

EES 1001.01 Girls Like Dinosaurs Too: Discoveries of Women in Science

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M 2:10-4:10pm (one 50-min session: 1/9; six 2-hour sessions: 1/23, 1/30, 2/13, 2/27, 3/27, 4/3)

Course Description

Name a female scientist that has changed the world. Okay, now name five and don't include Marie Curie, Roseland Franklin, and Rachel Carson. Harder than you think, now try naming five male scientists that changed the world.

This course will explore the discoveries made by female scientists and barriers female and minority scientists have faced over the centuries. Discussion of women scientists will include those who are well known (mentioned above) and less recognized women who have changed our world. We will venture into understanding the women of the Manhattan Project, girls of atomic city (i.e., from nearby Oak Ridge, Tennessee), the female astronauts that never launched (the first "manned space program"), and the most recent "underground astronauts" that helped discover early hominids in South Africa. Through the discovery of women scientists that changed the world we will also discuss historical and current barriers to engaging females in science. Guest female scientists will also participate in discussions pertaining to their own research and experiences.

The goals of this seminar are to:

- Learn about female scientists who changed the world, including faculty at Vanderbilt.
- Identify barriers that women face and/or societal situations that allow them to succeed.
- Engage middle-school aged students (the age where we see a pronounced drop off of girls in STEM fields) in the discovery of female scientists through a short blog and an interview with an active female scientist.

Students will discuss the assigned text and posted readings, engage with guest speakers, and contribute to a website via a blog post and an interview with female scientists – both targeted towards middle school girls.

Evaluation

In addition to class participation, including posting questions to blackboard (20%), students will lead one of the five primary discussions (20%), complete one blog post (30%), and complete an interview of a female scientist (30%) aimed at a middle-school audience that will be posted online.

Required Readings

Women in Science: 50 Fearless Pioneers Who Changed the World by Rachel Ignotofsky.
Additional readings will be mentioned on Blackboard.