# UF FLORIDA

# GEO6706: Transportation and Urban Accessibility Department of Geography Syllabus

Instructor E-Mail Lab Website Office Hours and Location

**Class Meeting Time and Location** 

Dr. Yujie Hu yujiehu@ufl.edu https://geonavilab.geog.ufl.edu Fri. 1:00 – 3:00 pm in TUR 3120 Mon. 1:55 – 3:50 pm in TUR 3012 Wed. 1:55 – 2:45 pm in TUR 3012

# COURSE DESCRIPTION

Investigates the relationship between transportation and urban accessibility from a geographic perspective, through the examination of the impacts of transportation systems and accessibility on human health, social equity, and the environment, as well as the methods and tools for modeling and analyzing transportation systems and accessibility.

# **COURSE OBJECTIVES**

After successful completion of this course students should be able to:

- Describe the history and evolution of the U.S. transportation system;
- Describe the geographic nature of transportation systems;
- Understand the relationship between transportation and urban accessibility;
- Measure and analyze transportation systems and urban accessibility using GIS tools.

# **PREREQUISITES**

• Sophomore standing or higher.

# **TEXTBOOKS**

Recommended:

- Rodrigue, Comtois, and Slack. (2020). *The Geography of Transport Systems* (5th edition). Routledge.
- Taaffe, Gauthier, and O'Kelly. (1996). *Geography of Transportation* (2nd edition). Prentice-Hall.

# **EVALUATION**

## GRADE DISTRIBUTION

## • Participation (10%)

Students are encouraged to participate in class and contribute to our discussions. The most effective way for them to prepare for this portion of the evaluation is to come to class having read the assigned materials, such as slides from last lecture and readings. Note that their level of engagement with the class will be monitored by the instructor. This also includes the possibility of having occasional quizzes, where a portion of the participation points will be specifically allocated for quizzes. The quizzes may be in a form of multiple choice, short answer, or short essay responses.

• Discussion leader (20%)

Students are expected to lead/chair class discussion on the Wednesday class, which involves a short (10 - 15 minutes) presentation of assigned topics and introducing questions for the class to explore. This will often be done in groups of 2-3. Each group will also write and submit a short summary of your reflections on the assigned topics (1000 words).

#### • Homework assignments (20%)

Hands-on homework assignments are provided to help students use GIS to study transportation systems and urban accessibility.

#### • Mid-term project: travel mode literature review (20%)

**Objective**: This assignment aims to develop students' research, critical analysis, and synthesis skills by having them review and analyze existing scholarly literature focused on a specific travel mode within the context of transportation geography.

**Step 1. Travel mode selection**: Each student selects a specific travel mode (e.g., driving, biking, carpooling, walking, public transit) for their literature review. The chosen travel mode should be one that the student is interested in exploring and has some level of familiarity with.

**Step 2. Literature search and collection**: Students conduct an in-depth literature search to identify scholarly articles, research papers, reports, and academic sources related to the chosen travel mode. These sources should address various aspects of the selected mode, including its benefits, challenges, impacts, and considerations within the realm of transportation geography.

**Step 3. Synthesis and analysis**: Students read, critically evaluate, and synthesize the collected literature. They identify common themes, patterns, methodologies, and key findings related to the chosen travel mode's role in transportation geography.

**Step 4. Organization and structure**: Students structure your literature review by organizing it into sections that cover the introduction, the importance of the chosen travel mode, benefits and challenges, impact on transportation geography, research methodologies used, findings, and concluding remarks.

**Step 5. Critical analysis**: Students are expected to critically analyze the quality and relevance of the sources they reviewed. They should assess the strengths and limitations of the studies, the validity of methodologies employed, and any potential biases.

