ADV 4930/MMC 6936 Social Media Analytics & Strategy Fall 2022

Meeting Time: Tuesdays 11:45 am– 1:40 pm and Thursdays 12:50 pm – 1:40pm Meeting Location: MAE B 0234 (scan the QR code to locate it)



Instructor:

Dr. Yang Feng

E-mail: <u>y.feng@ufl.edu</u> Office: Weimer Hall 1200C

Office Hours: Thursdays 1:40-3:40 pm (Zoom: https://ufl.zoom.us/j/96853093282)

Office Tel: 352-392-0453

Prerequisites:

Undergraduate students: ADV 3008 and MAR 3023 with minimum grades of C and Advertising major of junior standing or higher.

Graduate students: Consent of instructor or graduate adviser.

No previous programming experience required.

Course Description

Designed for students who are interested in social media advertising campaigns (e.g., influencer marketing, social issue campaigns) without prior knowledge of programming languages, this course is a conceptual synthesis and practical application of social media analytics using the Python programming language and other software. This course includes hands-on workshops, mini-lectures, and class discussions. The primary goal of the first half of the semester is to acquaint students with the fundamentals of the Python programming language and to introduce students to some important packages that enable students to analyze the effectiveness of social media-based campaign messages. The primary goal of the second half of the semester is to focus on real-world campaign cases and to guide students to use Python to solve real-world problems for brands and businesses through data collection, data analyses, and data visualization.

What you need to bring to class

Your laptop (either PC or MAC)

Software and tools we need to use in class

Google Colab, Microsoft Excel, Google Chrome, Gephi

Student Learning Outcomes (SLO): What You'll Learn along the Way

SLO #1: Demonstrate an understanding of the Python programming language.

SLO #2: Understand the role of Python and other software in social media analytics.

SLO #3: Understand the algorithm-facilitated environment of social media

SLO #4: Conduct advertising research using Python and other software.

SLO #5: Interpret research results and present them in a story-telling format.

Course Materials

Course materials are available on Canvas.

Textbook and Readings

There is no required textbook.

Grading Policy: How I'll Determine Your Grade

The overall grading system in this course is:

A = 93-100	C = 73-76
A = 90-92	C = 70-72
B+ = 87-89	D + = 67 - 69
B = 83-86	D = 63-66
B - = 80 - 82	D = 60-62
C + = 77 - 79	F = 59 and below

More information on UF grading policy may be found at:

http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#grades

https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Course Assessment

Weekly reflection posts	20 points
Class discussion	10 points
Project 1 (Team-based)	30 points
Project 2 (Team-based)	40 points

Total 100 points

General Class Policies

Cellphone: Silence your phone or turn it to airplane mode prior to entering the class.

Late Assignments –Unexcused late class assignments or projects will be penalized 10% of the assigned marks each day. However, a student who presents the instructor with a <u>documented</u> (i.e., <u>written</u> and <u>verifiable</u>, not oral) reason for an absence normally within a week will be given an opportunity to make up the work missed <u>if</u> this is feasible.

Incompletes – No incomplete grades will be issued except in extraordinary and well-documented circumstances.

Attendance Policy, Class Expectations, and Make-Up Policy

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies. Click here to read the university attendance policies.

Formal Course Assessment: How You'll Know You're Learning

1. Weekly Reflection Posts: (20 points)

Given the workshop format of this course, your participation is critical. You should finish all your readings prior to class and be prepared to talk and contribute to class discussions. Also, each week on Thursday (by 12:50 pm), you are required to post what you have read in that week and your opinions about the reading material on Canvas Discussion Forum (except for Week 1, Week 7, Week 10, Week 11, Week 14, Week 15, and Week 16).

Your posts will be evaluated on a 10-point scale (0 for poor, 10 for excellent), based on the following:

- Student ability to summarize the key ideas from the reading of the week.
- Student ability to raise questions on the reading of the week.

***Note: Your weekly reflection post should contain at least 150 words (if you are an undergraduate student) or at least 300 words (if you are a graduate student).

