

## Unit 4 – Evolution (Revised 2013)

### (1) General Introduction – Evolution and Adaptation

[http://www.wadsworthmedia.com/biology/0495119814\\_starr/big\\_picture/ch16\\_bp.swf](http://www.wadsworthmedia.com/biology/0495119814_starr/big_picture/ch16_bp.swf)

### (2) Peppered Moth & Other Examples of Natural Selection

<http://www.techapps.net/interactives/pepperMoths.swf>

[http://media.hhmi.org/fittest/natural\\_selection.html](http://media.hhmi.org/fittest/natural_selection.html)

<http://www.sumanasinc.com/webcontent/animations/content/evolution/evolution.html>

### (3) Artificial Selection

<http://www.pbs.org/wgbh/nova/dogs/world-flash.html>

<http://www.pbs.org/wgbh/harvest/engineer/select.html>

### (4) Inheritance of Acquired Characteristics

<http://www.tutorvista.com/content/biology/biology-iii/organic-evolution/lamarckian-and-darwinian.php>

### (5) Darwin – Song

<http://www.youtube.com/watch?v=X1Vh7jCUKSo&feature=related>

### (6) Vestigial Structures

[http://www.cengage.com/anthropology/book\\_content/lewis\\_0495129003/basic\\_genetics2006/modules/1a1.swf](http://www.cengage.com/anthropology/book_content/lewis_0495129003/basic_genetics2006/modules/1a1.swf)

### (7) Comparative Embryology

[http://www.pbs.org/wgbh/evolution/library/04/2/quicktime/1\\_042\\_02.html](http://www.pbs.org/wgbh/evolution/library/04/2/quicktime/1_042_02.html)

### (8) Relative Dating

<http://www.sciencelearn.org.nz/Contexts/Dating-the-Past/Sci-Media/Animations-and-Interactives/Relative-rock-layers>

### (9) Radioactive Dating

[http://www.youtube.com/watch?v=phZeE7Att\\_s](http://www.youtube.com/watch?v=phZeE7Att_s)

### (10) Adaptive Radiation

<http://www.pbs.org/wgbh/evolution/darwin/origin/index.html>

<http://www.sepa.duq.edu/finches.html>

<http://life9e.sinauer.com/life9e/pages/23/232001.html>

**(11) Homologous Structures / Analogous Structures**

[http://www.blackwellpublishing.com/ridley/tutorials/The\\_evidence\\_for\\_evolution16.asp](http://www.blackwellpublishing.com/ridley/tutorials/The_evidence_for_evolution16.asp)  
[http://evolution.berkeley.edu/evolibrary/article/similarity\\_ms\\_01](http://evolution.berkeley.edu/evolibrary/article/similarity_ms_01)

**(12) Hardy Weinberg Equilibrium**

<http://www.execulink.com/~ekimmel/hardyweinberg.htm>  
<http://nortonbooks.com/college/biology/animations/ch17a02.htm>  
<http://nortonbooks.com/college/biology/animations/ch17p01.htm>  
<http://www.youtube.com/watch?v=5NdMnlt2keE>  
[http://www.mhhe.com/cgi-bin/netquiz\\_get.pl?qfooter=/usr/web/home/mhhe/biosci/genbio/animation\\_quizzes/animate\\_59fq.htm&afooter=/usr/web/home/mhhe/biosci/genbio/animation\\_quizzes/animate\\_59fa.htm&test=/usr/web/home/mhhe/biosci/genbio/animation\\_quizzes/animate\\_59q.txt&answers=/usr/web/home/mhhe/biosci/genbio/animation\\_quizzes/animate\\_59a.txt](http://www.mhhe.com/cgi-bin/netquiz_get.pl?qfooter=/usr/web/home/mhhe/biosci/genbio/animation_quizzes/animate_59fq.htm&afooter=/usr/web/home/mhhe/biosci/genbio/animation_quizzes/animate_59fa.htm&test=/usr/web/home/mhhe/biosci/genbio/animation_quizzes/animate_59q.txt&answers=/usr/web/home/mhhe/biosci/genbio/animation_quizzes/animate_59a.txt)  
[http://www.cengage.com/biology/discipline\\_content/animations/sim\\_04.html](http://www.cengage.com/biology/discipline_content/animations/sim_04.html)

