

## Schedule ESC 23 - Historical Geology

| Class | Day | Date                | Topic                                                                                                    | Chapter |
|-------|-----|---------------------|----------------------------------------------------------------------------------------------------------|---------|
| 1     | Tu  | 15-Jan              | Introductions; Course Overview; Tools of Science                                                         |         |
| 2     | Th  | 17-Jan              | A Scientific Origin Story - Nothing, then Something                                                      | 1       |
| 3     | Tu  | 22-Jan              | Deep Time / Geologic Timescale                                                                           |         |
| 4     | Th  | 24-Jan              | Geologic Fundamentals                                                                                    |         |
| 5     | Tu  | 29-Jan              | Hadean Eon - Black Earth: Moon and Basalt Crust                                                          | 2, 3    |
| 6     | Th  | 31-Jan              | Hadean Eon - Blue Earth: Ocean and Atmosphere                                                            | 4       |
|       | Tu  | 5-Feb               | Class Cancelled - SNOW DAY                                                                               |         |
|       | Th  | 7-Feb               | Class Cancelled - SNOW DAY                                                                               |         |
| 7     | Tu  | 12-Feb              | Archean Eon - Gray Earth & Plate Tectonics                                                               | 5       |
| 8     | Th  | 14-Feb              | What is Life? Earliest Life                                                                              | 6       |
| 9     | Tu  | 19-Feb              | Archean and Proterozoic Eons - Red Earth: Early Life; Great Oxygenation Event; Minerals; Supercontinents | 7       |
| 10    | Th  | 21-Feb              | Proterozoic - White Earth: Boring Billion; Snowball-Hothouse Cycles                                      | 8, 9    |
| 11    | Tu  | 26-Feb              | Project 1 Presentation                                                                                   |         |
| 12    | Th  | 28-Feb              | Record of Life: Sedimentary Rocks & Fossils                                                              |         |
| 13    | Tu  | 5-Mar               | Phanerozoic Eon - Green Earth: Cambrian Explosion                                                        | 10      |
| 14    | Th  | 7-Mar               | Paleozoic Era - The Cambrian Explosion                                                                   |         |
| 15    | Tu  | 12-Mar              | Paleozoic Era - Life Evolves                                                                             |         |
| 16    | Th  | 14-Mar              | Evolution                                                                                                |         |
| 17    | Tu  | 19-Mar              | Mass Extinctions                                                                                         |         |
| 18    | Th  | 21-Mar              | Midterm                                                                                                  |         |
| 19    | Tu  | 26-Mar              | Mesozoic Era - Rise of Reptiles                                                                          |         |
| 20    | Th  | 28-Mar              | Mesozoic Earth                                                                                           |         |
| 21    | Tu  | 2-Apr               | Cenozoic Era - Rise of Mammals                                                                           |         |
| 22    | Th  | 4-Apr               | Research Project 2 Workshop                                                                              |         |
| 23    | Tu  | 9-Apr               | Research Project 2 Presentations                                                                         |         |
| 24    | Th  | 11-Apr              | Cenozoic Earth                                                                                           | 11      |
| 25    | Tu  | 16-Apr              | Field Trip - TBD                                                                                         |         |
| 26    | Th  | 18-Apr              | The Anthropocene, Climate Change, Sustainability                                                         |         |
| 27    | Tu  | 23-Apr              | The Future - Mankind and the Planet; submit Project 3                                                    |         |
| 28    | Th  | 25-Apr              | Final Review                                                                                             |         |
|       |     | April 29 -<br>May 4 | Final                                                                                                    |         |