Cover Sheet: Request 15786

JOU 3XXX – Artificial Intelligence in Media and Society

Info

Process	Course|New|Ugrad/Pro
Status	Pending at PV - University Curriculum Committee (UCC)
Submitter	Melinda Mcadams mmcadams@jou.ufl.edu
Created	2/1/2021 4:30:36 PM
Updated	4/22/2021 11:29:13 AM
Description of request	AI in Media and Society is a new elective course in the Journalism Department. This is a request to have it added to the UF course catalog as soon as possible, and to assign a permanent course number to it.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	JOU - Journalism 23040000	Theodore Spiker		4/22/2021
AI_and_Media_Syllabus_2020.pdf					2/1/2021
College	Approved	JOU - College of Journalism and Communications	James Babanikos		4/22/2021
No document changes					
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			4/22/2021
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 changes					
College Notified					
No document changes					

Course|New for request 15786

Info

Request: JOU 3XXX – Artificial Intelligence in Media and Society
Description of request: AI in Media and Society is a new elective course in the Journalism Department. This is a request to have it added to the UF course catalog as soon as possible, and to assign a permanent course number to it.
Submitter: Melinda Mcadams mmcadams@jou.ufl.edu
Created: 3/1/2021 9:49:42 AM
Form version: 5

Responses

Recommended Prefix
Enter the three letter code indicating placement of course within the discipline (e.g., POS, ATR, ENC). Note that for new course proposals, the State Common Numbering System (SCNS) may assign a different prefix.

Response:
JOU

Course Level
Select the one digit code preceding the course number that indicates the course level at which the course is taught (e.g., 1=freshman, 2=sophomore, etc.).

Response:
3

Course Number
Enter the three digit code indicating the specific content of the course based on the SCNS taxonomy and course equivalency profiles. For new course requests, this may be XXX until SCNS assigns an appropriate number.

Response:
XXX

Category of Instruction
Indicate whether the course is introductory, intermediate or advanced. Introductory courses are those that require no prerequisites and are general in nature. Intermediate courses require some prior preparation in a related area. Advanced courses require specific competencies or knowledge relevant to the topic prior to enrollment.

Response:
Intermediate

• 1000 level = Introductory undergraduate
• 2000 level = Introductory undergraduate
• 3000 level = Intermediate undergraduate
• 4000 level = Advanced undergraduate
• 5000 level = Introductory graduate
• 6000 level = Intermediate graduate
• 7000 level = Advanced graduate
• 4000/5000= Joint undergraduate/graduate
• 4000/6000= Joint undergraduate/graduate

*Joint undergraduate/graduate courses must be approved by the UCC and the Graduate Council)

Lab Code
Enter the lab code to indicate whether the course is lecture only (None), lab only (L), or a combined lecture and lab (C).

Response:
None

Course Title
*Enter the title of the course as it should appear in the Academic Catalog. There is a 100 character limit for course titles. *

Response:
Artificial Intelligence in Media and Society

Transcript Title
Enter the title that will appear in the transcript and the schedule of courses. Note that this must be limited to 30 characters (including spaces and punctuation).

Response:
AI in Media and Society

Degree Type
Select the type of degree program for which this course is intended.

Response:
Baccalaureate

Delivery Method(s)
Indicate all platforms through which the course is currently planned to be delivered.

Response:
On-Campus, Online

Co-Listing
Will this course be jointly taught to undergraduate, graduate, and/or professional students?

Response:
No

Effective Term
Select the requested term that the course will first be offered. Selecting "Earliest" will allow the course to be active in the earliest term after SCNS approval. If a specific term and year are selected, this should reflect the department's best projection. Courses cannot be implemented retroactively, and therefore the actual effective

term cannot be prior to SCNS approval, which must be obtained prior to the first day of classes for the effective term. SCNS approval typically requires 2 to 6 weeks after approval of the course at UF.

Response:
Earliest Available

Effective Year
Select the requested year that the course will first be offered. See preceding item for further information.

