

INSTRUCTOR: Dr. Joann Mossa, Professor

CONTACT INFORMATION: mossa@ufl.edu, (352) 294-7510

COURSE HOURS:

T | PERIOD 3 - 4 (9:35 AM - 11:30 AM) TUR 3012

R | PERIOD 3 (9:35 AM - 10:25 AM) TUR 3012

OFFICE HOURS: Fridays 9 to 12 AM and by appt., also happy to talk after class

COURSE WEBSITE: <http://elearning.ufl.edu>

REQUIRED OR RECOMMENDED TEXTBOOKS: *No textbooks required. Readings embedded in Canvas, e-learning.*

MATERIALS AND SUPPLIES FEES: *None*

PREREQUISITE KNOWLEDGE AND SKILLS: None. Helps to have some background in earth or environmental science, geography, or sustainability. Be willing to read, reflect, analyze, discuss, write, and present.

COURSE DESCRIPTION: The study of human-environment relationships from a primarily geographic perspective, focusing on the human forces that shape landscapes.

COURSE GOALS AND/OR OBJECTIVES:

- *Identify basic terms and concepts related to human impacts on earth*
- *Understand the interdisciplinary and complex nature of the human imprint on the landscape through multiple case studies.*
- *Retrieve, analyze, and integrate environment data from multiple reliable sources*
- *Communicate scientific information regarding human impacts on earth using graphs, maps, and comparative synthesis*
- *Synthesize scientific and social information about human impacts*

HOW THIS COURSE RELATES TO THE STUDENT LEARNING OUTCOMES IN THE GEOGRAPHY

MAJOR: *Human Footprint is a course that provides content learning in environmental geography for our majors' Student Learning Outcomes. We conduct Critical Thinking through article reviews and evaluating human impacts in readings, movies, and data analysis of real-world data. We develop graphical Communication Skills through assignments involving data analysis. We develop oral communication skills through writing and presenting article reviews, exhibiting a poster that synthesizes several studies relating to human impacts.*

BE AWARE THAT THE SEMESTER AND THIS SYLLABUS MAY CHANGE

- We have and are experiencing various pandemics/endemic diseases in recent years
- Most of us have had the opportunity to be vaccinated and boosted. If not, check out the Student Health Center. Anyone is welcome to wear masks.
- Anyone with concerns about group work, please let me know
- Coughing and illness, whether from COVID or another virus, is of concern to all of us.
- If you are coughing or ill, please stay home. I will work with you to make up any missed content.

Grade Breakdown Summary

Assignment Type	Points or percentage
Mini-assignments Data interpretation, mini-quizzes (open note), Google Earth, discussion comments in Canvas, typically 10-30pts.	~30%
Critical Thinking Assignments Short presentations, Spreadsheets, news or journal article reviews, Graphics Evaluation etc : 30-50 pts	~20%
Video Worksheets, typically 10-20 pts.	~30%
Final Project, 200 pts	~20%
Total	100%

MINI ASSIGNMENTS (~30%): There will also be data interpretation assignments, adding to the repository of articles and figures, Google Earth assignments and calculations, discussion comments in Canvas, current events regarding human impacts, peer review, present an important historical or recent case study, Preparing a public education brochure or billboard each typically 10-30pts.

VIDEO WORKSHEETS (~30%) One type of in-class assignment will be answering questions about documentaries or videos of human impacts associated with a variety of causes. Some will be in-class and others on-your-own. These answer sheets will be submitted on Sundays following introduction of class content and are designed to supplement and reinforce lectures.

CRITICAL THINKING ASSIGNMENTS (~20%): spreadsheet and journal article reviews designed to assist in learning terminology, find and interpret data sources, use thinking and questioning skills, analyze data: 30-50 pts each

Spreadsheet Assignments: We will do at least two spreadsheet assignments involving finding, analyzing, and graphing data.

Journal Article Reviews: Select a reading inside or outside of the repository (Canvas) and review with instructor permission. Two students should not review the same article, so students will declare selection in Canvas posting when an article is assigned. Your main goal is to review the topic, summarize and present a clear understanding of the topic. It involves: 1) Cite journal or

report with author, date, title, journal, volume, or website according to a standard convention (APA); 2) For each article, compose a very basic two sentence summary to get the major thrust of the paper: "The author's purpose in writing the article was..." "The author concluded...."; 3) List what struck you as being the four or five most important points in the article using your own words. Go beyond the author's conclusions or the abstract; 4) Find one thought-provoking quote from the article that will generate discussion; followed by a brief response, statement, or question of your own about the quote to provoke discussion; 5) Select an important figure or table from the article. Briefly state, and be prepared to discuss in class, why you think the figure or table is especially meaningful or interesting. If your article does not have one, write N/A; 6) What is the theoretical and applied significance of this article? What (if anything) was interesting or innovative about the paper?; 7) Come up with one thought-provoking question related to each article and express your own thoughts about this question. The class portal has some articles from which readings can be chosen. Students can start there to select articles for review or find readings outside of the repository and review with instructor permission. We will continue to add to the repository over the semester. Two students should not review the same article, so students will declare selection in Canvas posting when an article is assigned. You can save or upload your review as a Word or Google *.doc or Power Point *.ppt

