Course Introduction: PLAN 625 is part of the Asia-Pacific Initiative (API), which coordinates through video-conference with universities throughout the Asia-Pacific region. This course will explore the issue of environmental sustainability in the Asia-Pacific region from a holistic perspective using Climate Change as a cross-cutting theme. Lectures are designed to provide a background in climate science, negotiation and implementation of the Kyoto Protocol, environmental effects of climate change and policy solutions including coastal zone management, sustainable energy, forest management and food security. Additional topics include the role of land-use planning, sustainable cities, environmental equity and policy coordination. This course combines a series of lectures over video-conference by academics and practitioners who have accumulated knowledge on the environmental issues on various sites in the Asia-Pacific and a series of presentations on chosen topics by the students.

The international community is facing rising oil prices, a global food crisis and unprecedented climate changes. The implications for the Asia Pacific region are immense and daunting. This region is home to 65% of the world's population and has two of the largest oceans on Earth. As major climate disasters impact across the region, we all understand that environmental issues, such as global warming, know no national border.

While the economic profile of the region has been changing rapidly, stimulated by the global movement of goods and services, it is also vulnerable to increasing freight costs as oil prices surge.

As we shift to find replacement for oil through biofuels, there has been an increase
in agricultural land used for this purpose. At the same time, in parts of Asia, we have witnessed shortages of key commodities such as rice and associated social unrest.

These problems are evidence of complex inter-linkages in the modern world whereby the vibrant national economies for some can work to undermine the bases for a sustainable life for others. This raises a number of important questions: 1) How can policy coordination be sustained among the countries when the beneficiaries of economic development may not coincide with those who bear the burden for that development? 2) How can environmental issues in one country be properly recognized by others in distant areas? 3) How can environmental issues as perceived at local level be communicated effectively and efficiently to the policy-makers?

The Asia-Pacific region, with an immense diversity in cultural, geographic, economic, political, and historical make-ups, offers an excellent site to explore these questions. On a per capita basis, the emissions of greenhouse gases in most countries in this region have historically been lower than in other industrialized parts of the world, although China recently overtook the United States as the world's biggest emitter of CO2. Climate change, its underlying causes, mitigation and adaptation, therefore is a matter of great importance for the region.

At the same time, it is predicted that world energy demand will expand by more than 50% by 2030. Two-thirds of the increase will be from developing countries, led by China and India. These trends amplify the magnitude of global climate change but also raise fundamental questions regarding the issue of energy security and sustainability in the region. Finally, as the global population continues to grow, we have more mouths to feed. This is placing increased stress on an already stressed global agricultural system, which without effective measures, could collapse.

Collaborating Institutions: Asian Institute of Technology (Bangkok, Thailand), Keio University (Tokyo, Japan), Waseda University (Tokyo, Japan), University of the Ryukyus (Ryukus), United Nations University (Tokyo, Japan), University of Hawai‘i, National University of Samoa, and TERI University (New Delhi, India).

Student Learning Objectives: The objective of this course is to provide an introduction to issues of environmental planning through the lens of climate change. Specific objectives include building competency of climate change science and greenhouse gas reduction solutions; impacts of climate change, energy, and food security as well as planning responses; and build a comfort-level with video-conferencing and on-line resources as an educational and collaborative medium.
Course Requirements and Grading Policy: This is a seminar course and requires significant class participation and preparation. Lecture readings will be provided via the online system Laulima (coordinated with API lectures and supplemented with additional readings) and students are expected to prepare by completing readings prior to assigned lectures. There will be several class assignments, including participating in an online discussion forum, throughout the semester that will aid students to better understand lectures and connect with the online course community. Other assignments include an interview with a subject matter expert, a term paper and final class presentation. Through a voting process, a selected presentation will be presented to the API community.

Grading

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<td>Class Participation</td>
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<td>Online Participation</td>
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<td>Ask An Expert Interview</td>
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<td>Term Paper</td>
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Term Paper: The term paper will be a “planning document” (widely interpreted) for either climate change mitigation (i.e. greenhouse gas emissions reduction) or adaptation (i.e. dealing with the effects of accelerated climate change), drawing upon existing efforts and institutions in Hawaii or selected region. The paper should explore 1) trends, 2) successes & goals, 3) changes in policy and institutional developments, 4) gaps, and 5) barriers. The paper should focus on appropriate solutions and implementable mechanisms to achieve goals. The paper should review relevant government studies and planning documents that address climate change mitigation/adaptation (relevant to your topic) as well as academic literature. In sum, the paper should include a pertinent literature review, background on the planning environment, process, assessment of planning/policy possibilities and outcomes, recommendations and conclusions, and bibliography.

The required length is between 15-25 pages double-spaced (excluding graphs & references, i.e. text only). This paper is meant to give students both the opportunity to explore climate change from an actions and solution-oriented framework as well as advance analytical and writing skills. For questions on proper citation, please refer to The Elements of Style by William Strunk and E.B. White.

A topic proposal (1 page) will be due on October 27th. The final paper will be due in class on December 8th and will be returned with grades and comments on the 15th.
Revised papers are due in class on January 19th, with the opportunity to raise grades by a full step (ex: B to A). Please submit topic proposal and comments back with final paper and any rewrite.

**Class Presentation:**

The class presentation will be a (roughly, TBD) 15-minute presentation on your term paper topic. Get creative! There will be a “voting” process in which the selected presentation will be given to the larger API community in the January sessions. The selected presenter will receive considerable extra credit!

*Presentations will be given on December 1, 8, 15 as well as an additional Presentation Session in late November/December*

**Assignments:**

- **Carbon Footprint** – calculate your carbon footprint and share it with the API community! Does the calculation well-reflect your lifestyle? Any surprises?
  

- **“Ask an Expert”** – Interview a local expert on climate change mitigation/adaptation (renewable energy, ecosystem services & climate change…) and share your conversation with the API community. Hint: you may want to use this as research for your term paper! Details to come…

- **No Impact Week (“Know Your” Impact Week)** – Track (and minimize) your environmental impact for a week. What’s low hanging fruit? What behaviors are hardest to change? Which can we keep up? Check out [http://noimpactproject.org/](http://noimpactproject.org/)
Seminar Schedule (Subject to Change by API Coordinators):

TBA