



HOMEWOOD-FLOSSMOOR HIGH SCHOOL COURSE SCOPE & SEQUENCE



Semester 1 Department: *Science* Course: *AP Environmental Science* Instructor: *G. Slusinski*

*The Homewood-Flossmoor High School Course Scope and Sequence provides parents and students with a semester-long overview of each class that we offer. **An instructor may alter a course’s scope and sequence as needed.** Students are responsible for keeping track of due dates and other pertinent course information in their H-F Student Planners. Parents, please contact your child’s teacher by telephone or e-mail to clarify any questions you may have about the weekly plans of a particular course.*

| WEEK | INSTRUCTIONAL CONTENT | ACTIVITIES, READINGS, LABS, AND/OR ASSIGNMENTS | MAJOR ASSESSMENTS | OTHER |
|---|---|---|---|---|
| WEEK #1 8/15-8/19 No class 8/15,8/16 | Go over course materials: Description, class procedures and policies Chapter 1: Environmental History | -Read chapter 1 in textbook -Answer Chapter 1 Review Questions #7,9, 10 Critical Thinking # 1,3,6,7, 8 -A Natural History of you | -Review questions | -sign contracts -A Natural History of you |
| WEEK #2 8/22-8/26 | Chapter 1: Environmental History | -Activity: Is our campus wildlife-friendly? -Wildflower ID | Activities | |
| WEEK #3 8/29-9/2 PLC 9/2 | Chapter 1: Environmental Perspectives | -Read Chapter 1 in textbook -Reach Chapter 1 in Noah’s Garden; reading analysis -Activity: Community Structure -Tree ID activity | -Activity ó Tragedy of the Commons -Tree ID -Activity ó Community Structure | |
| WEEK #4 9/5-9/9 No class 9/5 | Chapter 1: Environmental Perspectives | -Read Chapter 1 in textbook -Read Chapter 2 in Noah’s Garden; reading analysis | -Activity ó Quadrat Study | |



HOMEWOOD-FLOSSMOOR HIGH SCHOOL COURSE SCOPE & SEQUENCE



| | | | | |
|---|-------------------------------------|--|---|---|
| WEEK #5 9/12-9/16 | Invasive Species | -Project: Invasive Species -Read Chapter 3 in Noah's Garden; reading analysis -Read 2-4 and 2-5 in textbook -Answer Review Questions Chapter 2: #8,9,10 -CT Q's #1,2,6 | -Exam: Unit 1 -Project: Invasive Species | |
| WEEK #6 9/19-9/23 PLC 9/23 | Population Ecology | -Read chapter 4 in Noah's Garden; reading analysis -Activity: Habitat and Niche | -Activity: Habitat and Niche | |
| WEEK #7 9/26-9/30 | Population Ecology | -Read Chapter 3 in textbook -Answer Review Q's #4,10 -CT Questions: #1,2,3,7,8,9 -Read chapter 5 in Noah's Garden; reading analysis | -Chapter Questions -Case Study: Diversity and Productivity | -Video: Strange Days on Planet Earth Invaders |
| WEEK #8 10/3-10/7 PLC 10/7 | Cycle In Nature | -Read Chapter 6 in Noah's Garden; reading analysis -Activity: Matter Cycling | -Activity: Matter Cycling | Video: Strange Days on Planet Earth ó Predators |
| WEEK #9 10/10-10/14 No class 10/10 | Cycle in Nature Biomes of the World | -Read Chapter 7 in Noah's Garden; reading analysis | | |
| WEEK #10 10/17-10/21 | Biomes of the World | -Read Chapter 8 in Noah's Garden; reading analysis | -Activity: Biomes Project -Case Study ó Making the | |



HOMEWOOD-FLOSSMOOR HIGH SCHOOL COURSE SCOPE & SEQUENCE



| | | | | |
|--|----------------------|--|--|-------------------------------|
| End of 1 st quarter | | -Read Chapter 7 in Textbook -Case Study: Making the Decision -Field trip ó The Morton Arboretum | Decision -Field Trip ó The Morton Arboretum | |
| WEEK #11 10/24-10/28 PLC 10/28 | Weather & Climate | -Activity: Weather Online -Read Chapter 9 in Noah's Garden; reading analysis - Chapter 7 Review Questions: #9 -CT Questions #1,2,5,8,9 | -Activity: Weather online | |
| WEEK #12 10/31-11/4 No class 11/4 | Weather & Climate | -Activity: Solid & Hazardous Wastes (Chapter 21) -Lab: Acid Deposition -Read Chapter 10 in Noah's Garden; reading analysis -Case Study: Methylbromide & the Ozone Layer | -Exam: Chapters 17, 18 & 20 -Lab: Acid Deposition -Case Study: Methylbromide & the Ozone Layer | |
| WEEK #13 11/7-11/11 No class 11/11 | Weather & Climate | -Activity Tropical Weather -Activity Hurricane Tracking -Read Chapter 11 in Noah's Garden; reading analysis | -Activity ó Tropical Weather Exam: Chapter 21 -Activity ó Hurricane Tracking | |
| WEEK #14 11/14-11/18 PLC 11/18 | Ecological Footprint | - Read Chapter 12 in Noah's Garden; reading analysis -Activity ó Ecological Footprint | -Activity ó Ecological Footprint | |
| WEEK #15 11/21-11/25 | | -Activity ó Evolve it -Case Study: Saving the | -Activity ó Evolve It -Case Study: Saving the | -Video: Great Transformations |