FINAL PROJECT (~20%): Options include a power point presentation of topical research, a research poster about a human impact, or an individual or group project such as a video or GIS analysis or other project with instructor permission. More will be posted in CANVAS

- **VISUAL (POWER POINT) TOPICAL RESEARCH:** Tell a story about human impact. The presentations should be approximately 10 slides. Begin with a title slide, and then a framework slide that raises one or more questions for which you will provide some insight. Use high-quality maps and graphics from refereed journals (discussed in class; Google Scholar/UF e-journals) and the internet. Cite the web source or author, date for each graphic on the slide, make a conclusions slide that responds to the initial questions. Use at least five journal articles and include a references slide with complete citations (author, date, article title, journal title, volume, pages). I am happy to provide early feedback. The grading rubric is as follows: 20% originality (using examples and topics not discussed in class, 20% breadth and depth of research (examining topic across different events and locations), 20% organization and structure, 20% use of maps, data, tables and graphics, 20% quality and quantity of sources, inclusion of full references and citations. (200 pts.)
- **RESEARCH POSTER** Relating to a Human Impact: It should have a title and at least five references, including three from journal articles. It should include maps, graphs, and photographs. Worth 20% or 200 pts Final Project: Part 1: Proposal, your idea and background resources explained (5%), Part 2: Draft Presentation of poster, will be peer- and professor-reviewed in order to improve final product (5%), Part 3: Final presentation, given in class, standing beside a poster and giving a 10-minute presentation, including sources (10%)
- **INDIVIDUAL OR GROUP PROJECT (20%):** This can be an individual or a group data analysis or research-based or project involving spreadsheets or GIS, or a video project focused on human impacts. I will be happy to assist with ideas and/or hear your ideas and suggest data sources.

GRADING BREAKDOWN AND POLICIES:

INFORMATION ON CURRENT UF GRADING POLICIES FOR ASSIGNING GRADE POINTS:

- Grading polices follow the UF Undergraduate Catalog [Grades and Grading Policies page](#).

GRADING SCALE: Grading Scale (& GPA equivalent):

Grade	%	Grade Points		Grade	%	Grade Points
A	≥ 93	4.0		C	70 – 76.9	2.0
A-	90 – 92.9	3.67		C-	68 – 69.9	1.67
B+	87 – 89.9	3.33		D+	66 – 67.9	1.33
B	83 – 86.9	3.0		D	60 – 65.9	1.0
B-	80 – 82.9	2.67		D-	57 – 59.9	0.67
C+	77– 79.9	2.33		E	< 56	0

Note: A grade of C- is not a qualifying grade for major, minor, Gen Ed, or College Basic distribution credit. For further information on UF's Grading Policy, see:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx#hgrades>

GENERAL OUTLINE: COURSE TOPICS

Week 1: Background and Overview

- Introduction to Class Power Point
- Power Point, M1 (M for Module) Background to human history and human impacts

TYPICAL ASSIGNMENTS

- Video Worksheets
- Note: Although these will be opened or assigned the first week, you will have until the end of the second week to submit it
- Meet with Mossa begins

VIDEOS WITH WORKSHEETS

- How one NASA image tells dozens of stories ~ 6 m, 10 pts
<https://www.youtube.com/watch?v=ZYGd-llxHJE>
- The Anthropocene | Has earth shifted out of its Holocene state? ~ 28 m, 20 pts
<https://www.youtube.com/watch?v=ZZ845voliOE>

READINGS

- Steffen, W., Crutzen, P. J., & McNeill, J. R. (2007). The Anthropocene: are humans now overwhelming the great forces of nature. *AMBIO: A Journal of the Human Environment*, 36(8), 614-621. [https://bioone.org/journals/ambio-a-journal-of-the-human-environment/volume-36/issue-8/0044-7447\(2007\)36\[614:TAAHNO\]2.0.CO;2/The-Anthropocene--Are-Humans-Now-Overwhelming-the-Great-Forces/10.1579/0044-7447\(2007\)36\[614:TAAHNO\]2.0.CO;2.full](https://bioone.org/journals/ambio-a-journal-of-the-human-environment/volume-36/issue-8/0044-7447(2007)36[614:TAAHNO]2.0.CO;2/The-Anthropocene--Are-Humans-Now-Overwhelming-the-Great-Forces/10.1579/0044-7447(2007)36[614:TAAHNO]2.0.CO;2.full)