2. Class Discussion: (10 points)

Given the workshop format of this course, your participation in discussion is critical. You are encouraged to finish all the in-class exercises during class time and be prepared to talk and contribute to class discussions.

Assignment Grading:

Your participation in class discussion is evaluated by the instructor during the weeks when there are class lectures on a 10-point scale (0 for none, 10 for most active participation), based on the following: 1) active participation in reading/exercise discussions and discussion on course topics; 2) answering questions raised by the instructor or classmates, 3) raising questions about the readings and course topics in class.

3. Projects (70 points)

There will be two team-based projects throughout the semester. Therefore, it is important for students to come to class on a regular basis.

Project 1: group presentation on sentiment analysis (due date: November 3) (30 points)

Project 2: group presentation on media exposure environment (due date: **December 6**) (40 points)

Grading will be based on:

- 1) Team ability to run Python coding and/or other software to analyze data.
- 2) Team ability to present sufficient research results to support claims.
- 3) Team ability to organize information in an efficient and a story-telling way.
- 4) Team ability to generate creative visuals.
- 5) Team ability to deliver effective oral presentation.

***Note: If you are a graduate student, please add a discussion section in your project to discuss how the results shed light on any advertising/mass communication theory.

4. Peer Evaluation

You will be evaluated **two times** during the semester by your team members. This is not a popularity rating but an objective evaluation of the commitment and quality of your efforts and contributions as seen by your team members. An average for both evaluations over the course of the semester will be computed for each team member. The evaluation form will be provided at the appropriate time. All evaluations are strictly confidential.

Your average team evaluation at the end of the semester will be used to adjust the amount of team points that **you** will receive as follows:

Your average evaluation for semester Your percent of team points received

90% or above	Full points (100%)
85% to 89%	90%
80% to 84%	70%
70% to 79%	50%
69% or below	10%

For example, imagine your team performs at an extraordinary level, receiving the maximum number of team points for the semester (60 points). Also assume that your team felt that you did not make a major contribution, and as a result, your average team evaluation is 81%. You personally would receive 42 points (60 * 70%) for all the team-based assessments. On the other hand, a team member who receives an average evaluation of 92% would receive all 60 points for all the team-based assessments. You can see how group evaluation can result in two members of the same team receiving two very different grades.

Participation in the evaluation process is not optional. If you fail to turn in an evaluation for any person on your team at the time that evaluation is due, you will receive zero points for that evaluation period.

Course Topic & Schedule: What You'll Be Doing

The lecture topics and relevant readings for each class are listed in the table below. Students are expected to have completed the assigned readings for the day BEFORE coming to class. **Topics and schedule are subject to change**.

Date	Topic	Readings	Class Work and Assignments
Week 1 August 25	Course Orientation and Introduction to Google Colab and Python	Top 10 Reasons Why Python is So Popular with Developers in 2021 (https://www.upgrad.com/blog/reasons-why-python-popular-with-developers/)	
Week 2 August 30	Programming in Python		In-class: log into Google Colab via your Gmail and start coding
September 1 Week 3 September 6	Variables and Data Types Variables and Data Types	Python Data Types (https://www.programiz.com/py thon-programming/variables- datatypes)	Due: weekly reflection post (reading assignment) In-class: log into Google Colab via your Gmail and start coding In-class: log into Google Colab via your Gmail and start coding
September 8	Lists	Python Lists (https://www.geeksforgeeks.org/python-list/)	Due: weekly reflection post (reading assignment) In-class: log into Google Colab via your Gmail and start coding
Week 4 September 13	Lists		In-class: log into Google Colab via your Gmail and start coding
September 15	Dictionaries	Python Dictionary (https://www.programiz.com/py thon-programming/dictionary)	Due: weekly reflection post (reading assignment) In-class: log into Google Colab via your Gmail and start coding
Week 5 September 20	For Loops		In-class: log into Google Colab via your Gmail and start coding
September 22	For Loops	Python For Loop (https://www.programiz.com/py thon-programming/for-loop)	Due: weekly reflection post (reading assignment) In-class: log into Google Colab via your Gmail and start coding
Week 6	Conditional Statements		In-class: log into Google Colab via
September 27 September 29	Conditional	Python ifelse Statement	your Gmail and start coding Due : weekly reflection post (reading

