## **Geography 5300 Transportation Geography Fall Semester 2017**

Instructor: Dr. Morton O'Kelly [okelly.1@osu.edu]

Class Location: Journalism Bldg 270

Class Time: Tuesday and Thursday 12:45 - 2:05 pm

Office: 1036 Derby Hall

Office Hours: Tuesday: 2:30 - 3:30 and by apt.

Phone: 292-8744

T.A.: Hui Kong [e-mail: kong.174@osu.edu]

Office: Derby 1131

Office Hours: office hours on Tuesday & Thursday 4:00-5:00pm

The course presents a review of the geography of transportation. Four major sets of ideas are discussed:

## 1) Introduction to Spatial Organization

- a. Spatial organization using concepts of linkage, node, hierarchy, and hinterland.
- b. Selected economic explanations and models of trade.
- c. Spatial interaction (gravity) models.

#### 2) Network Analysis

- a. Aggregate or descriptive measures.
- b. Disaggregate or detailed descriptive measures.

#### 3) Allocation Methods

Provides an example of optimal flow, where we aim to achieve efficient flows within a given network

#### 4) <u>Urban Transportation</u>

Introduction to selected urban transportation problems.

The emphasis is on three different interrelated approaches to understanding the geography of transport: [a] description, [b] explanation, and [c] normative or optimal models. The first type of approach asks "where?" and "what?" kinds of questions; the second approach asks "why?" questions; and the third approach deals with "how?" could a system be improved. In addition an overall learning goal is to tackle transport problems through a synthesis of various approaches. Specifically, the course examines different approaches to transport geography through activities and a project on accessibility.

Course Text: E.J. Taaffe, H.L Gauthier, and M.E. O'Kelly, Geography of Transportation 2nd Edition

Google Books electronic edition is freely available on line. Link for book on google:

https://play.google.com/store/books/details/Edward James Taaffe Geography of Transportation?id=N 60qf7WynaEC

### Course requirements and grade distribution

date	day	activity	points
9/19	Tuesday	Homework Part 1 DUE	15
9/21	Thursday	Midterm 1	10
10/26	Thursday	Homework Part 2 DUE	15
10/31	Tuesday	Midterm 2	10
12/5	Tuesday	Homework Part 3 DUE	15
		Attendance / Participation	5
Tuesday Dec 12,			
2:00 - 3:45	Tuesday	Final	30

Penalties of 20% per day will be assessed for late projects [i.e. maximum score after 1 day late is 80% of the available points]. It is the student's responsibility to ensure the instructor receives the material on time. The Final Exam is comprehensive and is scheduled for the usual classroom. We will use Carmen / Canvas to maintain grade book and communicate with you.

Be aware that the points on the system will initially show points from material **you have attempted**. At the end of the term missing material will be zeroed out. You are entitled to all the points, if you do excellent work, so it is up to the student to earn those points. We will add points for attendance and participation.

Please refer to the Committee on Academic Misconduct for a review of Student Code of Conduct. See their very useful web site including <a href="http://oaa.ohio-state.edu/coam/fag.html">http://oaa.ohio-state.edu/coam/fag.html</a>

Any student who feels s/he may need an accommodation based on the impact of a disability should contact me privately to discuss specific needs. Please contact the Office for Disability Services at 614-292-3307 in room 150 Pomerene Hall. That office will coordinate reasonable accommodations for students with documented disabilities.

# DETAILED COURSE CONTENT AND IMPORTANT DATES

Week	LINE	Lect	Date	Day	SEQ	TOPIC	TEXT	Activity	Percent
1	1	1.1	22-Aug	Tuesday	1	What is transport geog about?	Chapter 1		
	2	1.2	24-Aug	Thursday	2	Spatial Organization nodes and links			
2	3	1.3	29-Aug	Tuesday	3	Spatial Organization hinterlands and hierarchies			
	4	1.4	31-Aug	Thursday	4	Economic Foundations	Chapter 2	Hand out and prepare activities	
3	5	1.5	5-Sep	Tuesday	5	Transport costs			
	6	1.6	7-Sep	Thursday	6	Spatial Interaction I	Chapter 7		
4	7	1.7	12-Sep	Tuesday	7	Spatial Interaction II			
	8	1.8	14-Sep	Thursday	8	Spatial Interaction III			
5	9	1.9	19-Sep	Tuesday	9	Spatial Interaction IV	Chapter 11 (part)	Homework Part 1	15
	10		21-Sep	Thursday		Midterm Test		Midterm	10
6	11	2.1	26-Sep	Tuesday	1	Transport and Location	Readings		
	12	2.2	28-Sep	Thursday	2	Ideal location			
7	13	2.3	3-Oct	Tuesday	3	Network Analysis	Chapter 9	Hand out and prepare activities	
	14	2.4	5-Oct	Thursday	4	Network Analysis			
8	15	2.5	10-Oct	Tuesday	5	Network Analysis			
	16		12-Oct	Thursday		BREAK			
9	17	2.6	17-Oct	Tuesday	6	Allocation	Chapter 10		
	18	2.7	19-Oct	Thursday	7	Allocation			
10	19	2.8	24-Oct	Tuesday	8	Allocation			
	20	2.9	26-Oct	Thursday	9	Allocation		Homework Part 2	15
11	21		31-Oct	Tuesday		Midterm Test		Midterm	10
	22	3.1	2-Nov	Thursday	1	History and Development - a quick review			
12	23	3.2	7-Nov	Tuesday	2	Bike Share	Chapter 5		
	24	3.3	9-Nov	Thursday	3	Systematic look at modes / changes		Hand out and prepare activities	
13	25	3.4	14-Nov	Tuesday	4	URBAN TRANSPORT I	Chapter 6		
	26	3.5	16-Nov	Thursday	5	URBAN TRANSPORT II	Chapter 8		
14	27	3.6	21-Nov	Tuesday	6	URBAN TRANSPORT III	Chapter 12		
	28		23-Nov	Thursday		NO CLASS THANKSGIVING			
15	29	3.7	28-Nov	Tuesday	7	TRANSPORT SYNTHESIS II	Readings		
	30	3.8	30-Nov	Thursday	8	TRANSPORT SYNTHESIS III			
16		3.9	5-Dec	Tuesday	9	Conclusion		Homework Part 3	15
								Participation	5
						Tuesday Dec 12, 2:00 - 3:45		Final	30