HOMEWOOD-FLOSSMOOR HIGH SCHOOL COURSE SCOPE & SEQUENCE



| | | | | |
|---|--------------------------------|--|---|---------------------------------|
| No class 11/24,11/25 | | Galapagos -Mutations worksheet - Read Chapter 13 in Noah's Garden; reading analysis -Read Chapter 4 in the textbook | Galapagos -Mutations Worksheet | |
| WEEK #16 11/18-12/2 12-5-12/9 PLC 12/9 | Evolution | -Activity: Evolution Stations -Review Questions: #2,4,5,9,10 -CT Questions #2,3,5,7,8,9 -Activity: Evolve It | -Activity: Evolution Stations -Activity: Evolve It | |
| WEEK #17 12/12-12/16 | Evolution | -Activity: Evolution Stations -Case Study: The Dangers of Conservation | -Exam: Evolution -Activity: Evolution Stations -Case Study: The Dangers of Conservation | -Video: Darwin's Dangerous Idea |
| WEEK #18 1/4 & 1/6 | Freshwater Ecosystems | -Activity: Freshwater Ecosystems *Read chapter 8 in textbook | -Activity: Freshwater Ecosystems | -Video: Freshwater Ecosystems |
| WEEK #19 Finals 1/9-1/13 No class 1/12,1/13 | Freshwater & Marine Ecosystems | -Marine Ecosystems Project | -Field Work: Water Quality Testing Data Collection -Marine Ecosystems Project | |

Semester 2

| WEEK | INSTRUCTIONAL CONTENT | ACTIVITIES, READINGS, LABS, AND/OR | MAJOR ASSESSMENTS | OTHER |
|------|-----------------------|------------------------------------|-------------------|-------|
|------|-----------------------|------------------------------------|-------------------|-------|



HOMEWOOD-FLOSSMOOR HIGH SCHOOL COURSE SCOPE & SEQUENCE



| | | ASSIGNMENTS | | |
|---------------------------------------|-------------------|---|--|---|
| WEEK #1 1/16-1/20 No class 1/16 | Marine Ecosystems | <ul style="list-style-type: none"> ✓ Case Study: <i>Ultraviolet Radiation in Canadian Lakes</i> ✓ Read chapter 1 in <i>Silent Spring</i> | <ul style="list-style-type: none"> • Project: <i>Marine Ecosystems</i> | |
| WEEK #2 1/23-1/27 PLC 1/27 | Marine Ecosystems | <ul style="list-style-type: none"> ✓ Questions: <i>Chapter 7 Review # 4,5,8,9; C.T. # 6,7,9</i> ✓ Video: <i>Troubled Waters</i> ✓ Case Study: <i>The Exxon Valdez Oil Spill</i> ✓ Read chapter 2 in <i>Silent Spring</i> | <ul style="list-style-type: none"> • Exam: <i>Marine Ecosystems</i> | |
| WEEK #3 1/30-2/3 | Community Ecology | <ul style="list-style-type: none"> ✓ Read chapter 9 in textbook ✓ Video: <i>Predators</i> ✓ Lab: <i>Community Structure</i> ✓ Case Study: <i>The Wildlands Project</i> ✓ Read chapter 3 in <i>Silent Spring</i> | <ul style="list-style-type: none"> • Lab: <i>Community Structure</i> | <ul style="list-style-type: none"> ➤ Self Study: <i>Food Resources (Chapter 13)</i> |
| WEEK #4 2/6-2/10 PLC 2/10 | Community Ecology | <ul style="list-style-type: none"> ✓ Case Study: <i>Unwanted Species in Hawaii</i> ✓ Project: <i>Keystone Species</i> ✓ Lab: <i>Community Structure (Finish)</i> ✓ Read chapter 4 in | <ul style="list-style-type: none"> • Project: <i>Keystone Species</i> | |



