



# CE/EEE: Study Abroad Water and Infrastructure Resilience: Public Health and Extreme Events



*London Fire Brigade had busiest day since World War II, says London mayor (359 incidents)*

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#12 in World



**Course Description:** This course is focused on introducing and inspiring students about the engineering, science, and policy challenges associated with water infrastructure and extreme events. Topics will span water quality, public health, infrastructure, the environment, public safety, and communications.

**Learning Objectives:** At the completion of this course, it is expected that students will be able to:

1. Identify key population needs following natural and man-made disasters;
2. Explain the roles and responsibilities of common organizations responding to incidents;
3. Describe water quality challenges and solutions to natural and man-made disasters;
4. Communicate technical concepts effectively with audiences with widely-varying backgrounds;

**Course Content:** This course is designed for students to learn the roles, responsibilities, and complexity of responding to disasters and emergencies from leaders in this space. Events to be covered include those caused by natural disasters and those that are man-made. A variety of representatives from federal, academic, and private corporations will share experiences on this topic. The course objectives will be fulfilled in three capacities: Through (a) a combination of interactions with invited experts on the topics speaker interactions/information sharing, (b) learning activities in the host country and online education and learning opportunities, (c) final report and presentation that represents the student's breadth and depth knowledge. Materials will be available on Brightspace.

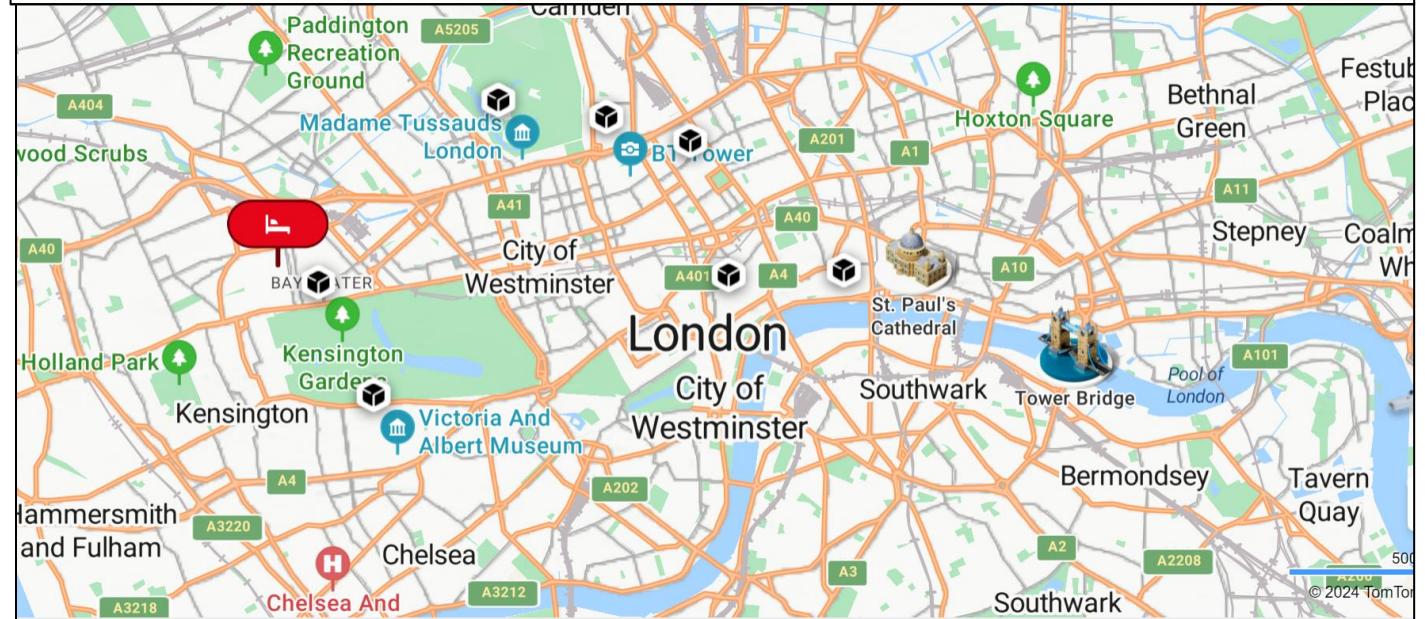
**Brightspace site will contain pre-travel materials**

# Lodging

London House Hotel or similar:

