Your
Issues and Solutions
AP Seminar Fall 2014
Assignment for Next Week

● What motivates your interest in applied physics?

● What are the leading issues facing our nation today? (no more than three)

● How can science (in general) and applied physics (in particular) contribute solutions to our nation’s leading issues?

Send by email to mauel@columbia.edu before C.O.B. this Friday
What motivates your interests in Applied Physics?

- Curiosity about the unknown, mathematics, and our beautiful universe (10)
- Applying knowledge to improve the world and our environment (4)
- Understanding how things work (3)
- Developing renewable/clean energy systems (2)
- Materials and condensed matter physics (1)
What are the leading issues facing our nation today?

- Global warming, climate change, clean/renewable energy, and over population (17)
- Unemployment, poverty, automation (9)
- Education and parenting (5)
- Social upheaval, racism, civil rights (5)
- Security, preventing war, and national defense (3)
- Political stalemate/gridlock (3)
- Disease (2)
- Advancing and protecting space technology (1)
- Supporting basic research (1)
How can science and applied physics contribute solutions to our nation’s leading issues?

- Develop clean/renewable energy sources and techniques to minimize climate change (14)
- Create new jobs, economic growth, advancing technology, and enhanced productivity of our national workforce (10)
- Improve education and promote social well-being (5)
- Discovery and invention (3)
- Cure disease and improve health care (2)
- Improving national security (2)
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<td>Haris Durrani</td>
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<td>Omar Mahmood</td>
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Seminar Plan

• Ad hoc science policy panels: 4 committees of five

• Present draft charge letter for my review and in-class discussion

• Gather information, discuss, develop group consensus

• Present interim report and in-class discussion

• Present Science Policy Brief to senior elected official/decision maker

• Draft op-ed for NY Times, advocating/explaining your policy recommendation to general public
Next Week

- Contact everyone in your policy committee
- Discuss and listen:

  How can you apply your understanding of applied physics to address a national policy issue?

- Report one or more ideas next week.

(One or two sentences please.)