COURSE: CHEMISTRY 321 – Environmental Chemistry

LEC | DAYS | TIME | ROOM | INSTRUCTOR | OFFICE | PHONE | EMAIL | OFFICE HOURS
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L01 | Tu/Th | 15:30-16:45 | SB 103 | Dr. Kimura-Hara | SB 333 | -- | s.kimurahara@ucalgary.ca | Tu/Th 16:45 – 17:30

COURSE WEBSITE or Desire 2 Learn (D2L):
- **REQUIRED TEXTBOOK:** Environmental Chemistry, 5th Ed., by Colin Baird and Michael Cann, W.H. Freeman, NY
- **RECOMMENDED TEXTBOOKS:**

**TOPICS COVERED:**

**Module I. Chemistry Review & Chemical Pollutants**
- Chemistry Review of Fundamentals
- Toxicology
- Contaminants of concern: pesticides, persistent organic pollutants (dioxins, furans, PCBs), endocrine disruptors, toxic metals

**Module II: Water chemistry and water treatment**
- Aqueous chemistry
- Drinking water and wastewater treatment

**Module III: Environmental chemistry in the biosphere**
- Chemistry and pollution of the atmosphere
- Catalytic destruction of stratospheric ozone and Montreal Protocol
- Greenhouse effect and climate forcing

**Module IV: Energy and Soil Chemistry**
- Energy, Radioactivity, Radon
- Soil

This course does not have a laboratory component.