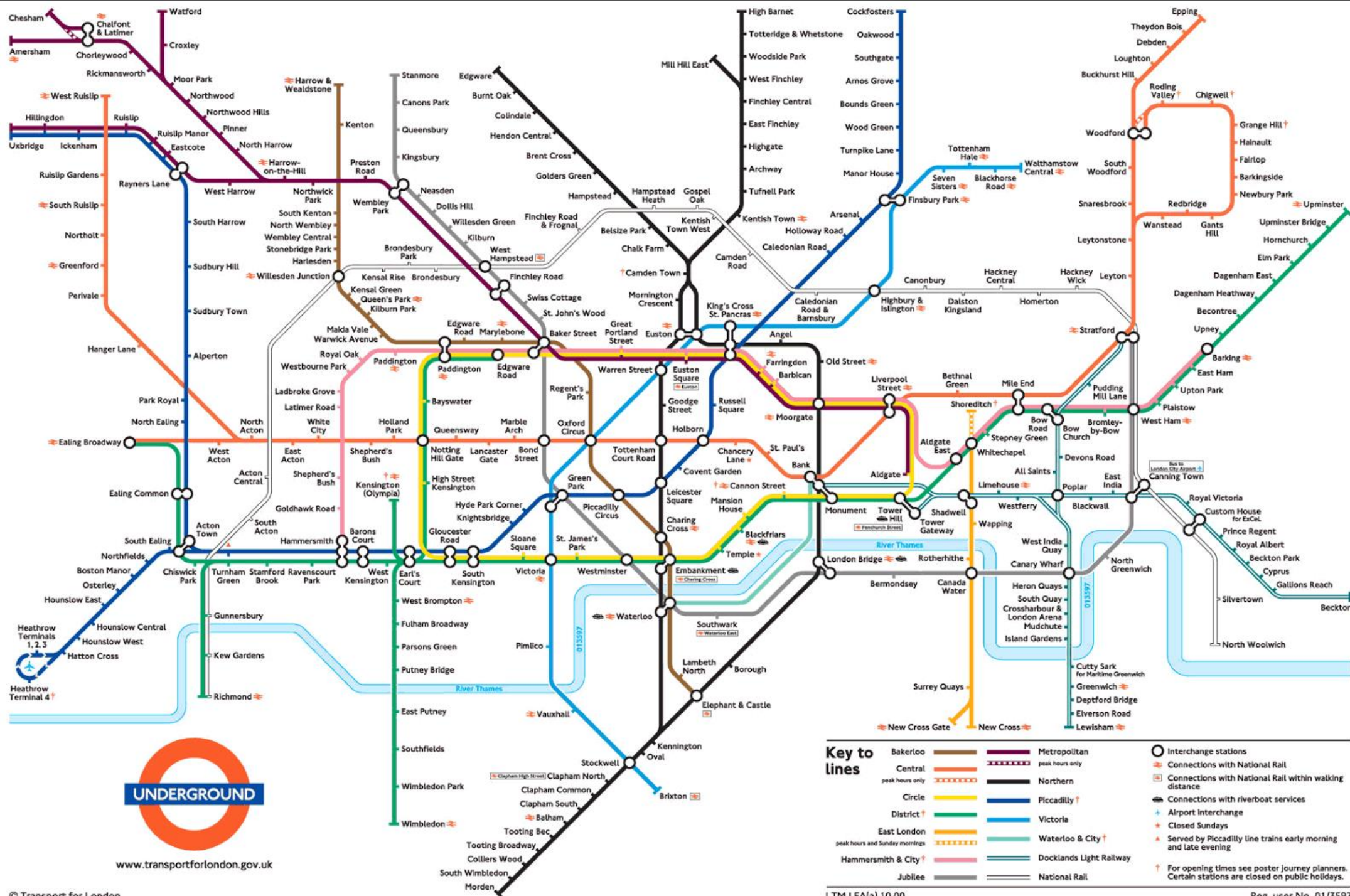
[London House Hotel in Kensington Garden Square \(londonhousehotels.com\)](https://www.londonhousehotels.com)