Response:
2021

Rotating Topic?
Select "Yes" if the course can have rotating (varying) topics. These course titles can vary by topic in the Schedule of Courses.

Response:
No

Repeatable Credit?
Select "Yes" if the course may be repeated for credit. If the course will also have rotating topics, be sure to indicate this in the question above.

Response:
No

Amount of Credit
Select the number of credits awarded to the student upon successful completion, or select "Variable" if the course will be offered with variable credit and then indicate the minimum and maximum credits per section. Note that credit hours are regulated by Rule 6A-10.033, FAC. If you select "Variable" for the amount of credit, additional fields will appear in which to indicate the minimum and maximum number of total credits.

Response:
3

S/U Only?
Select "Yes" if all students should be graded as S/U in the course. Note that each course must be entered into the UF curriculum inventory as either letter-graded or S/U. A course may not have both options. However, letter-graded courses allow students to take the course S/U with instructor permission.

Response:
No

Contact Type
Select the best option to describe course contact type. This selection determines whether base hours or headcount hours will be used to determine the total contact hours per credit hour. Note that the headcount hour options are for courses that involve contact between the student and the professor on an individual basis.

Response:
Regularly Scheduled

• Regularly Scheduled [base hr]
• Thesis/Dissertation Supervision [1.0 headcount hr]
• Directed Individual Studies [0.5 headcount hr]
• Supervision of Student Interns [0.8 headcount hr]
• Supervision of Teaching/Research [0.5 headcount hr]
• Supervision of Cooperative Education [0.8 headcount hr]

Contact the Office of Institutional Planning and Research (352-392-0456) with questions regarding contact type.

Weekly Contact Hours
Indicate the number of hours instructors will have contact with students each week on average throughout the duration of the course.

Response:
3

Course Description
Provide a brief narrative description of the course content. This description will be published in the Academic Catalog and is limited to 500 characters or less. See course description guidelines.

Response:
Gain an understanding of artificial intelligence as it applies to the media professions, including journalists reporting on AI. Explore developments in AI technologies as covered by the mass media. Learn to detect exaggeration in descriptions of AI's promise and potential risks and dangers.

Prerequisites
Indicate all requirements that must be satisfied prior to enrollment in the course. Prerequisites will be automatically checked for each student attempting to register for the course. The prerequisite will be published in the Academic Catalog and must be formulated so that it can be enforced in the registration system. Please note that upper division courses (i.e., intermediate or advanced level of instruction) must have proper prerequisites to target the appropriate audience for the course.
Courses level 3000 and above must have a prerequisite.
Please verify that any prerequisite courses listed are active courses.

Response:
Junior standing

Completing Prerequisites on UCC forms:

• Use "&" and "or" to conjoin multiple requirements; do not used commas, semicolons, etc.
• Use parentheses to specify groupings in multiple requirements.
• Specifying a course prerequisite (without specifying a grade) assumes the required passing grade is D-. In order to specify a different grade, include the grade in parentheses immediately after the course number. For example, "MAC 2311(B)" indicates that students are required to obtain a grade of B in Calculus I. MAC2311 by itself would only require a grade of D-.
• Specify all majors or minors included (if all majors in a college are acceptable the college code is sufficient).
• "Permission of department" is always an option so it should not be included in any prerequisite or co-requisite.
• If the course prerequisite should list a specific major and/or minor, please provide the plan code for that major/minor (e.g., undergraduate Chemistry major = CHY_BS, undergraduate Disabilities in Society minor = DIS_UMN)

Example: A grade of C in HSC 3502, passing grades in HSC 3057 or HSC 4558, and undergraduate PBH student should be written as follows: HSC 3502(C) & (HSC 3057 or HSC 4558) & UGPBH
* *

Co-requisites
Indicate all requirements that must be taken concurrently with the course. Co-requisites are not checked by the registration system. If there are none please enter N/A.

Response:
N/A

Rationale and Placement in Curriculum
Explain the rationale for offering the course and its place in the curriculum.

