6. JHU academic programs in energy, climate, air, sustainability

Panel: Megan Latshaw, Rebecca Kelly, Alexios Monopolis, Johannes Urpelainen, Jessica Bast, Peter Winch

Primary Air Care: Setting the agenda
Global action to build sustainable energy systems and reduce emissions of greenhouse gases and hazardous air pollutants
Friday, April 19, 2019 – Olin Hall, Homewood Campus, Johns Hopkins University
This session

1. Overview of academic programs from 10,000 feet
   – Peter Winch

2. Reflections on the 3 Es: EHE, ERE and EPS
   – Megan Latshaw, EHE
   – Johannes Urpelainen, ERE
   – Rebecca Kelly and Alexios Monopolis, EPS

3. Engagement with students – Office of Sustainability
   – Jessica Bast
Overview of the academic programs from 10,000 feet

Peter Winch
JHU academic programs on energy, climate, air, sustainability

- Major focus in 4 Schools: SAIS, KSAS, WSE, JHSPH
- Considerable interest in other Schools
- Huge variety of course offerings. We have breadth and depth in the courses we offer.
- Few connections or coordination between the degree programs
  - Students are not aware of courses offered by other schools
<table>
<thead>
<tr>
<th>School and Department</th>
<th>Degree</th>
<th>Major or program title</th>
</tr>
</thead>
<tbody>
<tr>
<td>WSE – Environmental Health &amp; Engineering</td>
<td>B. Eng.</td>
<td>Engr for Sustainable Development; Env. Engr</td>
</tr>
<tr>
<td>WSE – Environmental Health &amp; Engineering</td>
<td>M. Eng</td>
<td>Env. Engr; Env. Planning and Management</td>
</tr>
<tr>
<td>WSE – Environmental Health &amp; Engineering</td>
<td>PhD</td>
<td>Environmental Engineering</td>
</tr>
<tr>
<td>SPH – Environmental Health &amp; Engineering</td>
<td>MHS &amp; MSPH</td>
<td>Environmental Health</td>
</tr>
<tr>
<td>SPH – Environmental Health &amp; Engineering</td>
<td>PhD &amp; DrPH</td>
<td>Environmental Health</td>
</tr>
<tr>
<td>SPH – MPH Program, Environmental Health and Engineering &amp; International Health</td>
<td>MPH</td>
<td>MPH concentration in Global Environmental Sustainability and Health</td>
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<tr>
<td>SPH – MPH Program, Ctr for a Livable Future</td>
<td>MPH</td>
<td>MPH concentration in Food Systems &amp; Public Health</td>
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<tr>
<td>KSAS – Earth and Planetary Sciences</td>
<td>BA, PhD</td>
<td>Earth and Planetary Sciences</td>
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<tr>
<td>KSAS – Earth and Planetary Sciences</td>
<td>BA, BS</td>
<td>Global Environmental Change and Sustainability</td>
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<tr>
<td>KSAS – Earth and Planetary Sciences</td>
<td>BS, BA</td>
<td>Environmental Science and Studies</td>
</tr>
<tr>
<td>KSAS – Advanced Academic Programs</td>
<td>MS</td>
<td>Energy Policy and Climate, Env. Sci. and Policy</td>
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<tr>
<td>KSAS – Advanced Academic Programs</td>
<td>Certificate</td>
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<tr>
<td>SAIS – Energy, Resources &amp; Environment</td>
<td>MA</td>
<td>Energy, Resources &amp; Environment</td>
</tr>
</tbody>
</table>
Courses on energy production, energy systems and energy policy

- SPH – Energy, Environment and Public Health
- AAP energy courses can be found [here](#)
  - 14+ energy related courses, most of which are policy based
- SAIS energy courses can be found [here](#)
  - 12+ energy courses, including courses focused on renewables
- EPS energy courses can be found [here](#)
  - 3+ courses that focus on energy topics
Courses on climate change and policy

- **Advanced Academic Programs / AAP**
  - Science of Climate Change and its Impact
  - Climate Change Policy Analysis
  - Cities and Climate Change
  - International Climate Change Policy
  - Adaptation to Climate Change

- **SAIS Energy, Resources and Environment / ERE**
  - Climate Policy
  - Adaptation and Resilience
  - North American Climate Policy in a Warming World
  - Life Cycle Assessment
Courses on climate change and health