81 Kensington Gardens Square, London, W2 4DJ



# Onsite Travel

Tube  
&  
scheduled  
coach bus



# Assignments

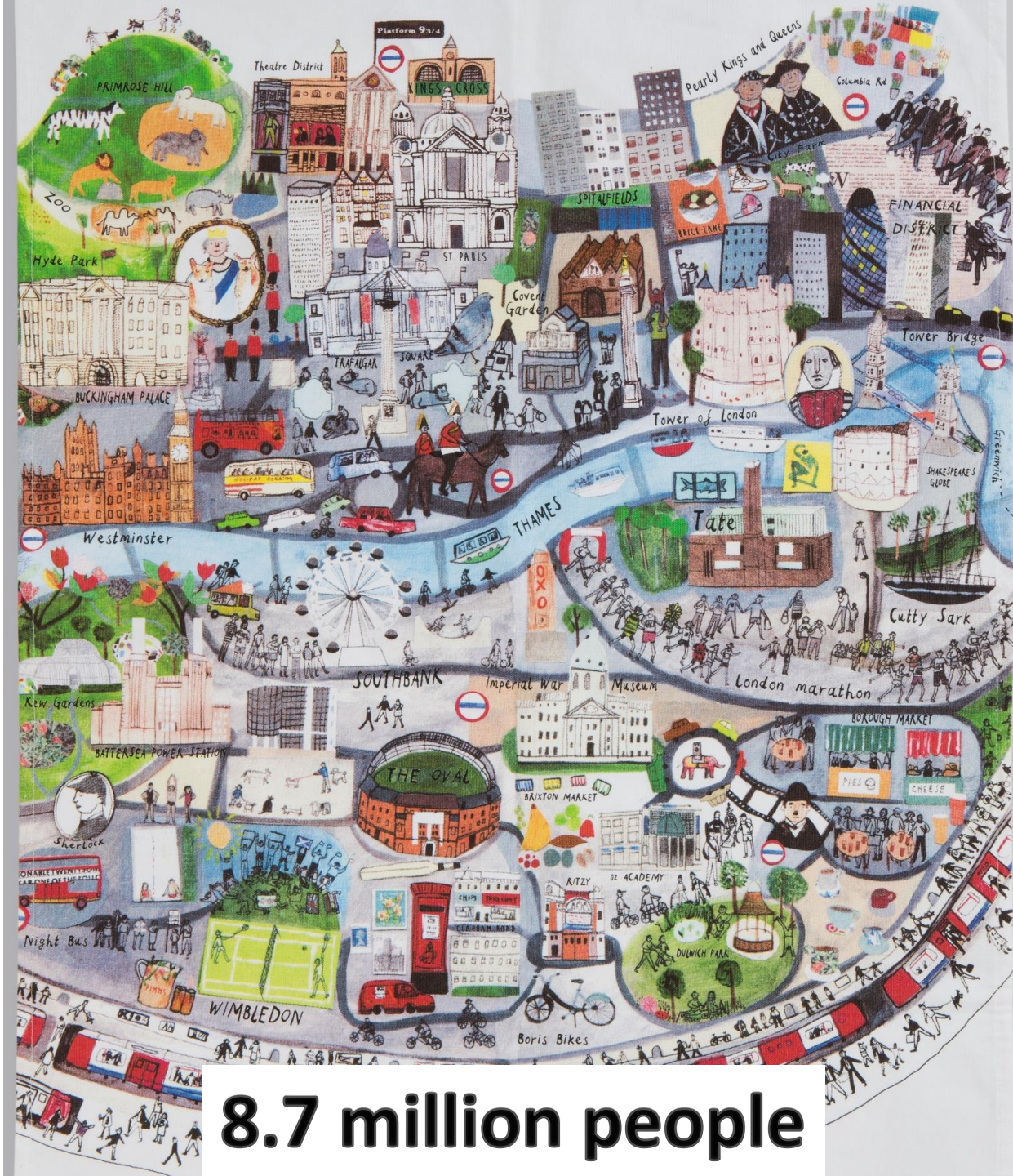
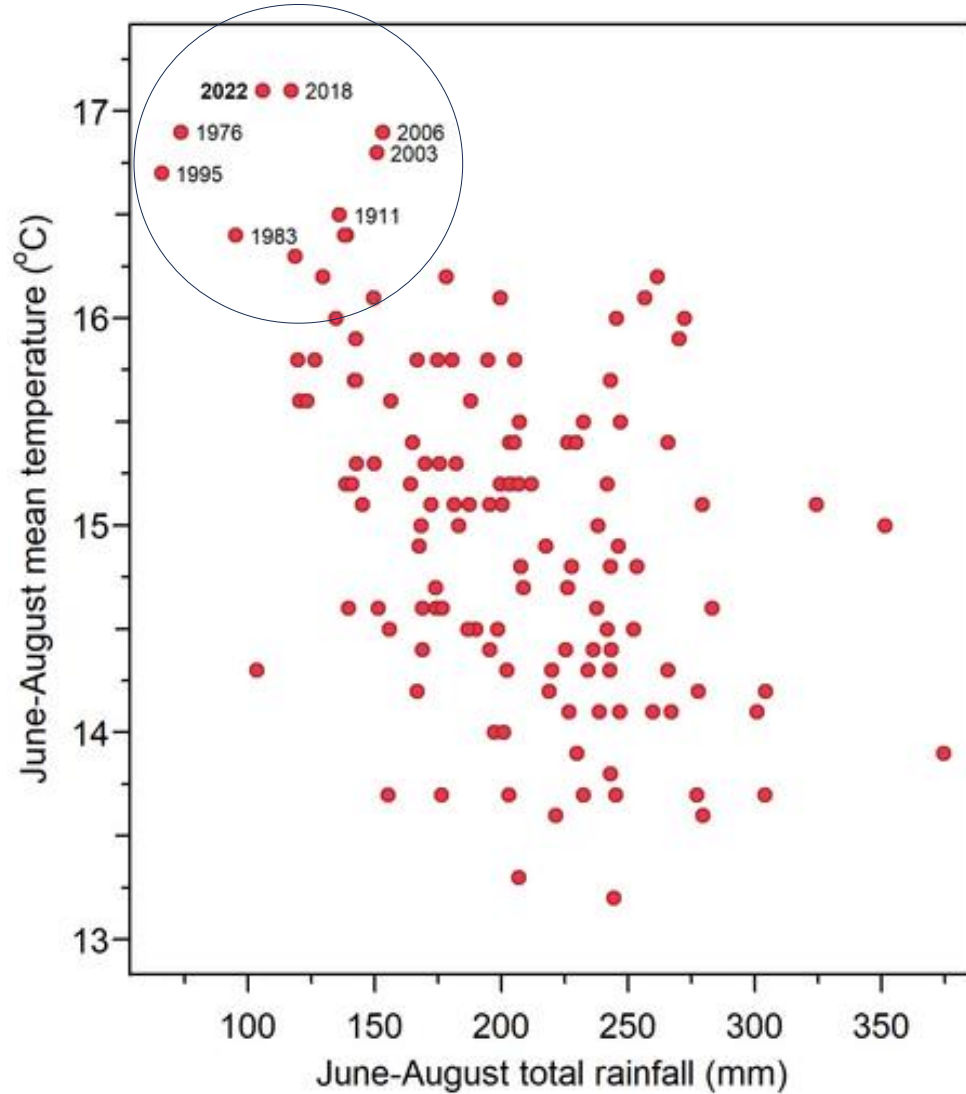
Schedule of due dates, and guidelines on discussion participation and evaluation will be posted on the course website.