	Statements	(https://www.programiz.com/py thon-programming/if-elif-else)	assignment)
		thon-programming/ii-em-eise)	In-class: log into Google Colab via
			your Gmail and start coding
Week 7	Conditional		In-class: log into Google Colab via
October 4	Statements		your Gmail and start coding
	Conditional		In-class: log into Google Colab via
October 6	Statements		your Gmail and start coding
	Combine For Loops		
	and Conditional		
Week 8	Statements:		In-class: log into Google Colab via
October 11	Applications		your Gmail and start coding
			Due : weekly reflection post (reading
		Python read text file	assignment)
	Open a file in	(<u>https://www.pythontutorial.net/</u>	
	Python	python-basics/python-read-text-	In-class: log into Google Colab via
October 13	~ ~ 1 1	file/)	your Gmail and start coding
	Case Study 1:		
	Emotional		
W. 1.0	Reactions of Users		
Week 9	toward a YouTube		I I I I I I I I I I I I I I I I I I I
October 18	campaign		Introduction to YouTube Data Tools
	Case Study 1:		Review the Python code; Get familiar
	Emotional	10 5-4-1-4 4	with Pandas
	Reactions of Users	10 Facts about Americans and	Duran was lake and sation as at (as dia a
October 20	toward a YouTube	YouTube	Due : weekly reflection post (reading assignment)
October 20	campaign Case Study 1:		assignment)
	Emotional		
	Reactions of Users		
Week 10	toward a YouTube		Review the Python code; run the code
October 25	campaign	Comment ranking algorithm	and interpret the results
00:000:123	cumpaign		and merpice the results
October 27	Work on Project 1		
	vv ork on rroject r		
Week 11 November 1	Work on Project 1		
November 1	Work on Project 1		
	Presentations on		
November 3	Project 1		Due : Project 1; Peer Evaluation 1
	Case Study 2:	Many Turn to YouTube for	
XX 1 12	Connection	Children's Content, News,	
Week 12	between YouTube	How-To Lessons Pew Research	
November 8	Videos	Center	T. 1 C X TI D T T
	G G(1 2		Introduction to YouTube Data Tools;
	Case Study 2:		Install Gephi
	Connection between YouTube		Due: wooldy reflection root (reading
November 10	Videos		Due : weekly reflection post (reading
november 10	v Iucus		assignment)

	Case Study 2:		
	Connection		
Week 13	between YouTube		
November 15	Videos		Review the Python code; run Gephi
	Case Study 2:		Review the Python code; run Gephi
	Connection	TikTok Sheds Some Light on	
	between YouTube	Why Videos Appear in Users'	Due : weekly reflection post (reading
November 17	Videos	For You Feeds	assignment)
Week 14			
November 22	Work on Project 2		
November 24		Happy Thanksgiv	ing
Week 15			
November 29	Work on Project 2		
December 1	Work on Project 2		
Week 16	Presentations on		
December 6	Project 2		Due: Project 2; Peer Evaluation 2

University Honesty Policy

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see:

http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html

Courser Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their

Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

Accommodation

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. Click here to get started with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Campus Resources:

Health and Wellness

U Matter, We Care:

If you or a friend is in distress, please contact <u>umatter@ufl.edu</u> or 352 392-1575 so that a team member can reach out to the student.

Counseling and Wellness Center: http://www.counseling.ufl.edu/cwc, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS)

Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or http://www.police.ufl.edu/.

Academic Resources

E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling. https://www.crc.ufl.edu/.

Library Support, http://cms.uflib.ufl.edu/ask. Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. https://teachingcenter.ufl.edu/.

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. https://writing.ufl.edu/writing-studio/.

Student Complaints Campus: https://www.dso.ufl.edu/documents/UF Complaints policy.pdf.

On-Line Students Complaints: http://www.distance.ufl.edu/student-complaint-process.