- SPH – The Global Env., Climate Change, and Public Health
- SPH – Climate Change: Avoiding Conflict and Improving Public Health
- SPH – A Built Environment for a Healthy and Sustainable Future
- SPH – Climate Change and Public Health
- AAP – Climate Change and Health
Courses with content on air pollution

- WSE - EN.570.420 Air Pollution – Undergraduate
- WSE - EN.570.657 Air Pollution – Graduate
- SPH - 180.602 Environment and Health in Low and Middle Income Countries
- SPH - 183.641 The Health Effects of Indoor and Outdoor Air Pollution
- SPH - 340.680 Environmental and Occupational Epidemiology
- SPH - 305.630 Transportation Policy and Health
Courses on food systems and sustainability

- Berman - 700.630.01 Global Food Ethics
- SPH - 180.622.01 Seafood and Public Health: From Production to Consumption
- SPH - 180.620.81 Food Systems and Public Health
- SPH - 180.655.01 Baltimore Food Systems: a Case Study of Urban Food Environments
- SPH - 182.640.01 Food and Water Borne Diseases
- SPH - 180.606.81 Case Studies in Food Production and Public Health
- SPH - 185.600.81 One Health Tools to Promote and Evaluate Healthy and Sustainable Communities
Reflections on the 3 Es: EHE, ERE and EPS

Megan Latshaw, Johannes Urpelainen, Rebecca Kelly, Alexios Monopolis
Engagement with students: Office of Sustainability
Jessica Bast
OVERVIEW

1. Eco-Reps Program
2. Green Lead Program
3. Green Office Certifications
4. Earth Week 2019
ECO-REPS PROGRAM

Restructured Office of Sustainability internship program:

- Focused on engagement and peer-to-peer education
- Eco-Reps plan 2-3 events each per semester
- Collaborate with one another and with JHU and Baltimore community groups
Sustainability leadership program for first-year students:

- Students learn skills to implement sustainability projects on campus and in Baltimore
- Apply project management principles to design a potential project
- Project ideas:
  - Green Day of Service
  - Sustainability Orientation Presentation
  - Reusable Bag Campaign
GREEN OFFICE CERTIFICATION

Engagement Opportunity for faculty and staff:

- Offices complete the Green Office Certification Checklist to receive points
- Certification based on 1-5 feather system
EARTH WEEK 2019

April 22nd-26th:

• April 22\textsuperscript{nd}: Earth Week Kick-Off | 11am-1pm, Breezeway
• April 22\textsuperscript{nd}: Green Blue Jay Awards | 12:30-2:30pm, Glass Pavilion
• April 24\textsuperscript{th}: Earth Week Fair | 11am-2pm, Levering Courtyard
• April 25\textsuperscript{th}: San Martin Center Green Team Lunch & Learn
7. JHU academic programs: Vision for collaboration in teaching, proposal for a DELTA grant

Panel: Megan Latshaw, Rebecca Kelly, Alexios Monopolis, Johannes Urpelainen, Jessica Bast
Questions for discussion

1. How can we forge closer links between the academic programs in the different Schools on sustainability more broadly, and on the energy-climate-air nexus more specifically? What form should these links take?

2. How can we build stronger bridges between practice, including Office of Sustainability, and the academic programs?

3. Could we propose a course through the DELTA program on air pollution?
DELTA program
https://provost.jhu.edu/about/digital-initiatives/delta/rfp/

- Digital Education and Learning Technology Acceleration (DELTA) program
- $75,000 grants available through Office of the Provost for “initiatives that unleash the potential of technology in teaching”
- Deadline May 28
- Course on using and presenting data to analyze and solve problems related to energy-climate-air?
Announcements
Session 15 Breakout Sessions

- Described in your handout given at Registration
- We need a show of hands for each session, so that we can assign groups to rooms.

**Sessions:**

1. Energy Transitions for Household Air Pollution (HAP)
2. Comprehensive Package of Interventions to Reduce Emissions in LMIC Cities
3. Community Mobilization / Participation to Address Local Sources of Emissions
4. Emissions from Production, Refining & Distribution of Fossil Fuels
Reception this evening 5-7:30pm

- We need a show of hands for this reception, so that we can finalize orders.