Response:
As artificial intelligence technology affects people's everyday lives, journalists need to report on its affects and consequences. Journalists do not need to learn how to create AI applications, but they should understand how it works, and why AI works, so that they can do more than just repeat what technology producers tell them. Journalists covering AI in society need sufficient understanding of the underlying technologies to ask the right questions and hold tech firms to account. This is an elective and not a required course because not all journalists will want to cover technology topics. It's an intermediate course because a familiarity with media systems will be assumed.

Course Objectives
Describe the core knowledge and skills that student should derive from the course. The objectives should be both observable and measurable.

Response:
1. Evaluate news reports and corporate claims about AI systems, noting when claims are poorly supported or likely to be exaggerated.
2. Explain how biases come to be "baked into" various AI systems, consequences of AI biases, and how biases could be reduced or eliminated.
3. Describe uses of AI systems in finance, healthcare, hiring decisions, housing, policing and other domains, based on news reports.
4. Differentiate between machine learning and other types of AI.
5. List limitations of trained AI systems used for image recognition and question answering, among other applications.
6. Define and describe fundamental structures related to AI, such as algorithms, models, neural networks.
7. Summarize the idea of artificial intelligence in computer science/mathematics/philosophy (not science fiction).
8. Define and describe common concepts related to AI, such as "AI Spring," "weak AI," "artificial general intelligence."
9. Explain the uses of some well-known datasets used in machine learning such as MNIST and ImageNet.
10. Describe generally the operations and structure of neural networks for tasks involving images or language.

Course Textbook(s) and/or Other Assigned Reading
*Enter the title, author(s) and publication date of textbooks and/or readings that will be assigned. Please provide specific examples to evaluate the course and identify required textbooks. *

Response:
Artificial Intelligence: A Guide for Thinking Humans, by Melanie Mitchell (2019)

Additional readings and videos will also be assigned. Many of these will be media reports for analysis. These are likely to change each time to course is taught.

Some examples:

The AI That Wasn't: Why 'Eugene Goostman' Didn't Pass the Turing Test
https://www.thedailybeast.com/the-ai-that-wasnt-why-eugene-goostman-didnt-pass-the-turing-test

Self-Driving Cars Still Don't Know How to See
https://www.theatlantic.com/technology/archive/2018/03/uber-self-driving-fatality-arizona/556001/

The data that transformed AI research—and possibly the world
https://qz.com/1034972/the-data-that-changed-the-direction-of-ai-research-and-possibly-the-world/

Weekly Schedule of Topics
Provide a projected weekly schedule of topics. This should have sufficient detail to evaluate how the course would meet current curricular needs and the extent to which it overlaps with existing courses at UF.

Response:
Week 1 Introduction to the course. Complete the syllabus quiz.

Week 2 Foundations: The Singularity and General AI. Symbolic AI. Perceptrons and conditioning. The MNIST dataset. News coverage of early AI successes.

Week 3 Foundations, part 2: Deep learning: layers and weights. Back-propagation. Narrow or "weak" AI. What is intelligence? Cycles of AI Winter and Spring.

Week 4 Machine vision and object recognition. Convolutional neural networks. Training and classification. Artist/programmers' experiments with reverse engineering machine vision classifiers.

Week 5 Machine vision and object recognition, part 2. ImageNet. Training data and test data. Common mistakes in object recognition.

Week 6 What is learning? Big Data and AI. The human components in machine learning. Unsupervised learning (vs. supervised). Adversarial attacks — how to fool an AI. News coverage of human labor in labeling data for machine learning.

Week 7 Face recognition and racial and gender bias. Self-driving cars and the long tail. How can AI be regulated? News coverage of racial and gender inequities in AI recommendations and decisions.

Week 8 Midterm review. Midterm exam.

Week 9 Robots. Reinforcement learning and Q-learning. How is this different from neural networks? News coverage of robots in the workforce.

