

BIOLOGY 355 – EVOLUTION

A01 (10371) Fall 2016

LECTURER: Geraldine A. Allen

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Lectures: ECS 116
Monday & Thursday, 8:30-9:50 am

LECTURE SCHEDULE

| <u>Date</u> | | <u>Lecture Topic</u> | <u>Chapter in Text</u> |
|----------------|----|---|------------------------|
| <u>Sept 8</u> | 1 | The origins of evolutionary thinking | 1 |
| <u>Sept 12</u> | 2 | History of life and the fossil record | 4,5 |
| <u>Sept 15</u> | 3 | Evolutionary trees: phylogenetic analysis | 2 |
| <u>Sept 19</u> | 4 | The origins of genetic variation | 8,9 |
| <u>Sept 22</u> | 5 | Genetic drift and gene flow | 10 |
| <u>Sept 26</u> | 6 | Natural selection I | 11,12 |
| <u>Sept 29</u> | 7 | Natural selection II | 11,12 |
| <u>Oct 3</u> | 8 | Population genetics exercise (& class discussion) | |
| <u>Oct 6</u> | | MIDTERM EXAM I | |
| <u>Oct 10</u> | | THANKSGIVING | |
| <u>Oct 13</u> | 9 | Quantitative traits and phenotypic evolution | 13 |
| <u>Oct 17</u> | 10 | Evolution of sexual reproduction | 15 |
| <u>Oct 20</u> | 11 | Sex ratios, sexual selection | 15 |
| <u>Oct 24</u> | 12 | Species and hybridization | 17 |
| <u>Oct 27</u> | 13 | Speciation | 18 |
| <u>Oct 31</u> | 14 | Life history evolution | 14 |
| <u>Nov 3</u> | 15 | Evolution of social behaviour | 16 |
| <u>Nov 7</u> | | MIDTERM EXAM II | |
| <u>Nov 10</u> | | READING BREAK | |
| <u>Nov 14</u> | 16 | Coevolution | 19 |
| <u>Nov 17</u> | 17 | Molecular evolution I | 20 |
| <u>Nov 21</u> | 18 | Molecular evolution II | 20 |
| <u>Nov 24</u> | 19 | Evolution and development I | 21 |
| <u>Nov 28</u> | 20 | Evolution and development II | 21 |
| <u>Dec 1</u> | 21 | Macroevolution | 3,6,22 |

Text: Futuyma, Douglas J. 2013. Evolution, 3rd ed. Sinauer Associates, Inc.

Course website: on CourseSpaces

GRADING FOR THIS COURSE:

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|--|-----|
| Midterm exam I (October 6) | 20% |
| Written assignment – critique (due October 24) | 20% |
| Midterm exam II (November 7) | 20% |
| Final exam (December exam period) | 40% |

Assignment of letter grades (see UVic Undergraduate Calendar):

A+ (90.0-100.0%), A (85.0-89.9%), A- (80.0-84.9%), B+ (77.0-79.9%), B (73.0-76.9%), B- (70.0-72.9%), C+ (65.0-69.9%), C (60.0-64.9%), D (50.0-59.9%), F (0-49.9%), N (failure to complete one or more of the following: research report, mid-term exam, final exam).

Preventing plagiarism and cheating – Please read UVic’s policy on academic integrity:

<http://web.uvic.ca/calendar2013/FACS/UnIn/UARe/PoAcI.html>

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