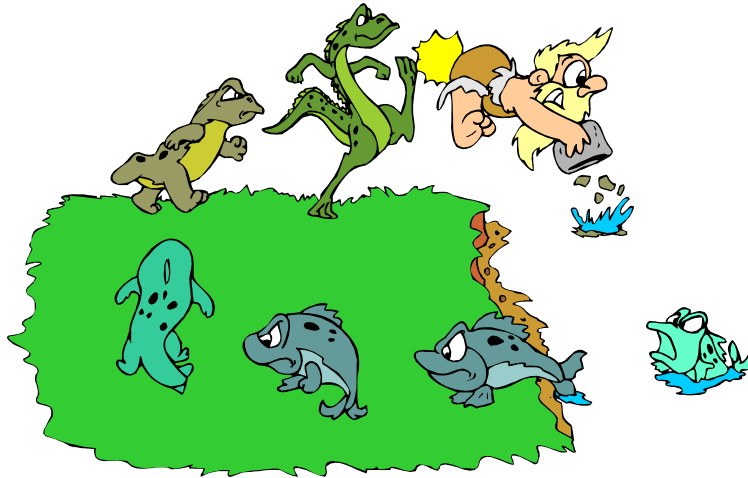


# Evolution: Separating Fact from Fiction



## Dates of the Course:

This course is set to run: **15 hours**

**Course Description:** Come on a fantastic journey to overview the findings of Charles Darwin and the many others who have, in the last century, moved the science of evolution to the forefront of a societal debate. Examine sources of scientific data that clearly demonstrate the process of Natural Selection. Find credible internet sites to use with your students for class discussion, investigation and experimentation. Participate in discussions of the sources of controversy surrounding evolution and then work to dispel misconceptions through the development of standards based lessons that will provide a concrete understanding of the biological processes involved.

## Course Outcomes:

- Participants will become familiar with on-line course procedures and 'culture'
- Participants will read and respond to course outcomes and objectives
- Participants will participate in interactive training sessions for the online communication tools used in the course. (Elluminate and Horizon Wimba).
- Participants will investigate Darwin's Theory of Natural Selection and use the Internet to develop a web-based tutorial on Natural Selection
- 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
- Participants will research mechanisms of Evolutionary Change and develop a lesson plan to demonstrate one such mechanism

- Participants will explore online resources that illustrate the fossil record and the evidence that it provides for speciation and evolution
- Participants will discuss the timeline of human evolution and the implications for the classroom.
- Participants will investigate additional explanations for changes in species over time.

## **NYS Standards Addressed:**

### **MST 4: Science**

Key Idea 8: Individual organisms and species change over time.

### **MST 6: Interconnected Themes**

Key Idea 5: Identifying patterns of change is necessary for making predictions about future behavior and conditions.

Key Idea 6: In order to arrive at the best solution that meets criteria within constraints, it is often necessary to make trade-offs.

**Also, ELA Standard 1 & 3 will be addressed**

**Course Contact Information:** I can be reached via email at:

[karen\\_finter@westiron.monroe.edu](mailto:karen_finter@westiron.monroe.edu). In the event of a technical emergency, call me from 9:00am-4:30pm at 585-336-3144.

**Prerequisite Information:** Participants should have a basic understanding of science lab skills (both physical science and life science) and a working knowledge of Microsoft Office Applications. In addition, participants should know how to email and access the internet. The attached tutorial will assist you in understanding the communication applications that we will be using in the course.

<http://iris.nyit.edu/tbls/guides/guides.htm>

## **Course Policies:**

### ***Code of Conduct:***

1. You will conduct yourselves in a professional manner. Postings will address the assignment given. All postings will be monitored by the instructor. (And **I** have the last word!)
2. You will log in at least 3 times a week to monitor assignments, engage in discussion and to read feedback.
3. This course is meant to enrich your content and curriculum and to assist you and your students in meeting (and exceeding) the standards in an engaging, meaningful way! **You** determine what you will take from this experience!

4. Your work is your own. Plagiarism will not be tolerated and will result in no credit for that assignment.

***Assignments & Grading:***

1. In order to receive full credit for the course, you must complete all of the assignments and actively participate in discussions.
2. All assignments must be completed and submitted by 11:59:00pm on the due date to receive full credit. Late assignments will receive a percentage of credit. Assignments posted later than one week past the due date will not receive credit.
3. Group assignments will receive two grades; One grade will be determined by a peer evaluation, the other grade will be determined by the quality and timeliness of the submission. These grades will be averaged to determine amount of credit received for that assignment.

***Nuts and Bolts:***

1. You must use Microsoft Office (Word, PowerPoint, etc..).
2. Feel free to ask questions! You may email questions directly or post questions in the appropriate thread pertaining to the assignment at hand.

**Inservice Credit:** Inservice credit will be recommended if all assignments are completed to a satisfactory level and if the participant meets all participation requirements. Partial credit will be awarded for work completed and time spent on course.