There is no escaping it: ours is an urban world. More people in the world lived in urban settlements than rural areas with estimates of reaching 75% urban by the end of the century. “The city” is the predominant structure of human settlement and the source of human impacts on the natural world. Moreover, urban areas are growing with exponential speed with little or no restrictions. However, “the city” also holds the most promise for shifting the relationships between human-based systems and natural systems so that human impact on the ecosphere might be less detrimental and more sustainable. It is this dual dimension of urbanization and the environment that we will examine in this course. The class examines these issues in light of the Paris Accord on Climate Change and the rising commitment of cities to meet the goals of the agreement. The goal is to better understand how cities contributes to ecological damage as well as how cities hold the solution.

Course Objectives
At the completion of the course, students will be able to

- Explain the major environmental impacts of cities and the effect of globalization on both urban development and city environments
- Explain the role of cities in creating sustainability
- Articulate specific alternatives to traditional urban development that can mitigate environmental impacts
- Understand the role of planning, governance and measurements in the development of sustainable cities
- Describe the relationships between competing environmental interests in sustainable urban development practice

Grading (See Assignments on Blackboard course for more details)

- Briefing Note – 20%
- Virtual Field Trip – 25%
- Threaded Discussion – 25%
- Final Paper - 30%

Grade Policy
Grades are assigned on a 4-point scale, as follows:

4.0 = A, 3.7 = A-, 3.3 = B+, 3.0 = B, 2.7 = B-, 2.0 = C, 0 = F

No Late Assignments will be accepted.
No Required Texts: All readings will be available via eReserve or web link on the course site.

Course Policies

Class "Attendance:"
The online class format is very demanding. Since there is no classroom to attend every week at an allotted time, the success of the course and of your learning depends on the frequency and quality of student participation through the various communication tools available to us in the virtual classroom. The most important tool we will use is the Threaded Discussion. You are required to logon to the course at least 3 times each week. You will also be required to post regularly onto the Threaded Discussion. Each unit will outline the specific number and type of postings required for that unit. In most cases, it will be at least 3 postings. Keep in mind that the quantity of postings is just the beginning. You will also be evaluated on the substance of your posting. A simple "I agree," or "That is a good point," is not sufficient. You should think about making a meaningful contribution to the ongoing dialogue. As you get ready to post or respond, ask yourself, "What value am I adding to this discussion?" Keep in mind, also, that a long post does not necessarily indicate more substance.

Contacting the Instructor:
It is best to try to answer questions online in the group format. In most cases, many students have similar questions, so the group format is helpful to everyone. I will be logging onto the course 3 times a week, so there may be a lag time between when you post and when I respond. In cases when you need to contact me privately, feel free to send an email via Blackboard.

Netiquette:
1. Check the discussion frequently and post responses appropriately.
2. In each of your posts, focus on one subject. Use additional posts if necessary. Use the subject titles appropriately.
3. Since your classmates can't see your face, think carefully about how your words might be read. Sometimes subtle humor in a post reads in unintended ways. Be careful and thoughtful before you post.
4. If you are posting an exceptionally long response, please warn the participants at the beginning of the post. It is better if you can think through your ideas and keep them cogent and to the point.

There is 24/7 technical help available to all AAP students.
Tentative Schedule

Unit 1: January 23 – January 29
The Paris Agreement

Unit 2: January 30 – February 5
Cities and Climate Change
- Sheridan Bartlett, and David Satterthwaite, Chapter 1 “Urbanization, Development and SDG,” in *Cities on a Finite Planet: Towards transformative responses to climate change,* Taylor and Francis, 2016

Unit 3: February 6 – February 12
Measuring Success: Indicators and GHG Inventories
Unit 4: February 13 – February 19
Greening and Urban Ecology


- Choose one of the following from Puay Yok Tan and Chi Yung Jim, eds, *Greening Cities: Forms and Functions* Springer, 2017.
  - Urban Greening and Microclimate Modification
  - Urban Greening and Its Role in Fostering Human Well-Being
  - Urban Community Gardens as Multimodal Social Spaces
  - Urban Green and Biodiversity
  - Urban Nature and Urban Ecosystem Services


Unit 5: February 20 – February 26
Transportation and Land Use


Briefing Note Due: February 27

Unit 6: February 27 – March 5
Green Buildings Cities and Energy


Unit 7: March 6 – March 12

Energy Policies in Cities


Unit 8: March 13 to March 17; March 25 – 26
Urban Adaptation
• Magali Dreyfus, “Adaptation to Climate Change in Cities,” in Walter Leal, Filho, ed. Handbook of Climate Change Adaptation, Springer 2015


Unit 9: March 27 – April 2
Urban Adaptation – Case Studies


**Unit 10: April 3 – April 9**

**Virtual Field Trips**

• VFT Due – April 7

**Unit 11: April 10 – April 16**

**Urban Agriculture**


• Peter Ladner, 2011. *The Urban Food Revolution*, New Society Publishers, Choose one of Chapters 4 – 17

**Unit 12: April 17 – April 30 (TWO WEEKS)**

**Urban Water Systems**

• Åse Johannessen and Christine Wamsler, “What does resilience mean for urban water services?” *Ecology and Society* 22(1):1


**Unit 14: May 1 - 7**

**Final Papers**

• 2 - page summary Due May 4
• Final Paper Due May 7
Assignments

- Please see Assignments on the Blackboard site for more details, grading criteria and examples.
- No extra credit given in this course.
- No late assignments accepted.

Briefing Note – Due February 27
In this assignment, students will prepare a Briefing Note (~1250 words) that presents to decision-makers (e.g. city council members, mayors, etc) the case for pledging to uphold the Paris Accord.

Choose a particular city or town that has not made the pledge. Write the paper as a memo to the decision-makers. You must use at least 2 sources from the class. You can use sources from other cities to help your argument.

Virtual Field Trip Report - Due April 7
The goal of this assignment is for you to explore a location in urban areas that either contribute to sustainability of the city or diminish from the city’s sustainability. The Assignment on the Blackboard site has a list of criteria for site and guiding questions for you to use for your exploration of your chosen sites. You will present your guided tour for the rest of us as a voice over ppt, or an audio recording.

Research Paper – 2 Page summary due May 4; Full paper due May 7
The goal of the paper is to construct a critical assessment of a particular urban sustainability idea, case, theme, issue or concept of interest to you. Examples include urban agriculture, renewable energy in cities, sustainable cities and health, climate change, and urban metabolism. The paper must be a critical argument, not just a summary of the topic. The thesis/argument must be clearly stated from the beginning, along with how the argument relates to the course themes. The body of the paper should lay out the evidence to support your thesis. You should also provide recommendations or alternative viewpoints and state the extent to which your paper contributes to a better understanding of urban sustainability. The paper will be marked according to clarity, succinctness, organization and accuracy. You are expected to cite the data sources you used, including contact names if applicable. You are expected to cite as references at least 10 scholarly research sources (i.e. journal articles and books- you can include references from the course readings), in addition to non-scholarly sources (e.g. government or private sector reports, interviews, newspapers, magazines, the internet, etc.). You should aim for 4000 – 4500 words (plus tables, figures, references, etc.).