# Syllabus: Biology 220, "Evolutionary Physiology"

**Spring 2012, Monday & Wednesday 8:30-10:00**

**University of California, Riverside**

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**Grading:**
- 15%: class participation
- 15%: paper presentation
- 35%: project presentation
- 35%: project paper

## Day | Date | Topic | Readings | Presenters
---|---|---|---|---
M | 2 April | Organizational meeting; accomplishments of physiological ecology as of 1987 | Bennett 1987 | none, read on your own
W | 4 April | Historical perspectives | Bartholomew 1987; Feder 1987 | Emily Kane & Gerald Claghorn
M | 9 April | Overview of approaches | Garland & Carter 1994; Feder et al. 2000 | Jeff Olberding and Taylor Hundman
M | 16 April | Phylogenetic comparative approaches II | Garland 1992; Garland et al. 1993 | Garland
W | 18 April | Phylogenetic comparative approaches III | Garland & Ives 2000 | Garland
M | 23 April | no meeting, plan papers/projects | | |
W | 25 April | no meeting, plan papers/projects | | |
M | 30 April | Phylogenetic comparative approaches IV | Blomberg & Garland 2002 | Garland
W | 2 May | Student paper/project proposals | | all students
M | 7 May | Methods in organismal energetics | Lighton 2008 book | Chappell
W | 9 May | Selection experiments & experimental evolution | Rose & Garland 2009; Garland 2003 | Garland
M | 14 May | Terrestrial locomotor biomechanics | Dickinson et al. 2000; Biewener, 1990 | Higham
W | 16 May | Aquatic locomotor biomechanics | Webb 1982; Lauder & Madden 2007 | Higham
M | 21 May | Evolutionary neuromuscular biology | Smith 1994; Wainwright et al. 1989 | Higham
W | 23 May | Evolutionary endocrinology & neurobiology | T.B.D. | Kathleen Foster and Juan Perea-Rodriguez
M | 28 May | Holiday | | |
W | 30 May | Evolutionary thermal physiology; other environmental factors | Angilletta et al. 2002; Huey & Stevenson, 1979; T.B.D. | Nicholas Shirkey and Jarren Kay
M | 4 June | Student paper/project presentations | 20 min each, like SICB talk | Students
W | 6 June | Student paper/project presentations | 20 min each, like SICB talk | Students
M | 11 June | Student paper/project presentations | If needed, probably will not be | Students
Th | 14 June | Review or project paper due by 4 P.M. | Word file to both instructors and one hard copy, double spaced, to TG. | |