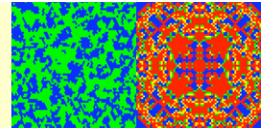


THE EVOLUTION OF COOPERATION



Key Concept Presentation Guidelines

Project objectives:

1. Choose a *key concept* to present to the class:
 - ☐ There are sixteen possible *key concepts* that students will present over the course of the semester. A list of these concepts and when they will be presented is provided on the second page of these *Guidelines*.
 - ☐ Each student can sign up for her *Key Concept Presentation* on the *LMS*; choice is available on a first-come, first-served basis.
2. Perform research on your *key concept* so that you can provide an answer to your assigned question(s):
 - ☐ Define the *key concept* at the core of your assigned question(s). What does this term mean? What is the correct way to use this term in the context of evolutionary biology (or science in general)? What sort of phenomena, processes, and/or things does this concept refer to?
 - ☐ How does this concept relate to how cooperation evolves? What evolutionary processes can be better understood in light of this concept?
 - ☐ How does this concept relate to other ideas and concepts that we have read about, discussed in class, or otherwise engaged in this course?
3. Develop a creative presentation designed to teach your classmates about your *key concept*:
 - ☐ Your presentation must address the tasks/questions listed above in objective #2.
 - ☐ Your presentation should be designed to help your classmates understand your *key concept* and its relevance to this class. Try to craft a presentation that you would find engaging and informing. How you design your presentation is up to you, including what role you play in the presentation (don't assume that just standing in front of the room talking is the best or only way to make a valuable presentation).
 - ☐ You may use any available media and/or props to make your presentation. Our classroom features a computer and projector, so any digital presentation media can be used. You may also bring posters and/or other "analog" props to aid your presentation.
4. Present your *key concept* to the class:
 - ☐ Your presentation should be designed to be ten (10) to twenty (20) minutes in duration.
 - ☐ You must present on the day assigned to your *key concept*: each concept is designed to fit into the curriculum at a particular moment, and early and/or late presentations will not be accommodated. Please make sure you can present on the day that you signed up for.
 - ☐ You must credit all sources that informed your presentation (see **Annotated Bibliography** below).

Feedback Forum:

On the *LMS* you will find a Forum designated for *Key Concept Presentation* discussion. If you have ideas about how you will make your presentation or questions/problems that you are trying to address, you can make a post on this Forum. Other students have the option to respond to your post with helpful suggestions. Participation in this Forum is voluntary; those students who do provide aid to their classmates will be rewarded with extra credit for *Participation*.

Key concepts and when they will be presented:

Key Concept	When Presented?
What are social dilemmas ? What are some examples of these dilemmas?	Week 04
What are zero-sum games ? What are some examples of zero-sum scenarios?	Week 04
How is kin selection different from other forms of selection?	Week 05
Why and how do most organisms avoid inbreeding ?	Week 05
Why and how does coevolution occur?	Week 08
What makes byproduct mutualisms different from other forms of mutualism?	Week 08
How is the haplodiploid system of reproduction unique?	Week 09
How should we define eusociality ? What species meet this criteria?	Week 09

Key Concept	When Presented?
What criticisms have been leveled against group selection theory?	Week 10
What evidence is there for group or multi-level selection ?	Week 10
What are some ways that current-day societies punish cheating ?	Week 11
What are some ways that reputation is formed and valued in current-day societies?	Week 11
How is cultural evolution different from biological evolution?	Week 12
What are some cultural adaptations that foster and/or maintain cooperation in current-day societies?	Week 12
In what ways is international fishing a social dilemma and how can this dilemma be solved?	Week 13
How did North America reduce the "tragedy of the commons" caused by acid rain ?	Week 13

Annotated Bibliography:

The only written material that you are required to submit with your presentation is an *Annotated Bibliography*, which will be submitted on the LMS prior to your presentation. This bibliography should contain a complete listing of each and every source you used to inform your presentation (remember that having many sources is a sign that you did thorough research). You should also use the bibliography to list the source of any images or other media that you have pulled from the web in order to make your presentation. Below are some basic guidelines for composing your bibliography:

1. Please use a standard bibliographical format and use it consistently.
2. Please be careful about web citations. Much of what is published on the web is unreliable. It is up to you to assess the validity of all your sources.
3. Internet references should be cited with a page title, a full URL address, and the date accessed. *For example:* Jensen, Christopher X J., "The Quest for the Perfect Hive", <http://www.christopherxjensen.com/2010/06/07/the-quest-for-the-perfect-hive/>, Accessed 9-Sept-2012.

The bibliography must also be **annotated**: this means that for each source you should provide a brief statement explaining what information this source provided and/or how it contributed to the preparation of your presentation.

How you will be graded:

Your grade will be primarily based on how well you meet the objectives stated above. In addition, your instructor will assess how well you expressed an understanding of evolutionary concepts. All written work is expected to use proper spelling and grammar, except where obvious and necessary creative liberties are being taken with the language. Please see the LMS for sample grading sheets that provide you with a precise idea of how you will be graded.