

# Comparing InTeGrate Modules with Textbooks

(Physical Geology, Earth Science, Environmental  
Geology, and Environmental Science)

## InTeGrate Module Content in Textbooks

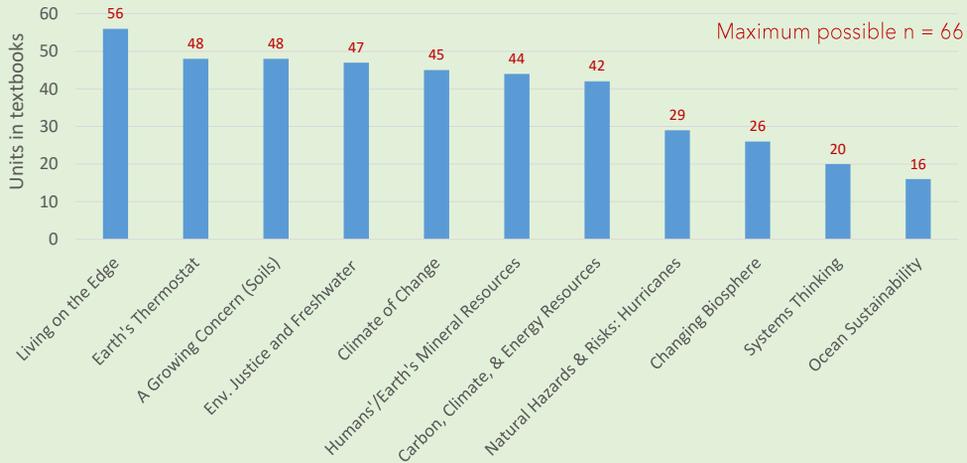
### InTeGrate Modules (6 units per module)

Living on the Edge  
 Humans' Dependence on Earth's Mineral Resources  
 A Growing Concern (Soils)  
 Environmental Justice and Freshwater Resources  
 Ocean Sustainability  
 Earth's Thermostat  
 Natural Hazards/Risks: Hurricanes  
 Climate of Change  
 Carbon, Climate, & Energy Resources  
 Systems Thinking  
 Changing Biosphere

### Geoscience Textbooks

Exploring Geology, Reynolds et al.  
 Essentials of Geology, Marshak  
 Earth: Intro. to Physical Geology, Tarbuck & Lutgens  
 The Good Earth, McConnell & Steer  
 Foundations of Earth Science, Lutgens & Tarbuck  
 Environmental Geology, Montgomery  
 Geology and the Environment, Pipkin  
 Environmental Geology, Reichard  
 The Environment and You, Christensen  
 Principles of Environmental Science, Cunningham  
 Environmental Science, Enger & Smith

## InTeGrate Module Unit Content in Textbooks



## Best Module vs. Textbook Matches

### Physical Geology

Living on the Edge  
 Earth's Mineral Resources  
 A Growing Concern  
 Changing Biosphere  
 Earth's Thermostat

### Environmental Geology

Earth's Mineral Resources  
 Living on the Edge  
 A Growing Concern  
 Climate of Change  
 Env. Justice/Freshwater

### Earth Science

Living on the Edge  
 Env. Justice/Freshwater  
 Earth's Thermostat  
 Carbon, Climate & Energy  
 Natural Hazards: Hurricanes

### Environmental Science

Climate of Change  
 Earth's Thermostat  
 Env. Justice/Freshwater  
 A Growing Concern  
 Carbon, Climate & Energy

Top five modules for each type of textbook.

- Some materials from all modules match with sections from all types of textbooks.

## Proportion of Module vs. Textbook Matches

### Physical Geology

- Average: 31% of chapter sections match with an InTeGrate unit
- Average: 38 InTeGrate units represented.

### Environmental Geology

- Average: 69% of chapter sections match with an InTeGrate unit
- Average: 40 InTeGrate units represented.

Larger physical geology texts contain proportionally less module content

### Earth Science

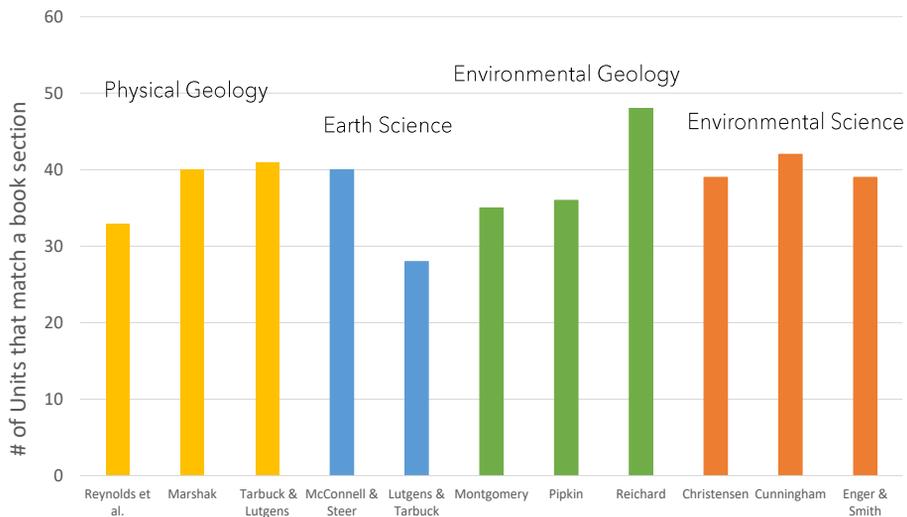
- Average: 49% of chapter sections match with an InTeGrate unit
- Average: 34 InTeGrate units represented.

### Environmental Science

- Average: 44% of chapter sections match with an InTeGrate unit
- Average: 40 InTeGrate units represented.

- More than half module units match with each type of textbook

## # of Module Units vs. Chapter section content



## What's Missing? Modules vs. Textbooks

### Physical Geology

- Earth's structures/interior
- Seafloor, continental margins
- Metamorphism
- Landslides/mass wasting
- Deserts

### Environmental Geology

- Landslides/mass wasting
- Renewable energy
- Waste management
- Environmental law
- Land use planning
- Deserts

### Earth Science

- Astronomy, solar system
- Landslides/mass wasting
- Weather, atmospheric processes

### Environmental Science

- Ecology, population
- Air pollution
- Renewable energy
- Waste management
- Urban environments
- Environmental policy

Some content not represented in InTeGrate modules

- Missing content varies depending on types of textbooks.