Endeavor
Science Teaching Certificate Project

Climate Change *with*

SPRINTT
Student Polar Research with IPY National (and International) Teacher Training

Syllabus for Graduate Credit with National Board Portfolio Development
Fall 2012

NSF Project SPRINTT [Student Polar Research with IPY National (and International) Teacher Training] brings cutting-edge polar science research with an Alaska Native perspective into K-12 classrooms, bridging the science and society divide while inspiring the next generation of polar explorers. Learn how to teach Life, Earth and Physical Science content in a polar context using high-quality, standards-based curricular materials. A user-friendly interface simplifies data where students perform their own authentic polar systems research projects.

Course Objectives

Participants will be able to:

- ✓ Access, interpret, and utilize polar data sets for the classroom.
- ✓ Teach standards-based Life, Earth, and Physical Science content in a polar context.
- ✓ Compare and contrast Indigenous and Western science knowledge on polar science and incorporate each into classroom instruction.
- ✓ Facilitate students' use of authentic polar data in conducting formal investigations and research projects.
- ✓ Adopt inquiry and technology-based teaching and learning strategies and successfully implement them in the classroom.

Instructor:

Georgia Hart
georgia.hart@gmail.com

Live meeting dates:

9/12/12, 9:00-10:00 PM ET
9/19/12, 9:00-10:00 PM ET
9/26/12, 9:00-10:00 PM ET
10/3/12, 9:00-10:00 PM ET
10/10/12, 9:00-10:00 PM ET

Sponsored by:
National Aeronautics and Space Administration
(NASA Award NNX08BA63A)

Course Requirements

This course meets once per week. The live class meeting dates are indicated on the course calendar and on the schedule below. Between meetings, participants may be asked to work on assignments and respond to questions posed by the instructor in the Online Learning Space Discussion.

Students will be assessed using rubrics where applicable. Major course assignments are outlined in this syllabus, and more detailed information will be provided in class.

You are required to complete the *Mandatory assignments* listed below. To ensure adequate advancement in the course, you are expected to show progress with implementation of course content and pedagogy and a clear plan for portfolio development **by November 10th**.

You will receive an "incomplete" grade on your transcript for Fall 2012, which will change once you submit your portfolio.

Note: Please be sure to use reputable sources and to cite them appropriately using APA format; no credit will be given for plagiarized papers or segments.

You must complete the mandatory assignments, and may choose optional assignments to earn the necessary points for credit.

Assignment	**Maximum Points Value**
1. Preparation & Participation in live class sessions, including assignments, etc.	20
2. Online Investigation and Sample Research Paper	25
3. National Board Portfolio Development	55

Mandatory 2: Online Investigation and Research Paper (25 points possible)

Create a SPRINTT student account and choose any of the available investigations. Go through the entire investigation, including writing the research paper. Then create a guest username and password to view the paper, and post this information on the Discussion Board, along with a short (a few sentences) reflection on the process.

The final step is to comment on at least the research paper of at least one of your classmates on the Discussion Board.

Mandatory 3: National Board Portfolio Development (55 points)

As an Endeavor fellow and National Board Candidate you will use the course content and pedagogy from this course to develop a portfolio suitable for submission to NBPTS.
Your portfolio can meet the course objectives AND the requirements of the specific National Board certification area to which you are applying.

Please consult the guidelines for the portfolio entry you will develop. Consult your Candidate Support Provider and support system through Endeavor. Your Candidate Support Provider is available to answer questions and to review drafts of your work, given adequate time to do so.

Please submit your completed portfolio to Karen Woodruff: kwoodruff@us-satellite.net