Weeks 2 to 3: Human Impacts on Vegetation

- Power Point, M2 Human Footprint on Vegetation
- Change in vegetation, invasive species,

VIDEOS WITH WORKSHEETS

- Humans, Biodiversity, and Habitat Loss — HHMI BioInteractive Video, 33 m
<https://www.youtube.com/watch?v=1drkFgHbcWY>
- The destruction of the Amazon, explained, Vox (~12m)
<https://www.youtube.com/watch?v=SAZAKPUQMw0&pbjreload=101>
- Tumbleweeds: The Trouble With Tumbleweed, 7 m
https://www.youtube.com/watch?v=hsWr_JWTZss
- Tumbleweeds: Why Do Tumbleweeds Tumble? | Deep Look, 4 m
<https://www.youtube.com/watch?v=dATZsuPdOnM>
- Iceland Is Growing New Forests for the First Time in 1,000 Years, 5m
<https://www.youtube.com/watch?v=pnRNdbqXu1l>

TYPICAL ASSIGNMENTS

- Video Worksheets
- IA US Wildfire and Drought Info.
- Mini-quiz
- Plant problem presentation

Weeks 3 and 4: Human Impacts on the Animals

- Power Point, M3 Human Footprint on Animals

VIDEOS WITH WORKSHEETS

- Are We Living In the Sixth Extinction? PBS ~9m
- <https://www.youtube.com/watch?v=z9gHuAwxwAs>
- Pangolins: The Most Trafficked Mammal You've Never Heard Of | Natl Geographic ~ 5m
<https://www.youtube.com/watch?v=DqC3ieJJFM>
- How Wolves Change Rivers ~ 5m (reintroduction of wolves in 1995 in Yellowstone)
<https://www.youtube.com/watch?v=ysa5OBhXz-Q>

TYPICAL ASSIGNMENTS

- Worksheets
- Article Review
- Google Earth Assignment
- Student Presentations
- Mini-quiz

READINGS

- Ceballos, G., García, A., & Ehrlich, P. R. (2010). The sixth extinction crisis: Loss of animal populations and species. *Journal of Cosmology*, 8(1821), 31.

Week 5 and 6: Human Footprint on Soils

- Power Point, M4 Human Footprint on Soil
- What is a soil? Why it matters
- Human impacts to soils: Salinization, erosion, gullies
- Soil conservation

TYPICAL ASSIGNMENTS (Some of the larger assignments may be due later)

- Video worksheets
- Discussion postings
- Deep dive into Census of Agriculture documents

VIDEOS WITH WORKSHEETS

Dust Bowl Videos

- The Dust Bowl and the Depression ~ 4m
- <https://www.youtube.com/watch?v=pJ9QOcVt1Hc>
- History Brief: Black Blizzards ~ 4m
- <https://www.youtube.com/watch?v=Ep7-7x2sp8Y>

Soil Videos

- Why Soil Matters ~ 5 m
<https://www.youtube.com/watch?v=8kZXulLobA8>
- Slowing down erosion with Soil Conservation
<https://www.youtube.com/watch?v=5-6lwAk5T40>

READINGS

TBA

Week 7 and 8: Human Footprint on Water

- Power Point, M5 Human Footprint on Water

TYPICAL ASSIGNMENTS

- Video worksheets
- Evaluating change in water levels
- Calculating water footprint
- Deep dive into Chief of Engineers documents
- Mini-quiz

VIDEO WITH WORKSHEETS

- Aral Sea: The sea that dried up in 40 years - BBC News, 6 m
<https://www.youtube.com/watch?v=5N-69cWyKo&t=11s>
- Inside The Three Gorges Dam, 8 m
<https://www.youtube.com/watch?v=6lUyrLW7Qcw&t=32s>
- How "levee wars" are making floods worse (~ 7 m)
https://www.youtube.com/watch?v=LTv6RkFnelM&list=PLftUZSONTrFF9n3di0Qs4IIU_RwYdcj1d&index=23
- Lost Rivers (longer video shown in class)

READINGS

TBA

Week 9 and 10: Human Footprint on Land

- Power Point, M6 Human Footprint on Land
- Land building/Reclamation, land loss, land elevation change
- Road cuts, Mining (mountaintop, sand and gravel, etc.)
- Flood control levees, floodwalls
- Seawalls, Jetties, Dune destruction, Oil canals
- Google Earth Engine Tutorial: Night Light (NOAA Dataset - VIIRS)
- <https://www.youtube.com/watch?v=wjm9UpZL9NI>

TYPICAL ASSIGNMENTS

- Video Worksheets
- Google earth activity of land changes
- Mini-quiz

VIDEO WITH WORKSHEETS

- Is Concrete the Most Destructive Material On Earth? - Cheddar Explains 9 m
<https://www.youtube.com/watch?v=hsSE0DlxKGQ>
- Should cities expand into the sea? 13 m
<https://www.youtube.com/watch?v=Ak-kAdhh8-o>