Step 6. Discussion of implications: Students discuss the implications of the reviewed literature for the field of transportation geography, highlighting connections to broader transportation trends, urban planning, sustainability, and the evolving landscape of mobility. Step 7. Integration of geographical concepts: Students should incorporate relevant geographical concepts into their analysis, such as spatial patterns, accessibility, urban development, and the interaction between transportation systems and geographic context. Step 8. Conclusion and future research directions: Students conclude their literature review with a summary of the key findings and insights from the reviewed literature. They may also suggest areas for future research and potential contributions to advancing transportation geography knowledge.

**Step 9. Project report and presentation**: Each student submits a review report (1500-2000 words, not including references) and gives a presentation (10 - 15 minutes) summarizing their literature review. They may choose to include relevant visual displays, such as charts, maps, or diagrams. The report should be properly referenced with a complete bibliography included. Please follow the APA style.

#### • Final project (20%)

Students will pick a specific transportation question of interest (**topic approval by the instructor is required**) and find evidence/information—through discussing theories and findings from existing studies and performing geographic analyses on existing data—to

support their claims. Write a paper (5,000 – 6,000 words; a suggested format of the paper will be provided) summarizing how they address the question. The paper should be properly referenced with a complete bibliography included. Please follow the APA style.

#### • Final presentation (10%)

Each student will prepare a 15-minute presentation (10-minute for presentation and 5-minute for Q&A) on the final project. Students will be provided with a rubric to guide their presentation. This usually takes place in the last week of the class.

А	A-	B+	В	B-	C+	С	C-	D+	D	D-	Е
93+	92-90	89-87	86-83	82-80	79-77	76-73	72-70	69-67	66-63	62-60	59-
4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	1.0	0.67	0

## GRADING SCALE (&GPA EQUIVALENT)

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

# CLASSROOM POLICIES

- Attendance & makeup: Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at: <u>https://catalog.ufl.edu/UGRD/academic-</u> regulations/attendance-policies/.
- **Cell phone and texting:** To encourage uninterrupted participation in class, it is expected that students turn cell phones to silent mode before coming to class.
- Late submissions: Late submissions will not be accepted.
- **Grade disputes:** Should a student wish to dispute any grade received in this class (other than simple addition errors), the dispute must be in writing and be submitted to the instructor within a week of receiving the grade. The dispute should set out very clearly, the grade that the student believes the assignment should have received as well as why he or she believes that he or she should have received such a grade.

# **OTHER INFORMATION**

- Academic honesty: 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. 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 (http://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.
- Accommodations for 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. Contact the Disability Resources Center

(<u>http://www.dso.ufl.edu/drc/</u>) for information about available resources for students with disabilities.

- **Counseling and mental health resources**: Students facing difficulties completing the course or who are in need of counseling or urgent help should contact the on-campus Counseling and Wellness Center (352-392-1575; <u>http://www.counseling.ufl.edu/cwc/</u>).
- Online course evaluation process: 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 <a href="https://gatorevals.aa.ufl.edu/students/">https://gatorevals.aa.ufl.edu/students/</a>. 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 <a href="https://ufl.bluera.com/ufl/">https://ufl.bluera.com/ufl/</a>. Summaries of course evaluation results are available to students at <a href="https://gatorevals.aa.ufl.edu/public-results/">https://gatorevals.aa.ufl.edu/public-results/</a>.

# SUGGESTED COURSE SCHEDULE

Students should note that there may be changes to the class schedule.

Weeks	Lectures				
1	Course overview				
2	Overview of transportation geography				
3	Holiday and assignments				
4	Evolution of transportation systems				
5	Transportation and spatial structure				
6	Transportation and spatial structure				
7	Transportation data and GIS-T				
8	Transportation data and GIS-T				
9	Mid-term project presentation				
10	Measurement of transportation networks				
11	Measurement of transportation networks				
12	Spatial accessibility				
13	Spatial accessibility				
14	Holiday; NO CLASS				
15	Transportation, environment, and social equity				
16	Final project presentation				

## **IMPORTANT DATES TO REMEMBER**

- Mid-term project presentation: **10/16/2023**
- Final presentation slides: submitted by 12/06/2023
- Final report: submitted by **12/11/2023**