ADV 4331 AI-Driven Social Media Insights/MMC 6936 Social Media Analytics & Strategy
Spring 2026
Meeting Time: Tuesdays 3:00 pm - 4:55 pm and Thursdays 4:05 pm - 4:55 pm
Meeting Location: https://ufl.zoom.us/j/97922663297

Instructor:
Dr. Yang Feng
E-mail: y.feng@ufl.edu
Office Hours: Tuesdays/Thursdays 10:40 – 11:40 am (Zoom: https://ufl.zoom.us/my/fengyang29)

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
This course caters to students intrigued by social media campaigns, including influencer marketing and societal initiatives, irrespective of their programming background. It melds the theoretical underpinnings of social media analytics with hands-on experience in Python and supplementary software tools, presented through lectures, workshops, and interactive discussions.

The semester begins with an immersion into Python's core concepts and essential packages tailored for social media analysis. As the course progresses, we shift our focus to real-world social media campaign studies. Students will be equipped to harness Python for comprehensive brand solutions within the algorithmic social media landscape, encompassing data acquisition, analysis, and visualization.

What you need to bring to class
Your laptop (either PC or MAC) and earphone

Software and tools we need to use in class
Google Colab, Microsoft Excel, ChatGPT, Leonardo AI

Student Learning Outcomes (SLO): What You'll Learn along the Way
SLO #1: Describe the role of Python and other software in social media analytics.
SLO #2: Explain the role of the algorithmic social media environment in shaping advertising effectiveness.
SLO #3: Perform social media advertising research using Python and other software.
SLO #4: Evaluate the performances of both dictionary-based and machine learning-based sentiment analysis techniques.
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	30 points
Class discussion	10 points
Project 1 (Team-based)	30 points
Project 2 (Team-based)	30 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 documented (i.e., written and verifiable, not oral) reason for an absence normally within a week will be given an opportunity to make up the work missed if 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

Excused absences must be consistent with university policies in the Undergraduate Catalog and Graduate Catalog and require appropriate documentation.

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

1. Weekly Reflection Posts: (30 points)

Given the workshop format of this course, your participation is critical. You should finish all your readings and be prepared to talk and contribute to class discussions. **Also, each week on Thursday (by 4:05 pm), you are required to post what you have read or practiced in that week and your opinions about the reading material (or practice) on Canvas Discussion Forum (except for Week 1, Week 10, and Week 15).**

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

- Student ability to answer discussion questions.
- Student ability to raise questions based on the reading.
- Student ability to respond to questions posed by classmates.

***Note:** For certain weeks, 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 discussions will be evaluated by the instructor during lecture weeks on a 10-point scale, with 0 indicating no participation and 10 representing the most active participation. This evaluation will be based on three main criteria:

1. Active participation in discussions on course topics.
2. Responding to questions posed by the instructor or classmates.
3. Raising questions about the readings and course topics during class.

3. Projects (60 points)

There will be three 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: **March 24**) (30 points)
Project 2: group presentation on AI-generated content (due date: **April 21**) (30 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 instance, let's assume your team performs exceptionally well and earns the maximum number of team points for the semester, which is 60 points. However, if your team feels that you didn't contribute significantly and consequently rates you an average evaluation of 81%, you would receive only 42 points (60 * 70%) for all team-based assessments. Conversely, a team member with an average evaluation of 92% would secure the full 60 points for all team-based assessments. This example illustrates how group evaluations can lead to significantly different grades for members within the same team.

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 week BEFORE the weekly reflection post due time. **Topics and schedule are subject to change**.