HOMEWOOD-FLOSSMOOR HIGH SCHOOL COURSE SCOPE & SEQUENCE



| | | | | |
|---|-------------------|--|---|--|
| WEEK #5 2/13-2/17 | Community Ecology | <i>Silent Spring</i> <ul style="list-style-type: none">✓ <i>Project: Keystone Species</i>✓ <i>Read chapter 5 in Silent Spring</i>✓ <i>Video: The One Degree Factor</i> | <ul style="list-style-type: none">• <i>Exam: Community Ecology</i> | |
| WEEK #6 2/20-2/24 No class 2/20 PLC 2/24 | Water Pollution | <ul style="list-style-type: none">✓ <i>Read Chapter 13 in textbook</i>✓ <i>Chapter 13 Review questions #4,6; C.T. # 1,3,4,6,7</i>✓ <i>Case Study: The Controversy Over Water Fluoridation</i>✓ <i>Read chapter 6 in Silent Spring</i>✓ <i>Field Trip: The Field Museum of Natural History</i>✓ <i>Activity: Water Pollution</i> | <ul style="list-style-type: none">• <i>Field Trip Assignment</i>• <i>Activity: Water Pollution</i> | |
| WEEK #7 2/27-3/2 | Water Pollution | <ul style="list-style-type: none">✓ <i>Read Chapter 14 in textbook</i>✓ <i>Case Study: Beach Nourishment</i>✓ <i>Activity: Water Pollution</i>✓ <i>Read chapter 7 in Silent Spring</i> | <ul style="list-style-type: none">• <i>Exam: Chapter 14 & 19 (Water Pollution)</i>• <i>Activity: Water Pollution</i> | |



HOMEWOOD-FLOSSMOOR HIGH SCHOOL COURSE SCOPE & SEQUENCE

| | | | | |
|---|-----------------------|---|---|---|
| WEEK #8 3/5-3/9 No class 3/5 | Human Populations | <ul style="list-style-type: none">✓ <i>Read Chapter 6 in textbook</i>✓ <i>Read chapter 8 in Silent Spring</i>✓ <i>Questions: Chapter 6 Review # 2,6,10; C.T. # 2,3,5,7</i>✓ <i>Activity: Human Populations</i>✓ <i>Activity: Population Demographics</i> | <ul style="list-style-type: none">• <i>Activity: Human Populations</i>• <i>Activity: Population Demographics</i> | ➤ <i>Self Study: Risk, Toxicology & Human Health (Chapter 11)</i> |
| WEEK #9 3/12-3/16 PLC 3/16 | Human Populations | <ul style="list-style-type: none">✓ <i>Read Chapter 12 in textbook</i>✓ <i>Read chapter 9 in Silent Spring</i>✓ <i>Questions: chapter 12</i>✓ <i>Activity: Power of the Pyramids</i>✓ <i>Activity: Changes in Survival</i> | <ul style="list-style-type: none">• <i>Activity: Power of the Pyramids</i>• <i>Activity: Changes in Survival</i>• <i>Exam: Human Populations (Ch. 9 & 12)</i> | ➤ <i>Self Study: Pesticides & Pest Control (Chapter 20)</i> |
| WEEK #10 3/19-3/23 End of 3 rd quarter | Air and Air Pollution | <ul style="list-style-type: none">✓ <i>Read Chapter 18 in textbook</i>✓ <i>Case Study: The Rise and Fall of DDT</i>✓ <i>Read chapter 10 in Silent Spring</i>✓ <i>Activity: Assessing Environmental Quality</i>✓ <i>Video: Acid rain, pollution & smog</i> | <ul style="list-style-type: none">• <i>Activity: Assessing Environmental Quality</i> | |



HOMEWOOD-FLOSSMOOR HIGH SCHOOL COURSE SCOPE & SEQUENCE



| | | | | |
|--|---|---|--|---|
| <p>WEEK #11 4/2-4/6 No class 4/6</p> | <p>Air and Air Pollution Climate Change & Ozone</p> | <ul style="list-style-type: none"> ✓ Case Study: <i>Are All Risks Equivalent?</i> ✓ Video: <i>Let's Clean Up The Air!</i> ✓ Read chapter 11 in Silent Spring ✓ Read Chapter 19 in textbook ✓ Case Study: <i>Pollution from a Superfund Site</i> | <ul style="list-style-type: none"> • Case Studies | |
| <p>WEEK #12 4/9-4/13 PLC 4/13</p> | <p>Climate Change & Ozone Water Resources</p> | <ul style="list-style-type: none"> ✓ Activity: <i>Solid & Hazardous Wastes (Chapter 21)</i> ✓ Lab: <i>Chemical & Physical Analysis of Water</i> ✓ Read chapter 12 in Silent Spring | <ul style="list-style-type: none"> • Exam • Activity: <i>Solid & Hazardous Wastes (Chapter 21)</i> • Lab: <i>Chemical & Physical Analysis of Water</i> | <p>➤ Self Study: <i>Chapter 23</i></p> |
| <p>WEEK #13 4/16-4/20</p> | <p>Water Resources</p> | <ul style="list-style-type: none"> ✓ Lab: <i>Chemical & Physical Analysis of Water</i> ✓ Questions: <i>Chapter 20: Review # 4,5,7; C.T. #1,3</i> ✓ Read chapter 13 in Silent Spring ✓ Read chapter 20 in textbook ✓ Case Study: <i>Should Toxic Wastes Attract More Toxic Wastes?</i> | <ul style="list-style-type: none"> • Lab: <i>Chemical & Physical Analysis of Water</i> | |



