

Tentative

GEOG/UNHO 491: Urban Sustainability: Freiburg, Germany

May 12th – May 27th

Instructor: Melissa Hinten, Ph.D. (mhinten@utk.edu)

Course Description: This study abroad course is intended to immerse students in a “green” city to learn about urban sustainability. Currently half of the world’s population lives in urban areas, but mid-century two-thirds of the world’s population is predicted to live in urban areas, with those percentages much higher in developed countries. Urbanization, the movement of human populations to urban areas, can have detrimental impacts on the environment and society. The study of urban sustainability seeks to understand and develop strategies to reduce environmental impacts, create thriving and resilient urban areas, and to ensure communities have strong relationships between people and place, and equal access to community and environmental goods and resources.



We will explore characteristics of urban sustainability in the setting of Freiburg, Germany and surrounding communities. Characteristics explored include energy, housing, mobility and transportation, water and green spaces, food and agriculture, and waste management.

Student learning outcomes (applies to all course designations except where indicated):

1. Define and discuss the concepts and practices of urban sustainability
 - *Assessed through in-class and field discussions and story map (GEOG 491) with proposal (UNHO 491)*
2. Explore the skillsets and mindsets needed to promote urban sustainability
 - *Assessed through in-class and field discussions, activities, and reflection paper*
3. Explain and evaluate current challenges to urban sustainability
 - *Assessed through in-class and field discussions, and activities*
4. Apply skills of inquiry, research, and analysis of urban sustainability issues
 - *Assessed through activities and story map (GEOG 491) with proposal (UNHO 491)*

Grading:

Attendance and participation	25%
Discussion and Activities	30%
Urban Analysis Story Map	35%
Reflections	10%

Grade scale: A (100-93%), A- (92-90%), B+ (89-87%), B (86-83%), B- (82-80%), C+ (79-77%), C (76-73%) C-(72-70%), D+ (69-67%), D (66-63%), D- (62-60%) and F (< 60%)

Attendance and participation: Due to the immersion and time constraints of this program it is important that you come to every class and site visit or field trip on time and *prepared to participate and ready to learn*. For every missed class 1% will be deducted from your grade, and 0.05% will be deducted if you arrive more than 10 minutes late to class/site visit/field trip.

Discussions: The instructor will lead mini-lectures on days that new material is being presented, and which is most appropriately explored through direct instruction. The mini-lectures will be followed by in-class and field discussions, which are facilitated by the instructor and based on assigned readings. Pairs of students will be asked to lead off the day’s discussion. Please see the discussion assignment schedule for specifics.



Activities: We will work on data activities both in and out of class in which we will use internet resources to explore urban sustainability characteristics. You will be asked to present and discuss your findings to the class.

Urban Analysis Story Map (GEOG 491): You will observe and explore many characteristics of urban (and suburban and rural) sustainability during the course. This analysis activity asks you to document concepts and theories that explain those characteristics. Your task is to create a story map from your examples and then critique and analyze your examples based on prompts provided. Detailed instructions will be provided in Canvas.

Safety Information: Please use caution and your best judgement when collecting images and examples for your story map. Work with a classmate if you feel that is appropriate.

Measuring Urban Sustainability Proposal (UNHO 491): In addition to the Urban Analysis Story Map project you will select one urban sustainability issue and propose a sustainability method to quantitatively or qualitatively measure the issue. Your proposal needs to include a literature review and proposed methods and outcomes. Examples of proposed sustainability measures include, but are not limited to GHG inventory, design charrettes, benefit-cost analysis, and ecological footprints. Detailed instructions will be provided in Canvas.

Reflection write-ups: At the beginning, and the end of the course you will be asked to complete a 250-word written reflection.

Late Submission Policy: Any assignment that is submitted up to two days late will receive a 10% reduction per day, and after day two no late submissions will be accepted.

Canvas: All course communication will take place in Canvas, this includes course readings, which will be posted in Canvas modules prior to the start of the course. Instructions and rubrics to assignments will be posted in Canvas. Please submit all assignments in Canvas.

