

“Türleşme ve Yaşam Ağı” Konulu Lisansüstü Kısa Ders

Georgia Üniversitesi Genetik Bölümü Öğretim Üyesi [Prof. Michael L. Arnold](#), **4-8 Haziran 2012** Tarihlerinde Üniversitemizde “Türleşme ve Yaşam Ağı” konusunda Yüksek Lisans ve Doktora öğrencilerine kısa ders açacaktır. Ders içeriği ve kullanılacak materyal aşağıda belirtilmiştir ve bu materyal Yrd. Doç. Dr. Muhammet Şakiroğlu tarafından katılımcılara önceden dağıtılacaktır.

Dersi almak isteyen lisansüstü öğrenciler ile derse katılmak isteyen öğretim üyelerinin [Yrd. Doç. Dr. Muhammet Şakiroğlu](#) ile irtibata geçmeleri gerekmektedir.

Syllabus

SPECIATION AND THE WEB OF LIFE – Kafkas University, Kars, TURKEY

The goals of this course are to 1) (re-)introduce the students to some of the canonical literature concerning the process of speciation and 2) discuss the new paradigm represented by the web-of-life metaphor. The second goal will be accomplished by using Mike’s book (Arnold, M.L. 2006. *Evolution Through Genetic Exchange*. Oxford University Press) as a distillation of many studies of natural hybridization, lateral exchange and viral recombination.

By the end of the course, I hope that the students will have an increased awareness of both where current studies in speciation/hybridization fit into the history of such investigations and the ongoing shift in the paradigm used to describe the process of evolutionary diversification.



Day 1

- 1) Introduction to course
- 2) Chapter XIV from Origin of Species - Darwin, 1859. [7939p]
- 3) Mayr, E. 1942. Systematics and the Origin of Species. Ch.VII. Columbia Univ. Press. New York. [7940p]
- 4) Cracraft, J. 1989. In D. Otte and J.A. Endler, eds. Speciation and its consequences. ppg. 28-59. Sinauer Associates, Inc. Sunderland, Mass. [7941p]
- 5) Templeton, A.R. 1989. In D. Otte and J.A. Endler, eds. Speciation and its consequences. ppg. 3-27. Sinauer Associates, Inc. Sunderland, Mass. [7943p]

Day 2

- 1) Via, S. 2001. TREE 16:381-390. [5915p]
- 2) Soltis, D.E. et al. 2003. New Phytologist 161:173-191. [5372p]
- 3) Schluter, D. 2001. TREE 16:372-380. [5916p]
- 4) Gould, S.J. and N. Eldridge. 1977. Paleobiology 3:115-151. [5917p]
- 5) Meyer, A., T.D. Kocher, P. Basasibwaki and A.C. Wilson. 1990. Nature 347:550-553. [1387p]
- 6) Arnold et al. 2012. **Hybridization and Rapid Evolution**

Day 3

- 1) Arnold, M.L. 2006. *Evolution Through Genetic Exchange*. Oxford University Press. Chapters 1-3

Day 4

- 1) Arnold, M.L. 2006. *Evolution Through Genetic Exchange*. Oxford University Press. Chapters 4-6

Day 5

- 1) Arnold, M.L. 2006. *Evolution Through Genetic Exchange*. Oxford University Press. Chapters 7-9

The success of this course depends upon student interactions because the format will be discussion, rather than lecture. There is quite a lot of required reading for this course, so I would suggest STRONGLY that the students begin the assignments before the week of classes. This will facilitate the discussion and add greatly to the value of the course material for the students.

