



Code	Subject Title	Cr. Hrs	Semester
ZOOL-309	Evolution Lab	1	V
Year	Discipline		
3	Zoology		

Calculation of gene and genotype frequency for generations. To calculate deviation of genotype from Hardy Weinberg equilibrium. Simulate to check the effects of natural selection and genetic drift in changing environments. Simulation of assess the role population size in evolution. Discussion on the evidences of evolution, role of biodiversity in evolution. Simulation experiment to show the process of coevolution.

### Textbook

1. Ridley, M. 2004. Evolution, 3<sup>rd</sup> edition. Blackwell Science.

### Additional Readings

1. Bell, G. 1997. Selection: the mechanism of evolution. Chapman & Hall, NY.
2. Dawkins, R. 1986. The blind watchmaker. Longman Scientific and Technical. Essex, England.
3. Dawkins, R. 1978. The selfish gene. Oxford University Press, NY.
4. Freeman, S. and Herron, J. C. 2004. Evolutionary analysis, 3<sup>rd</sup> ed. Pearson Prentice Hall.
5. Futuyma, D. J. 1997. Evolutionary Biology, 3<sup>rd</sup> ed. Sinauer Associates, Inc. Sunderland, Massachusetts.
6. Gould, S. J. 1977. Ever since Darwin. W. W. Norton and Company, NY.
7. Ridley, M. 2000. Genome. New York: Perennial. Great reading.
8. Stearns, S. C. and Hoekstra, R. F. 2000. Evolution, an introduction. Oxford University Press.
9. Strickberger, (3<sup>rd</sup> or latest edition) Evolution. Jones and Barrett Publishers.
10. Freeman Dyson, 1999. Origin of life, Cambridge University Press.