

Syllabus: Biology 220, "Evolutionary Physiology"
Spring 2012, Monday & Wednesday 8:30-10:00

University of California, Riverside
3365 Spieth Hall (the Moore Room)

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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
W	11 April	Phylogenetic comparative approaches I	Felsenstein 1985; Garland & Adolph 1994	Garland
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.	