There is no final exam.

- **PARTICIPATE in the course activities IN the United Kingdom:** Students are expected to attend and participate in every course activity in the United Kingdom. Speakers and tours have been setup so that students can learn directly from experts in the discipline. Tours will enable students to learn concepts and see, firsthand, the technologies of importance to this course.
- **UPLOAD a 1-page reflection to Brightspace for each learning activity in the United Kingdom.** Each submission should be a single spaced, 12pt font or smaller, 1"x1" margins. In this reflection, the student should discuss the speaker's topic/tour topic content and provide a reflection upon what they learned *and* additional thoughts that they had because of the presentation.
- **COMPLETE the online Brightspace quizzes for specific reading materials as denoted on the schedule.**
- **UPLOAD a 1-page reflection to Brightspace for each Scientific Paper assigned.** Each submission should be a single spaced, 12pt font or smaller, 1"x1" margins. In this reflection, the student should discuss the speaker's topic/tour topic content and provide a reflection upon what they learned *and* additional thoughts that they had because of the presentation.
- **UPLOAD a FINAL REPORT to Brightspace** about an extreme event topic of the student's choosing. Details are below.

# London – Capital of the U.K.

Drought is increasingly a UK problem: Water restrictions; Life safety/fire fighting; Urban fires and wildfires; Water sources



**8.7 million people**