[http://highered.mcgraw-hill.com/sites/9834092339/student\\_view0/chapter20/animation\\_-\\_mechanisms\\_of\\_evolution.html](http://highered.mcgraw-hill.com/sites/9834092339/student_view0/chapter20/animation_-_mechanisms_of_evolution.html)

**(13) Genetic Drift**

[http://lcmrschooldistrict.com/roth/PowerPoint\\_Lectures/chapter17/videos\\_animations/computer\\_drift\\_v2.html](http://lcmrschooldistrict.com/roth/PowerPoint_Lectures/chapter17/videos_animations/computer_drift_v2.html)

**(14) Bottleneck Effect / Founder Effect**

<http://biology200.gsu.edu/houghton/2107%20%2713/Figures/Chapter22/bottleneck.jpg>  
<http://biology200.gsu.edu/houghton/2107%20%2713/Figures/Chapter22/founder.jpg>

**(15) Gene Flow**

<http://nortonbooks.com/college/biology/animations/ch17a01.htm>

**(16) Stabilizing Selection Directional Selection, Disruptive Selection**

[http://wps.pearsoncustom.com/wps/media/objects/3014/3087289/Web\\_Tutorials/17\\_A02.swf](http://wps.pearsoncustom.com/wps/media/objects/3014/3087289/Web_Tutorials/17_A02.swf)  
[http://csep10.phys.utk.edu/lightcone/Klug8E/Ch22/22\\_1\\_6a.swf](http://csep10.phys.utk.edu/lightcone/Klug8E/Ch22/22_1_6a.swf)

**(17) Speciation – Isolating Mechanisms**

[http://www.pbs.org/wgbh/evolution/library/05/2/1\\_052\\_01.html](http://www.pbs.org/wgbh/evolution/library/05/2/1_052_01.html)  
[http://smartsite.ucdavis.edu/access/content/user/00002950/bis10v/media/ch13/isolating\\_mechanisms.html](http://smartsite.ucdavis.edu/access/content/user/00002950/bis10v/media/ch13/isolating_mechanisms.html)

**(18) Gradualism vs Punctuated Equilibrium**

[http://glencoe.mcgraw-](http://glencoe.mcgraw-hill.com/olcweb/cgi/pluginpop.cgi?it=swf::550::400::/sites/dl/free/0078802849/383939/gradualism_Punctuated_Equilibrium.swf::)

[hill.com/olcweb/cgi/pluginpop.cgi?it=swf::550::400::/sites/dl/free/0078802849/383939/gradualism\\_Punctuated\\_Equilibrium.swf::](http://glencoe.mcgraw-hill.com/olcweb/cgi/pluginpop.cgi?it=swf::550::400::/sites/dl/free/0078802849/383939/gradualism_Punctuated_Equilibrium.swf::)

<http://academygenbioii.pbworks.com/w/page/65520728/Section%2025%203A%20The%20Pace%20of%20Speciation>

**(19) Coevolution**

[http://www.pbs.org/wgbh/evolution/library/01/3/quicktime/1\\_013\\_07\\_56.html](http://www.pbs.org/wgbh/evolution/library/01/3/quicktime/1_013_07_56.html)

**(20) Chemical Evolution Miller / Urey Experiment**

<http://faculty.massasoit.mass.edu/whanna/122/page4/page29/page61/page61.html>

[http://highered.mcgraw-hill.com/sites/9834092339/student\\_view0/chapter26/animation\\_-\\_miller-urey\\_experiment.html](http://highered.mcgraw-hill.com/sites/9834092339/student_view0/chapter26/animation_-_miller-urey_experiment.html)

**(21) Endosymbiosis**

[http://highered.mcgraw-hill.com/sites/9834092339/student\\_view0/chapter4/animation\\_-\\_endosymbiosis.html](http://highered.mcgraw-hill.com/sites/9834092339/student_view0/chapter4/animation_-_endosymbiosis.html)

<http://bcs.whfreeman.com/thelifewire/content/chp28/2802s.swf>

**(22) Gaia Theory**

<http://library.thinkquest.org/C003763/flash/gaia1.htm>