Week 10 AI and games. More on reinforcement learning (vs. supervised). Rule-based systems (brute force) and their limitations. Arcade games. Chess. AlphaGo and DeepMind. Monte Carlo tree search. Analysis of the feature-length documentary "AlphaGo" (2020).

Week 11 What is implied by the recent successes of reinforcement learning? Comparison of game states and parameters to real-world scenarios. How far off is general AI (AGI)?

Week 12 Natural language processing. What is understanding? Speech recognition. Word vectors. Sequential data and time steps (recurrent neural networks). News coverage of GPT-3. Research paper/unpaper proposal due.

Week 13 Machine translation. Encoding/decoding. How quality of translation is measured. Differences in quality between translated short texts and long(er) texts.

Week 14 Question-answering systems. IBM Watson and the Jeopardy! Challenge. Use of IBM Watson tech in other domains; failures. Voice assistants (Siri, Alexa, etc.). SQuAD and Winograd schema. News coverage of IBM Watson.

Week 15 Abstraction, analogy, meaning, and metaphor: What AI (still) can't do. Questions that remain. Research paper/unpaper due.

Final Exam in UF scheduled final exam time slot.

Grading Scheme
List the types of assessments, assignments and other activities that will be used to determine the course grade, and the percentage contribution from each. This list should have sufficient detail to evaluate the course rigor and grade integrity. Include details about the grading rubric and percentage breakdowns for determining grades. If participation and/or attendance are part of the students grade, please provide a rubric or details regarding how those items will be assessed.

Response:
Quizzes - 20 percent (12 weekly quizzes)
Midterm exam - 20 percent
Final exam - 20 percent
Research paper/unpaper - 20 percent
Attendance and participation - 20 percent

For attendance and participation, students discuss assigned questions in small groups during class and create a document to be handed in and graded (one document per group; it is a team product). Separately each student completes a confidential, individual survey form about that day's group experience. Altogether these deliverables are worth up to 5 points per week. The student's lowest week is dropped. Of course accommodations will be made if a student is not able to participate in the group activities due to illness, etc.

Instructor(s)
Enter the name of the planned instructor or instructors, or "to be determined" if instructors are not yet identified.

Response:
Melinda J. McAdams

Attendance & Make-up
Please confirm that you have read and understand the University of Florida Attendance policy.
A required statement statement related to class attendance, make-up exams and other work will be included in the syllabus and adhered to in the course. Courses may not have any policies which conflict with the University of Florida policy. The following statement may be used directly in the syllabus.

• 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:

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

> Response:
> Yes

Accomodations

Please confirm that you have read and understand the University of Florida Accommodations policy.
A statement related to accommodations for students with disabilities will be included in the syllabus and adhered to in the course. The following statement may be used directly in the syllabus:

• *Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.*

> Response:
> Yes

UF Grading Policies for assigning Grade Points

Please confirm that you have read and understand the University of Florida Grading policies.
Information on current UF grading policies for assigning grade points is require to be included in the course syllabus. The following link may be used directly in the syllabus:

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

> Response:
> Yes

Course Evaluation Policy

Course Evaluation Policy
Please confirm that you have read and understand the University of Florida Course Evaluation Policy.
A statement related to course evaluations will be included in the syllabus. The following statement may be used directly in the syllabus:

• *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/public-results/. 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/.*

* *

> Response:
> Yes

AI in Media and Society

JOU 4930 | Spring 2021 | Section 23070 (AI01)
Lecture: **Monday,** period 7 (1:55–2:45 p.m.)
Class discussion and in-class projects: **Wednesday,** periods 7 & 8 (1:55–3:50 p.m.)

Instructor:	Mindy McAdams, Professor, Department of Journalism
Email:	mmcadams@ufl.edu
Office:	3049 Weimer Hall
Office hours:	Monday 3–4 p.m. (online), Tuesday 1–3 p.m. (online), and by appointment
Office phone:	(352) 392-8456 (NOTE: Email is better. Much better.)
Website:	https://ufl.instructure.com/courses/415353 (Canvas)

Course Description

Gain an understanding of artificial intelligence and machine learning as they apply to the media professions, including journalists reporting on AI. Explore major developments in AI technologies as covered by the mass media. Learn to detect hype and exaggeration in descriptions of AI's promises and potential risks and dangers. Examine use of AI systems in finance, healthcare, hiring decisions, housing, policing, etc.