Date	Topic	Readings	Class Work and Assignments
Week 1 January 13	Course Orientation and Programming in Python	Will AI Make Agencies Obsolete? The Future Of Advertising (https://www.forbes.com/councils/forbestechcouncil/2025/05/22/will-ai-make-agencies-obsolete-the-future-of-advertising/)	
January 15	Programming in Python		In-class: log into Google Colab via your Gmail and start coding
Week 2 January 20	Variables and Data Types		In-class: log into Google Colab via your Gmail and start coding
January 22	Variables and Data Types	Week 2 Weely Reflection on Canvas	In-class: log into Google Colab via your Gmail and start coding **Due**: weekly reflection post (reading assignment)
Week 3 January 27	Lists		In-class: log into Google Colab via your Gmail and start coding
January 29	Lists	Week 3 Weely Reflection on Canvas	In-class: log into Google Colab via your Gmail and start coding **Due**: weekly reflection post (reading assignment)
Week 4 February 3	Dictionaries		In-class: log into Google Colab via your Gmail and start coding
February 5	Dictionaries	Week 4 Weely Reflection on Canvas	In-class: log into Google Colab via your Gmail and start coding **Due**: weekly reflection post (reading assignment)

Week 5 February 10	For Loops		In-class: log into Google Colab via your Gmail and start coding
February 12	For Loops	Week 5 Weely Reflection on Canvas	In-class: log into Google Colab via your Gmail and start coding **Due**: weekly reflection post (reading assignment)
Week 6 February 17	Conditional Statements		In-class: log into Google Colab via your Gmail and start coding
February 19	Conditional Statements	Week 6 Weely Reflection on Canvas	In-class: log into Google Colab via your Gmail and start coding **Due**: weekly reflection post (reading assignment)
Week 7 February 24	Conditional Statements and Pandas		In-class: log into Google Colab via your Gmail and start coding
February 26	Conditional Statements and Pandas	Week 7 Weely Reflection on Canvas	In-class: log into Google Colab via your Gmail and start coding **Due**: weekly reflection post (reading assignment)
Week 8 March 3	Case Study 1: Emotional Reactions of Users toward a YouTube campaign		Introduction to the YouTube Data Tools
March 5	Case Study 1: Emotional Reactions of Users toward a YouTube campaign	5 facts about Americans and YouTube	Review the Python code; get familiar with Pandas **Due**: weekly reflection post (reading assignment)
Week 9 March 10	Case Study 1: Emotional Reactions of Users toward a YouTube campaign		Review Python code, interpret results, and understand fundamentals of comment ranking, sentiment analysis, and machine learning.
March 12	Hands-On Workshop (project 1)	Facebook Feed Ranked Comments AI system	**Due**: weekly reflection post (reading assignment)
Week 10 March 17/19	**Happy Spring Break**		

Week 11 March 24	**Presentations on Project 1**		**Due**: Project 1; Peer Evaluation 1
March 26	No Class Meeting. Instructor Attends AAA 2026 Annual Conference.	How Generative AI Is Changing Creative Work	**Due**: weekly reflection post (reading assignment)
Week 12 March 31	Case Study 2: Content Generation and AI	The Amazing Ways L'Oréal Is Using AI To Transform The Beauty Industry Forever	Explore AI's role in generating creative content on social media.
April 2	Case Study 2: Content Generation and AI		**Due**: weekly reflection post (reading assignment)
Week 13 April 7	Case Study 2: Content Generation and AI	Photographers are mad that Instagram is labelling edited photos as 'made with AI' while ignoring AI generated images	Discuss human-AI collaboration and AGI.
April 9	Case Study 2: Content Generation and AI		**Due**: weekly reflection post (reading assignment)
Week 14 April 14	Hands-On Workshop (project 3)	Understanding the Legal and Regulatory Landscape of Generative AI	Discuss prompt engineering
April 16	Hands-On Workshop (project 3)		**Due**: weekly reflection post (reading assignment)
Week 15 April 21	**Presentations on Project 2**		**Due: Project 2; Peer Evaluation 2**

University of Florida Academic Policies

All students are expected to familiarize themselves with and adhere to the academic policies of the University of Florida. These policies include, but are not limited to, regulations on academic integrity, student conduct, attendance, accommodations, and grading procedures.

Please review the full list of academic policies & resources here:
https://syllabus.ufl.edu/syllabus-policy/uf-syllabus-policy-links/