

Advanced Ecology Exam 1

Instructions:

- A) This exam is based on the readings and discussions. You need not invoke other resources.
- B) WORK ALONE on this exam. Do not consult anyone else or share your answers with anyone.
- C) CITE resources you use, in whatever format you choose.
- D) Take time to EDIT your answer! Clearly-articulated, logical statements with evidence-based justifications will be graded most highly; unclear arguments lacking clear logic and/or evidence will be graded lower.
- E) No page limit, font, spacing, etc. rules exist, but remember: Watson & Crick (1953) was only two pages.
- F) Email your exam answers as an attached pdf to david.jenkins@ucf.edu by **Oct 8 before class**— you will receive confirmation of receipt.

Questions

1. Explain how you define the concepts listed below and how they are related.
 - a) regime shift
 - b) critical transition
 - c) alternative stable states
 - d) thresholds
 - e) tipping points
2. Evaluate the merits and/or failings of the body of concepts (in 1 above) as fundamental ecological theory
3. Evaluate the practical utility offered by these concepts for conservation biology and natural resource management.