Prerequisites: Junior standing

Course Objectives

At the end of the course, students should be able to:

1. Evaluate news reports and corporate claims about AI systems, noting when claims are poorly supported or likely to be exaggerated.
2. Explain how biases come to be "baked into" various AI systems, consequences of AI biases, and how biases could be reduced or eliminated.
3. Describe uses of AI systems in finance, healthcare, hiring decisions, housing, policing and other domains, based on news reports.
4. Differentiate between machine learning and other types of AI.
5. List limitations of trained AI systems used for image recognition and question answering, among other applications.
6. Define and describe fundamental structures related to AI, such as algorithms, models, neural networks.
7. Summarize the idea of artificial intelligence in computer science/mathematics/philosophy (not science fiction).

8. Define and describe common concepts related to AI, such as "AI Spring," "weak AI," "artificial general intelligence."
9. Explain the uses of some well-known datasets used in machine learning such as MNIST and ImageNet.
10. Describe generally the operations and structure of neural networks for tasks involving images or language.

Attendance and Attitude

Students are expected to show respect for one another and for the instructor by arriving before the class starting time. Attendance is taken and participation is expected. If you have been absent, you are responsible for finding out about any missed material by consulting another student and/or going to the instructor's office hours and/or making an appointment to meet with the instructor.

Mobile devices must be turned OFF and placed out of sight during class. Do not check text messages, social media, email, etc., during class, as your instructor considers this quite rude and therefore grounds for disciplinary action. Moreover, you will miss things if you're checking your phone. Give your full and undivided attention to anyone who is speaking in class, including your fellow students. Another student might ask a question that will help you, if you are listening.

Notetaking on paper is highly recommended. Research has shown that our thinking about new ideas and also our retention are improved when we *write* notes about new material rather than typing on a laptop or phone.

UF Attendance Policies
> https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/

Course Deadlines and Makeup Work

Late assignments are not accepted unless an emergency can be documented. This means that an assignment submitted late is graded as a zero. Assignments are not accepted via email unless requested by the instructor. If an illness or a personal emergency prevents you from completing an assignment on time, advance notice and written documentation are required. If advance notice is not possible because of a genuine emergency, written documentation will be required. No work for "extra credit" is accepted.

NOTE: Assignment deadlines in Canvas are usually set for 11:59 p.m. If you submit after the deadline, your assignment is late. Your inability to upload *at the last minute* is not a valid excuse for lateness.

Academic Dishonesty

Academic dishonesty of any kind is not tolerated in this course. It will be reported to the student's department chair AND to the university's Dean of Students—and *it will result in a failing grade* for this course. A formal report of the offense will be filed with the university's Dean of Students.

Academic dishonesty includes, but is not limited to:

- Using any work done by another person and submitting it for a class assignment, quiz, or exam.
- Submitting work you did for another class or course.
- Copying and pasting text written by another person without use of quotation marks AND complete attribution, including a URL (online) or page number (print).
- Paraphrasing text written by others, such that it constitutes de facto plagiarism (e.g. word substitutions).
- Sharing answers to exams or quizzes online or with anyone.

UF Student Honor Code

> https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/

Required Book, Videos and More

Students are required to read this book:

Artificial Intelligence: A Guide for Thinking Humans, by Melanie Mitchell (2019)

All students are expected to own or rent their own copy of the book, whether printed or electronic. Either the hardcover or the paperback is acceptable.

Each week, some articles and/or videos will be required reading/viewing. These will be linked in Canvas. There is no fee for these materials. Some might require students to log into the library with the UF VPN.

Course Requirements and Grading Policies

Read this entire document (the syllabus) in the first week of classes. If anything is not clear to you, ask me for clarification before the last day of Drop/Add (Jan. 15, 2021). This syllabus is a contract between you and me.