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Course Schedule:

Date	Logistics	Modules, readings, and activities
Online Modules in Canvas May 6-8 online reading, lectures, and assignments		Module: Introduction to Urban Sustainability Readings: <ul style="list-style-type: none">● Urban Sustainability and Resilience: From Theory to Practice● Freiburg, Germany – Germany’s Eco-Capital, Ch 3; pgs 65-76● Green Urbanism: Formulating a Series of Holistic Principles
Tues, May 12	<ul style="list-style-type: none">● Arrive at IES Center in Freiburg by 4:00 pm● Check into apartment● Dinner on own	
Weds, May 13	<ul style="list-style-type: none">● 9:30 Welcome Breakfast● 10:30 Orientation● 12:00-13:00 lunch at Munstermarket● 13:00-15:00 Practical city walking tour● 15:00-16:00 afternoon lecture/discussion	Module: Introduction to Urban Sustainability Discussion: urban sustainability, introductory readings and story map project
Thurs, May 14	<ul style="list-style-type: none">● 12:00-14:00 bike pick-up and bike tour● 15:00-17:00 Historical city walking tour	Readings from Introduction and Transportation Modules
Fri, May 15	<ul style="list-style-type: none">● 10:30-12:00 am @ IES● Lunch break● 13:00-14:00 lecture● 14:30-17:30 transportation/mobility site visits	Module: Housing, mobility, and community Discussion: Transportation readings Readings: <ul style="list-style-type: none">● On the road to Sustainability: Transport and Carfree Living in Freiburg● Sustainable Transport in Freiburg: Lessons for Germany’s Environmental Capital
Sat, May 16	<ul style="list-style-type: none">● 11:00-13:00 lunch and hike to Scholssberg● 13:00-15:00 bike or tram to Seepark	Module: Biodiversity and Green Spaces
Sun, May 17	Free Day	
Mon, May 18	<ul style="list-style-type: none">● 9:30-10:30 @ IES● Pack a lunch● Black Forest hike and site visit 12:00-17:00	Module: Biodiversity and Green Spaces Discussion: Biodiversity and Green Spaces Assignment: Reflection write-up due at midnight Readings: TBD

Tues, May 19	<ul style="list-style-type: none"> ● 9:00-11:00 Vauban tour ● 11:30-13:30 lunch, discussion, and free time ● 13:30-16:30: housing site visits and scavenger hunt at Rieselfeld, etc. 	<p>Module: Housing, mobility, and community Discussion: readings and Vauban tour Readings:</p> <ul style="list-style-type: none"> ● Vauban: A European Model Bridging the Green and Brown Agendas ● The Sustainable Urban District of Vauban in Freiburg, Germany ● Freiburg, Germany – Germany’s Eco-Capital, Ch 3; pgs 76-82 ● Social sustainability, residential design and demographic balance: neighborhood planning strategies in Freiburg, Germany ● Freiburg: The City That Did It All
Weds, May 20	<ul style="list-style-type: none"> ● 9:30-11:00 @ IES ● 11:45-14:00 Munstermarket mini-lecture and tour + lunch ● 17:00-19:00 Group dinner preparation and discussion at student apartments 	<p>Module: Food, water, and energy Discussion: readings Activity: local food purchase and preparation as a group</p>
Thurs, May 21	<ul style="list-style-type: none"> ● 10:00-12:00 @ IES ● Lunch break ● 13:00-19:00 Local farm + Dreisam water site visit 	<p>Module: Food, water, and energy Discussion: Food prep activity, readings Activity: Life Cycle Analysis and Carbon Footprint of wine Readings:</p> <ul style="list-style-type: none"> ● Hidden Linkages between urbanization and food systems ● LCA and CF of wine supply chain ● Wines of Germany Website ● Food and Agriculture Organization of UN: Organic farming in Germany website
Fri, May 22	<ul style="list-style-type: none"> ● 10:30-12:00: Lecture at IES ● 12:30-17:30: Rhine valley and Kaiserstuhl vineyard site visits ● Optional group dinner in Kaiserstuhl region 	<p>Module: Food, water, and energy Readings:</p> <ul style="list-style-type: none"> ● Urban Sustainability and River Restoration: Green and Blue Infrastructure Part A: A definition of the issue ● Urban green space, public health, and environmental justice: The challenge of making cities ‘just green enough’
Sat-Sun, May 23-24	Free Weekend	Optional train and bike ride to Staufen, Germany
Mon, May 25	<ul style="list-style-type: none"> ● 9:00-10:00 Lecture at IES ● 10:30-17:30 ● Day trip to Strasbourg 	<p>Module: Housing, mobility, and community Readings: TBD</p>
Tues, May 26	<ul style="list-style-type: none"> ● 11:00-12:30 lecture @ IES ● Lunch break ● 13:30-14:30 Lecture 	<p>Module: Food, water, and energy Discussion: local farm and vineyards, readings and story map project Readings:</p>

	<ul style="list-style-type: none"> ● 15:00-19:00 renewable energy site visits 	<ul style="list-style-type: none"> ● How Germany Became Europe's Green Leader: A Look at Four Decades of Sustainable Policy Making ● Emerald Cities: Ch 1, Sustainability as Economic Development ● What influences pro-environmental behavior
Weds, May 27	<ul style="list-style-type: none"> ● 10:30-12:00 Discussion/lecture at IES ● 12:30-14:00 Farewell Lunch 	