READINGS

Week 11 and 12: Human Footprint on Climate

- Power Point, M7 Human Footprint on Climate and the Atmosphere
- Weather vs. climate
- Evidence of climate change
- Focus on temperature change
- Greenhouse gases
- Albedo change
- Urban heat island
- Ozone layer
- Acid rain
- Smog and pollutants

TYPICAL ASSIGNMENTS

- Video Worksheets
- Changing Atmospheric Gases Assignment
- Article Review

VIDEO WORKSHEETS

- The Effects of Climate Change, USGS, begin at 5:00 and stop at 58:15
- <https://www.youtube.com/watch?v=BaxJHTGDCPI>
- How Ancient Ice Proves Climate Change Is Real ~ 11 m
- <https://www.youtube.com/watch?v=myxVsYI4WZk>
- How we Solved the Problem with the Ozone Hole? ~13m
- https://www.youtube.com/watch?v=dB5sZJ_q5Zs

READINGS

- TBD

Weeks 13 and 14: The Future

- Plastic, SLR

TYPICAL ASSIGNMENTS

- Video Worksheets
- Submit Plan for Final project

VIDEOS

- Why scientists are so worried about this glacier 5m
- <https://www.youtube.com/watch?v=XRUXTFWWdY>
- 100,000,000 Years From Now, PBS ~5 m
- <https://florida.pbslearningmedia.org/resource/100000000-years-from-now-video/its-okay-to-be-smart/>

READINGS

- TBD
- Historical newspapers and film of human impacts

Weeks 14 and 15: Student Projects

- Case studies

TYPICAL ASSIGNMENTS

- Video Worksheets
- Submit early draft of final project

POLICIES:

HEALTH AND MENTAL HEALTH: Please take care of your health and be aware that the University Counseling Center (<http://www.counseling.ufl.edu/cwc/Default.aspx>, 392-1575), the Student Health Care Center (392-1161) and Student Mental Health (392-1171) can assist students as they work through personal, academic and social issues. Provide advance notice and obtain documentation for excused absences where possible. If needed, University Police Department can be contacted at 392-1111 or Dial 9-1-1 for emergencies.

U MATTER WE CARE: 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 our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community 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 phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

UNIVERSITY POLICY ON ACCOMMODATING STUDENTS WITH DISABILITIES: "Students requesting classroom accommodation 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 accommodation.

ATTENDANCE POLICY: The health of students is my overriding priority. If you are healthy, please do your best to attend and participate in the course throughout the duration of the term. If you are not, communicate with the instructor when there is a problem. All assignments will be listed in the course schedule, and specific due dates can be found in the calendar. Requirements for class attendance and assignments in this course are consistent with university policies that are in the current [UF Undergraduate Catalog](#)

UNIVERSITY POLICY ON ACADEMIC CONDUCT: UF students are bound by The Honor Pledge as follows: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty 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](#) 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 of this class.

COURSE TECHNOLOGY: Access to and on-going use of a computer is required for all students. Competency in the basic use of a computer is required although the instructor will provide help for spreadsheet work. For additional information on UF College of Liberal Arts and Sciences policy regarding computer requirements you can visit: <http://it.clas.ufl.edu/policies/student-computer-requirement/> For technology related issues the UF computing help desk can be reached at: <http://helpdesk.ufl.edu>, (352) 392-HELP - select option 2

CLASS DEMEANOR OR NETIQUETTE: Class members must follow rules of common courtesy in all discussions/ electronic communication. Consequences for violating UF netiquette guidelines include zeroes or reporting. See info at <http://teach.ufl.edu/wp-content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf>.

COMMON SENSE ADULT BEHAVIOR: Please minimize distractions to yourself and others during class time (mute when appropriate, pay attention, etc.). Students are expected to be respectful of their peers and engage in student-led discussion. Occasional in-class activities and/or homework may be assigned and will count toward the participation grade. Cellphones and laptops are encouraged for class activities. Avoid any non-class related use of technology or any behavior that is distracting to the instructor and/or other students or arriving late to class.

LATE WORK AND MAKE-UP POLICY: Clemency is granted for late work with valid excuse, including the possibility of COVID-related problems this term. Please communicate with the instructor regarding any problems with *assignments submissions or discussions*. *Please document your problems as best possible (doctor's or ER slip, obituary, etc.)*

DISCUSSION/PEER REVIEW POLICY: Students should adhere to professional etiquette/netiquette standards (see UF Policies below) in all posts and to engage in CONSTRUCTIVE dialogue. Posts should be thoughtful, detailed responses in full sentences with specificity. In most cases, discussions require some research prior to their initial post. Follow-up posts are typically required. Please check the course Calendar for the specific due dates.

EVALUATIONS: 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/>