

CourseNo: PLANA4010_001_2015_1

Meeting Time: R 09:00A-11:00A **Meeting Location:** [AVERY HALL 408](#)

Instructor Information:

[Peter J. Marcotullio](#)

Course description

Climate change includes a set of processes operating at multiple scales resulting from and affecting human development. The importance of planning for these changes continues to increase with further anthropogenic contributions of climate forcing compounds to the atmosphere and population concentration in dense settlements. As both of these trends are predicted to increase over the near term, urban planning for climate change is now and will continue to be a fundamental development task.

But what is urban planning for climate change? As cities are major contributors of energy related CO₂ emissions and increasingly the sites of vulnerable locations, spaces and communities, urban planning must consider both mitigation and adaptation strategies.

In order to meet this task, this course focuses on the urban contributions and vulnerabilities to climate change and provides a background to local mitigation and adaptation actions. The questions the course addressed are:

- How do cities fit into the carbon cycle?
- What methods do researchers use to analyze urban climate change impacts, risks and vulnerabilities?
- How does climate change affect cities around the world?
- What are current trends in urban mitigation and adaptation options?

The course is divided into four sections. The first part of the course is the introduction, which provides an overview of how cities fit into the carbon cycle, including urbanization processes at the global scale and urban climate issues. The second section examines urban GHG production and urban vulnerability and risk. The third section examines climate change governance trends through a single text. This book, while covering both previous and subsequent sections is one of the latest and most comprehensive in the field. The fourth section provides an overview of mitigation and adaptation planning and strategies. After examining these separately, we read a full text on spatial planning for climate change which covers a number of different sectors. This last book, while not

focusing strictly on cities does provide background and information on how spatial planning has and can be used to address both mitigation and adaptation.