Class 15b: Global climate change

Greenhouse effect

• Natural warming effect

What is global warming?

- Global = worldwide, not universal
- "Global climate change" more accurate

Climate research

• How do we know about past climates?

Is global warming happening?

Is global warming unusual?

What's causing global warming?

What's causing global warming?

How much more warming?

• 2.5° - 10°F by 2100; 5.4°F at current emission rates

So what for the weather?

• More climatic variability

So what for ecosystems?

• Northward climate shift of 90-350 miles

So what for the oceans?

- Thermal expansion of warmer water
- Melting ice sheets, glaciers

So what for the oceans?

So what for cities?

So what for countries?

Solutions to global warming

• Mitigation: reduce effects

• Adaptation: adapt to effects

Politics of global warming

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