Please make sure to check the relevant **Canvas module** early in the week. Plan your work accordingly so you have enough time to absorb the material. All your deadlines are in Canvas.

Quizzes

There will be 12 weekly quizzes, *plus* a syllabus quiz. Quizzes are in Canvas and are always open-book. Quizzes cover the assigned readings/videos for the week. These are always listed in precise detail in the module's "Assigned readings" document in Canvas. Deadlines are in Canvas. Any quiz not submitted by the deadline is graded 0. Your lowest quiz grade will be dropped.

Exams

There will be one midterm exam and a final exam. These will require essay answers to demonstrate your understanding of the ideas in the course. The final exam will be in **Finals Week**, on April 29.

Research paper/unpaper

You have a choice: Write a traditional research **paper**, or produce a **project** in another medium (video, infographic, etc.) that requires an equivalent amount of research. Details will be provided in Canvas.

Attendance and participation

Points are accumulated as detailed below. This is 20 percent of your final course grade. Participation is expected; you will be working on small assigned projects and small-group discussions during class. Absences due to illness, serious family emergencies, special curricular requirements, etc., will be handled in accordance with UF policies, to which you will find a link on **page 2** of this syllabus.

- In spring 2021, the **lecture** will be *asynchronous,* prerecorded video. Thus no attendance points are attached to the lecture. However, it is expected that the lecture will be viewed and all assigned readings/videos read or watched BEFORE **the second class day each week**.
- The **second class day** each week is where the attendance and participation points come from. This is a *synchronous* **two-period** meeting, which will be fully in Zoom for spring 2021.
- Your camera must be on. You should be sitting upright (not lounging/lying down). Your appearance should be similar to what it would be in the classroom — that is, your clothes and hair should be appropriate to be seen by your classmates and your instructor. You should be paying attention, not talking to people off-camera in your room. In other words: ***Be present.***
- It is expected you will attend the entire two periods, from 1:55 p.m. until 3:50 p.m., every week. Attendance for the full time is 1 point. Partial attendance is 0, unless class is dismissed early.
- You will show up in Zoom on time. For chronic lateness—
    - If you have been marked late 4 times or more: –1 point
    - If you have been marked late 8 times or more: –2 points
- Each week, students will be divided into teams. You will be on a different team each week. Small projects and discussion questions will be assigned, and teams will collaborate on these in breakout rooms. Throughout the double period, the full class will come together and then go back into breakout rooms for other work. That is, you will not be in the breakout rooms continuously for the two periods.
- The group's work will be documented in *one* shared file such as [Jamboard](#) or a Google document, which will be submitted in Canvas for grading immediately at the end of the double period. Instructions will be given each week.
- Each team will be assigned a team leader. The team leader is responsible for submitting the shared file. Every student in the class will be a team leader at least once. The team leader is also responsible for encouraging all team members to contribute equally.
- The shared file, which represents your team's work for one day, is worth up to 3 points. It might earn anywhere from 0 to 3 points. **Quality** is valued over quantity. A rubric will be available in Canvas.
- Finally, *each team member* will submit a team checklist at the end of the double period. This is a form, and it is worth 1 point if filled in correctly and completely. In the form, you will list your name and the names of all your team members. You will **rate the contributions of your team**

leader and all team members, including yourself. This is an attempt to hold every team member accountable so that everyone participates and division of labor is fair.

- To summarize, the attendance and participation points for one week are as follows:
    - 1 point for attending the full two periods.
    - Up to 3 points for a document that represents the work assigned that day.
    - 1 point for your individual team report form.
    - That is a total of 5 possible points for each student, each week. If you miss class, you forfeit all 5 points for that day.
- Your lowest-score day will be dropped, allowing you one absence without penalty.
- In the midterm week, there are no points for attendance and participation.