HOMEWOOD-FLOSSMOOR HIGH SCHOOL COURSE SCOPE & SEQUENCE



| | | | | |
|--|-------------------------|---|---|--|
| <p>WEEK #14 4/23-4/27</p> | <p>Geology and Soil</p> | <ul style="list-style-type: none"> ✓ <i>Read Chapter 14 in textbook (Geology)</i> ✓ <i>Lab: We Love Soil!</i> ✓ <i>Read chapter 14 in Silent Spring</i> ✓ <i>Case Study: The Wastefulness of Reuse & Recycling</i> | <ul style="list-style-type: none"> • <i>Exam</i> • <i>Lab: We Love Soil!</i> | <p>➤ <i>Self Study:</i> <i>Chapters 24 & 25</i></p> |
| <p>WEEK #15 4/30-5/4 PLC 5/4</p> | <p>Geology and Soil</p> | <ul style="list-style-type: none"> ✓ <i>Lab: We Love Soil!</i> ✓ <i>Case Study: Recycling Disposable Diapers</i> ✓ <i>Read Chapter 15 in textbook (Geologic resources)</i> ✓ <i>Read chapter 15 in Silent Spring</i> ✓ <i>Questions: Chapter 15: Review # 3,10; C.T. # 2,3,4,6</i> | <ul style="list-style-type: none"> • <i>Lab: We Love Soil!</i> • <i>Exam: Geology & Geologic Resources (Chapters 10 & 15)</i> | |
| <p>WEEK #16 5/7-5/11</p> | <p>Energy</p> | <ul style="list-style-type: none"> ✓ <i>Activity: Energy Types & Uses</i> ✓ <i>Read Chapter 16 in textbook (Energy)</i> ✓ <i>Questions: Chapter 16: Review # 1,4,6,7; C.T. # 1,2,3,7</i> ✓ <i>Read chapter 16 in Silent Spring</i> ✓ <i>Video: Energy Resources, Use, & Conservation</i> | <ul style="list-style-type: none"> • <i>Activity: Energy Types & Uses</i> | <p>➤ <i>Self Study:</i> <i>Chapters 26,27 & 28</i></p> |



HOMEWOOD-FLOSSMOOR HIGH SCHOOL COURSE SCOPE & SEQUENCE



| | | | | |
|--|---|--|---|--|
| | | ✓ <i>Video: Who Killed the Electric Car?</i> | | |
| WEEK #17 5/14-5/18 PLC 5/18 | Environmental Laws & Ethics Endangered Species | <ul style="list-style-type: none"> ✓ <i>Read Chapter 24 in textbook</i> ✓ <i>Case Study: An excess of Deer</i> ✓ <i>Activity: Environmental Laws, Ethics & Policies</i> ✓ <i>Endangered Species Project (Final Exam Part 1)</i> ✓ <i>Read chapter 17 in Silent Spring</i> | <ul style="list-style-type: none"> • <i>Exam: Chapter 16 (Energy)</i> • <i>Activity: Environmental Laws, Ethics & Policies</i> • <i>Endangered Species Project (Final Exam Part 1)</i> | |
| WEEK #18 5/21-5/25 5/24 Seniors last day | Environmental Laws & Ethics Endangered Species | <ul style="list-style-type: none"> ✓ <i>Activity: Environmental Laws, Ethics & Policies</i> ✓ <i>Field Trip: The Brookfield Zoo (Final Exam Part 2)</i> ✓ <i>Case Study: Elephants in an Overcrowded Park</i> ✓ <i>Read Chapter 23 in textbook</i> | <ul style="list-style-type: none"> • <i>Activity: Environmental Laws, Ethics & Policies</i> • <i>Field Trip Assignment (Final Exam Part 2)</i> | |
| WEEK #19 5/28-6/1 No class 5/28 Finals 5/29/5/30/5/31, | | ✓ <i>Water Quality Testing (Juniors)</i> | • <i>Field Work: Water Quality Testing Data Collection</i> | |



HOMEWOOD-FLOSSMOOR HIGH SCHOOL COURSE SCOPE & SEQUENCE



| | | | | |
|--------------------|--|--|--|--|
| 6/1 Marking Day | | | | |
|--------------------|--|--|--|--|