
Final (cumulati	

#### Attendance

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: <a href="https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx">https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx</a>

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## **Grading Scale**

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A-	92-90%	B-	82-80%	C-	72-70%	D-	62-60%

Scores are rounded to the nearest whole point: 89.4 rounds down to 89 (B+) while 89.5 rounds up to 90 (A-). The <u>UF grading policy</u> details how GPA is computed.

#### OTHER IMPORTANT DETAILS

#### **Academic Integrity**

UF students pledge to abide by an <a href="https://honor.code">honor.code</a> that prohibits academic dishonesty such as fabrication, plagiarism and cheating. You have an affirmative obligation to understand what constitutes academic dishonesty. You also must report to appropriate personnel any condition that facilitates academic misconduct. If you have any questions or concerns, please contact me.

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In case of emergency, call 911.

#### **Academic Resources**

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- For career advice and planning, or even help selecting a major or minor, contact the <u>Career Resource Center</u> in the Reitz Union, 392-1601.
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Subject: Re: course consult JOU

Date: Tuesday, January 3, 2017 at 10:17:44 PM Eastern Standard Time

From: Knudson, Kevin P

To: Spiker, Ted

**CC:** Cenzer, Douglas A, Sin, Peter K

Hi Ted.

This doesn't duplicate any courses in the math department. There are elements that appear in our Math for Liberal Arts (MGF1106), which I suspect many of your majors take as well, but given the focus on how to read and write about data I think your proposed course will be a useful complement. As most of the material is statistical in nature, I suspect the Statistics department may have more to say about it.

Best, Kevin

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Professor and Associate Chair UF Distinguished Teaching Scholar Department of Mathematics University of Florida PO Box 118105 Gainesville, FL 32611

e: kknudson@ufl.edu

w: http://people.clas.ufl.edu/kknudson

On Jan 3, 2017, at 3:19 PM, Spiker, Ted < tspiker@jou.ufl.edu > wrote:

Hi Dr. Cenzer, Dr. Knudson and Dr. Sin,

This is Ted Spiker from the journalism department. As part of a curriculum revision, we have developed a 1-credit course called Data Literacy for Communicators. As part of protocol for the University Curriculum Committee, I am attaching the syllabus here for your review to make sure this does not conflict with any current offering in the department of mathematics. If everything is ok, can you please let me know when you get a chance?

Thanks, Ted

Ted Spiker
Chair, Professor
Department of Journalism • University of Florida
352-392-6990 • tspiker@jou.ufl.edu • @ProfSpiker

<MMCxxxx Data Literacy.docx>

Subject: Re: course consult JOU

Date: Wednesday, January 4, 2017 at 5:46:24 PM Eastern Standard Time

From: Brett Presnell

To: Spiker, Ted

I think this is ok. Naturally there is some overlap with STA2023 (a 3-semester-hour course), but we probably spend only a couple of lectures on such issues.

Spiker, Ted <<u>tspiker@jou.ufl.edu</u>> writes:

Hi Dr. Presnell,

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Thanks, Ted

Ted Spiker
Chair, Professor
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