Grades

Quizzes	20 percent
Midterm exam	20 percent
Final exam	20 percent
Research paper/unpaper	20 percent
Attendance and participation	20 percent
TOTAL	100 percent

92–100 points	A	72–77 points	C
90–91 points	A–	70–71 points	C–
88–89 points	B+	68–69 points	D+
82–87 points	B	62–67 points	D
80–81 points	B–	60–61 points	D–
78–79 points	C+	59 points or fewer	E

UF Policies about Student Grades
>   https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/

UF Dates (Spring 2021)

Classes begin	Jan. 11	Jan. 18	MLK Jr. Day (UF holiday)
Drop/Add	Until Jan. 15		
Classes end	April 21		
Final exams	April 24–30		

Students with Disabilities

Students requesting accommodations must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student, who must then provide this documentation

to the instructor when requesting accommodations. Accommodations must be discussed in private, not in the classroom.

UF Disability Resource Center
> https://disability.ufl.edu

Course Evaluations

Students are expected to provide feedback on the quality of instruction in this course.

- Guidance on how to give feedback: https://gatorevals.aa.ufl.edu/students/
- Students will be notified when the evaluation period opens and can complete evaluations through the email from GatorEvals, in their Canvas course menu under GatorEvals, or via: https://ufl.bluera.com/ufl/
- Summaries of course evaluation results are available here: https://gatorevals.aa.ufl.edu/public-results/

Course Schedule and Required Work

Please note that many important details are in Canvas and do not appear herein. Additional assigned readings, links to videos, resources, etc., are **in Canvas**.

Week 1 | Jan. 11–15
Introduction to the course. Complete the syllabus quiz.
Get started on Week 2 reading and videos.

Week 2 | Jan. 18–22
Foundations: The Singularity and General AI. Symbolic AI. Perceptrons and conditioning. The MNIST dataset.
READ Mitchell, Prologue and chapter 1. Other readings/videos as listed in Canvas.
Quiz 1.

Week 3 | Jan. 25–29
Foundations, part 2: Deep learning: layers and weights. Back-propagation. Narrow or "weak" AI. What is *intelligence*? Cycles of AI Winter and Spring.
READ Mitchell, chapters 2 and 3. Other readings/videos as listed in Canvas.
Quiz 2.

Week 4 | Feb. 1–5
Machine vision and object recognition. Convolutional neural networks. Training and classification.
READ Mitchell, chapter 4. Other readings/videos as listed in Canvas.
Quiz 3.

Week 5 | Feb. 8–12

Machine vision and object recognition, part 2. ImageNet. Training data and test data. Common mistakes in object recognition.

READ Mitchell, chapter 5. Other readings/videos as listed in Canvas.

Quiz 4.

Week 6 | Feb. 15–19

What is *learning*? Big Data and AI. The human components in machine learning. Unsupervised learning (vs. supervised). Adversarial attacks — how to fool an AI.

READ Mitchell, chapter 6. Other readings/videos as listed in Canvas.

Quiz 5.

Week 7 | Feb. 22–26

Face recognition and racial and gender bias. Self-driving cars and the long tail. How can AI be regulated?

READ Mitchell, chapter 7. Other readings/videos as listed in Canvas.

Quiz 6.

Week 8 | March 1–5

Midterm review. This is a synchronous Zoom meeting on Monday, March 1.

Midterm exam during Wednesday class double period.

Week 9 | March 8–12

Robots. Reinforcement learning and Q-learning. How is this different from neural networks?

READ Mitchell, chapter 8. Other readings/videos as listed in Canvas.

Quiz 7.

Week 10 | March 15–19

AI and games. More on reinforcement learning (vs. supervised). Rule-based systems (brute force) and their limitations. Arcade games. Chess. AlphaGo and DeepMind. Monte Carlo tree search.

READ Mitchell, chapter 9. Other readings/videos as listed in Canvas.

Quiz 8.

Week 11 | March 22–26

What is implied by the recent successes of reinforcement learning? Comparison of game states and parameters to real-world scenarios. How far off is general AI (AGI)?

