

EVOLUTIONARY PHYSIOLOGY

Fred Janzen (4-4230)

Week 1 Organizational meeting

Week 2 NO CLASS

Week 3 Adaptationism and optimality

Gould and Lewontin. 1979. Proc. R. Soc. Lond. B 205:581-598.

Week 4 Directions and historical overview

Bartholomew. 1987. New Directions in Ecol. Physiol. pp. 9-37.

Bennett. 1987. New Directions in Ecol. Physiol. pp. 1-8.

Week 5 More directions and historical overview

Feder. 1987. New Directions in Ecol. Physiol. pp. 38-75.

Week 6 A new field: evolutionary physiology

Garland and Carter. 1994. Annu. Rev. Physiol. 56:579-621.

Week 7 Morphology, performance, and fitness

Arnold. 1983. Am. Zool. 23:347-361.

Week 8 Natural selection on manipulated traits

Sinervo et al. 1992. Science 258:1927-1930.

Sinervo. 1993. BioScience 43:210-218.

Week 9 Natural selection on physiological traits

Janzen. 1995. Evolution 49:in press.

Jayne and Bennett. 1990. Evolution 44:1204-1229.

Week 10 Artificial selection on physiological traits

Bennett and Lenski. 1993. *Evolution* 47:1-12.

Huey et al. 1991. *Evolution* 45:751-756.

Week 11 Quantitative genetics

Arnold. 1987. *New Directions in Ecol. Physiol.* pp. 189-215.

Arnold. 1994. *Quant. Gen. Stud. of the Evol. of Behav.* pp. 17-48.

Week 12 Population genetics

Powers. 1987. *New Directions in Ecol. Physiol.* pp. 102-134.

Powers et al. 1979. *Nature* 277:240-241.

Week 13 Variation among populations

Bennett. 1987. *New Directions in Ecol. Physiol.* pp. 147-165.

Garland and Adolph. 1991. *Annu. Rev. Ecol. Syst.* 22:193-228.

Week 14 Phylogenetic methods

Huey. 1987. *New Directions in Ecol. Physiol.* pp. 76-101.

Week 15 More phylogenetic methods

Garland and Adolph. 1994. *Physiol. Zool.* 67:797-828.

Leroi et al. 1994. *Am. Nat.* 143:381-402.