



URBAN RESILIENCE TO FLOODING II

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Course Meeting Time – Thursdays 1:00pm - 4:00pm – 117 Robinson Hall + CRP PIT Lab, McCord Hall

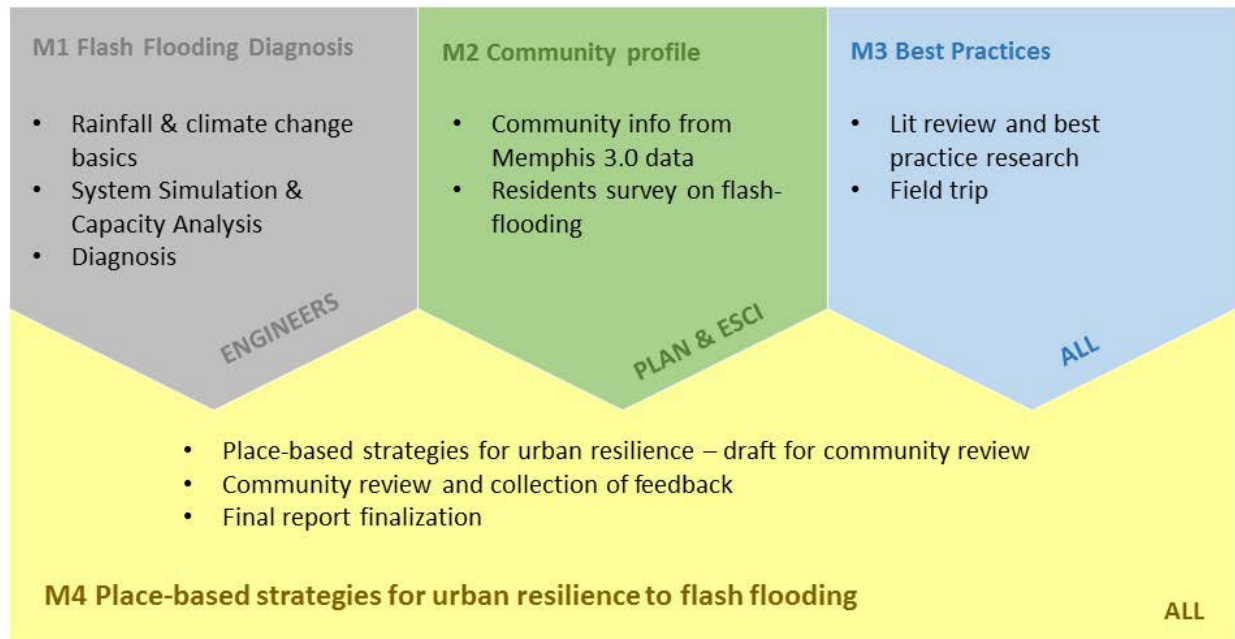
This is an interdisciplinary class, framed within a research project, investigating the theme of urban resilience in relation to surface water-related issues, especially flash flooding.

Objectives – To develop a critical understanding of the fundamentals of urban resilience, community resilience, as well as extreme rainfall and runoff events, and to learn practical tools and methods for improving urban communities' resilience, with special reference to flash flooding.

Students – Graduate-level students from City and Regional Planning, Civil Engineering, and Earth Sciences

Format and Methods – The course combines elements of traditional lecture classes, with planning studios/laboratory exercises. The class includes parallel streams of activities, called Modules:

- **Module 1 (M1) – Flash Flooding Diagnosis**
- **Module 2 (M2) – Assessment of Community Resilience**
- **Module 3 (M3) – Best Practices for Urban Resilience to Flash Flooding**
- **Module 4 (M4) – Place-based Strategies for Urban Resilience to Flash Flooding**



Requirements – All students will be required to show proficiency in the subject matter through active class participation, fieldwork, participation in planned community events, completion of assignments, and a final presentation. PhD students will also review a paper from the recent literature.

Grading Policy

	Master Students	PhD students
• Attendance	10%	5%
• Active Participation (classes & field work)	15%	15%
• Active participation in community events	15%	10%
• Periodical Assignments	25%	20%
• Final Assignment	35%	30%
• Paper review	NA	20%

Students with Disabilities - The University encourages the full participation of students with disabilities. We invite students with disabilities to meet individually with the instructors, to discuss any accommodations that may be needed for successful participation in this course.

Inclement Weather - In the event that inclement weather requires the cancellation of classes at the University of Memphis, local radio and television media will be immediately notified. Additionally, the University of Memphis has established an inclement Weather Hotline at 678-0888.

List of Assignments

- Assignment #1: System Simulation and Capacity analysis
- Assignment #2.1: Community Profile and SWOT analysis
- Assignment #2.2: Resident Resilience Survey
- Assignment #3: Best Practice Research Report
- Assignment #4: Urban Resilience to Flash Flooding Strategy for community review
- Final assignment: Place-based strategies for improving flash flooding resilience for urban communities
- Final assignment (PhD students): Paper Review

Course Outline (draft schedule – last update: Feb 9th, 2018)

<u>Week</u>	<u>Date</u>	<u>Topic</u>
1	1/18	No class – snow week
2	1/25	Class Overview (Lead instructor: All) Recap from Urban Resilience and Flash Flooding I (student-led) Discussion on class study trip to Boston, MA (Readings on flash flooding and climate change TBA)
3	2/1	M1 – Climate Change and Flash flooding Basics (lecture by CM & DB) Ass #1 handout (Led by CM) M2 – Ass#2.1 handout (Led by LS) M4 – Teams’ formation (Led by LS) (Readings on flash flooding and circular economy TBA)
4	2/8	M1 – Flash Flooding Basics cont’d (by CM) Ass #2.1 – working day
5	2/15	Desk Review - M1 Ass #1 (led by CM & DB) + M2 Ass #2.1 (led by LS) M2 – Ass # 2.2 handout M3 – Circular economy & Flash flooding (lecture by LS) M3 – Ass #3 handout

6	2/22	Ass #1 first draft (students' presentation) Ass #2.1 – final due (students' presentation) Ass #2.2 and Ass#3 – desk review
7	3/1	Desk Review - M1 Ass #1 (led by CM & DB) M3 – Ass #3 final due (students' presentation)
8	3/8	Spring Break (no class)
9	3/15	Ass #1 final due (students' presentation) Ass #2.2 final due (students' presentation) Ass #4 hand out
10	3/22	Field Trip to Boston
11	3/29	Ass #4 Desk Review & Final Assign hand out
12	4/5	Final Assign Desk Review
13	4/12	Final Assignment first draft due (students' presentation)
14	4/19	Final Assignment Desk Review
	5/3	Final exam, from 10:30 am to 12:30 pm (students' presentations)

Community events will be planned during the course of the semester between wk 7 and wk 12, depending on our partners' availability – students are expected to participate actively