READ Mitchell, chapter 10. Other readings/videos as listed in Canvas.

Quiz 9.

Week 12 | March 29–April 2

Natural language processing. What is *understanding*? Speech recognition. Word vectors. Sequential data and time steps (recurrent neural networks).

READ Mitchell, chapter 11. Other readings/videos as listed in Canvas.
Quiz 10.
<mark>Research paper/unpaper **proposal** due.</mark>

Week 13 | April 5–9

Machine translation. Encoding/decoding. How quality of translation is measured. Differences in quality between translated short texts and long(er) texts.
READ Mitchell, chapter 12. Other readings/videos as listed in Canvas.
Quiz 11.

Week 14 | April 12–16

Question-answering systems. IBM Watson and the *Jeopardy!* Challenge. Use of IBM Watson tech in other domains; failures. Voice assistants (Siri, Alexa, etc.). SQuAD and Winograd schema.
READ Mitchell, chapter 13. Other readings/videos as listed in Canvas.
Quiz 12.

Week 15 | April 19–21

The 21st, Wednesday, is the last day of classes.
Abstraction, analogy, meaning, and metaphor: What AI (still) can't do. Questions that remain.
READ Mitchell, chapters 14, 15 and 16. Other readings/videos as listed in Canvas.
<mark>Research paper/unpaper due.</mark>

Final Exam | April 29

<mark>UF scheduled final exam time</mark> is **Thursday,** April 29, starting at **10 a.m.** The exam period is two hours.

Weekly topics are subject to change. Please check in Canvas for the latest updates.

How to Communicate with Me, Your Instructor

<mark>For *private* communications,</mark> regarding your grades, accommodations for disability, etc., please use email, meet with me in person, or schedule a meeting in Zoom.

- Email directly in our Canvas course is great.
- Email me outside Canvas at mmcadams@ufl.edu — also fine.

<mark>Make sure to read all **Announcements** posted in **Canvas**.</mark> I will use the Announcements to remind you about deadlines or any changes in class meetings, assignments, etc.

Office hours are times the professor sets aside for random student interactions and chats. Look at the top of page 1 of this syllabus for my office hours this semester. I will open Zoom and enable a waiting room. You can just "drop in" at those times and talk about anything at all (even non–course related matters).

Diversity, Equity & Inclusion

The Department of Journalism in the College of Journalism and Communications embraces a commitment toward an intellectual community enriched and enhanced by diversity along a number of dimensions, including race, ethnicity and national origins, gender and gender identity, sexuality, class and religion. We expect each of our journalism courses to help foster an understanding of the diversity of peoples and cultures and of the significance and impact of mass communications in a global society.

- If you have a name and/or set of pronouns that differ from those that appear in your official records, and you want me to know this, please tell me.
- If something was said (or written) in class — by anyone, including me — that made you feel uncomfortable, please talk to me about it.
- If you feel that your performance in the class is being affected by your experiences outside of class, please don't hesitate to tell me. I want to be a resource for you, and I'm open to discussing anything that's standing in the way of your success.
- If you would rather speak with someone outside of the course — Joanna Hernandez, the CJC director of inclusion and diversity, is an excellent resource. You can email her at: jhernandez@jou.ufl.edu

Every student and every person deserves *respect* and *fair treatment*. I expect all students to show respect toward others and treat them fairly, and I always try to do so. If I fall short, you should let me know.

Your Privacy and Zoom Recordings

Our class sessions may be audio-visually recorded for later viewing by enrolled students who are unable to attend live. If the Zoom session is being recorded, you will be able to see that as a red "recording" dot beside the instructor's name in the participants list. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, *and the session is being recorded,* you may keep your camera off and/or not use a profile image. *If the session is being recorded,* students who un-mute during class and participate orally thereby agree to have their voices recorded. If you are not willing to consent to have your voice recorded *during a class that is being recorded,* you will need to keep your mute button activated.

As in all UF courses, **unauthorized recording** and **unauthorized sharing** of recorded materials is prohibited.

(end)