

Course Title
Instructor

Natural Selection, Charles Darwin and Evolution: Separating the Fact from Fiction
Karen Finter

WELCOME				
OUTCOME	ASSESSMENT	ACTIVITY	NYS STANDARDS Key ideas and Indicators	TIME IN MINUTES
Participants will become familiar with on-line course procedures and 'culture'	Review responses in "What on Earth have I gotten into?"	Read and respond to course syllabus and roadmap. Post responses in 'What on Earth have I gotten into?'.		10 minutes
Participants will read and respond to course outcomes and objectives	Review Responses in "What on Earth have I gotten into?"	Respond to prompt "What is your motivation for taking this course?" Provide one comment and one question for another's responses.		15 minutes
Participants will participate in interactive training sessions for the online communication tools used in the course. (Elluminate and Horizon Wimba).	Moderate Elluminate Session and provide course support on a weekly basis through this communication tool.	Participate in either live or "taped" Elluminate Session to review application tools and procedures. Instructor will hold bi-weekly "Elluminate" hours to provide course support.	MST 2 Key Idea 1	60 minutes
	Review Responses to Wimba Session: "Misconceptions about Evolution abound, particularly the idea that there isn't "concrete proof" for species evolving. How would you address a misconception like this in your classroom? What protocols or procedures would you follow to uncover and clarify misconceptions?"	Post original response to prompt and review and respond to posted comment threads.	MST 4 Key Idea: 3 PI: 3.1	20 minutes

COURSE				
OUTCOME	ASSESSMENT	ACTIVITY	NYS STANDARDS	TIME
Participants will investigate Darwin's Theory of Natural Selection and use the Internet to develop a web-based tutorial on Natural Selection	Review comments posted re: specific sites.	Visit and review selected websites for clarity, age appropriateness and interest. Some sites will be assigned, others will be available for all to view. Post and comment on site reviews.	MST 4 Key Idea: 3 PI: 3.1	60 minutes
	Read and respond to created webquests.	Using given template, develop a web-quest for students to use as a web-based tutorial on the concept of Natural Selection.		60 minutes
	Review Peer review comments and rubrics.	Peer review created web quests using rubric provided.		30 minutes
Participants will examine the role of adaptations in the study of evolutionary form and function as they develop classroom materials to illustrate the importance of adaptation to survival	Conduct Elliminate session with provided model. View and respond to participant created presentations.	Research given species adaptation (Finch beaks, opposable thumb, etc..) for web resources that would be appropriate for use. Create a virtual materials list for use during Elluminate session.	MST 4 Key Idea: 3 PI: 3.1	45 minutes
		Participate in an Elluminate session to view a model PowerPoint about the role of adaptations and then form virtual groups to collaborate and create their own PowerPoint presentations about the role of specific adaptations to the evolution of species.		60 minutes
		Review collaborative PowerPoint post feedback/comments.		15 minutes

<p>Participants will research mechanisms of Evolutionary Change and develop a lesson plan to demonstrate one such mechanism</p>	<p>Provide tour of MarcoPolo and Discovery School CD.</p> <p>Review Lesson Plans for content, clarity and format and provide feedback.</p> <p>Review Peer Comments.</p>	<p>Participate in an introductory Elluminate session that includes a n application sharing session of the Discovery School CD, Evolution and a web tour of MarcoPolo lessons and resources on evolutionary change, and mechanisms for this change.</p> <p>Develop a lesson plan that would introduce Evolutionary change, utilizing web resources from Marco Polo or additional sites.</p> <p>Share lesson plans and provide feedback and comments to peers.</p>	<p>MST 4 Key Idea: 3 PI: 3.1</p>	<p>60 minutes</p> <p>75 minutes</p> <p>30 minutes</p>
<p>Participants will explore online resources that illustrate the fossil record and the evidence that it provides for speciation and evolution</p>	<p>Read posted responses.</p> <p>Review adapted lessons.</p>	<p>Read and respond to posted article.</p> <p>Using web resources, images, etc... develop an activity to showcase the fossil record, including the process of fossil formation and discovery. Modify the activity for various grade level groups: 6-8, 9-10, 11-12. and provide adapted lessons.</p>	<p>MST 4 Key Idea: 3 PI: 3.1</p>	<p>30 minutes</p> <p>75 minutes</p>

<p>Participants will discuss the timeline of human evolution and the implications for the classroom.</p>	<p>Review and critique student centered activities.</p>	<p>Participate in a virtual tour of human evolution.</p> <p>Develop student centered activities to use during a lesson on human evolution to clarify the timeline.</p>	<p>MST 4 Key Idea: 3 PI: 3.1</p>	<p>90 minutes</p> <p>45 minutes</p>
<p>Participants will investigate additional explanations for changes in species over time.</p>	<p>Review posted discussion threads and summaries.</p>	<p>Choose one alternative theory to evolution to research and summarize for the group. Use the research guide sheet to assist in finding evidence for and against the theory. Post summaries for the group. In addition, participants have the option to post a voice summary and commentary using <i>Wimba</i>.</p>	<p>MST 4 Key Idea: 3 PI: 3.1</p>	<p>90 minutes</p>
<p>Participants will provide feedback and evaluation of course.</p>	<p>Completed evaluation tool.</p>	<p>Complete evaluation using on-line survey and submit responses.</p>		<p>15 minutes</p>